





## CONTENTS

	<b>Preface</b>	<b>7</b>
	<b>Glossary</b>	<b>9</b>
	<b>Disclaimer</b>	<b>11</b>
	<b><u>Invitation for Proposal</u></b>	
<b>1.</b>	<b>Introduction</b>	<b>13</b>
	1.1 Background	<b>13</b>
	1.2 Request for Proposal	<b>13</b>
	1.3 Due Diligence by Bidders	<b>13</b>
	1.4 Sale of RFP Document	<b>13</b>
	1.5 Validity of the Proposal	<b>14</b>
	1.6 Brief description of the Selection Process	<b>14</b>
	1.7 Currency conversion rate and payment	<b>14</b>
	1.8 Schedule of Selection Process	<b>14</b>
	1.9 Pre-Proposal visit to the Site (Lab) and inspection of data	<b>14</b>
	1.10 Pre-Proposal Conference	<b>15</b>
	1.11 Communications	<b>15</b>
<b>2.</b>	<b>Instructions to Bidders</b>	<b>16</b>
	<b>A. <u>General</u></b>	<b>16</b>
	2.1 Scope of Proposal	<b>16</b>
	2.2 Conditions of Eligibility of Bidders	<b>17</b>
	2.3 Conflict of Interest	<b>18</b>
	2.4 Number of Proposals	<b>20</b>
	2.5 Cost of Proposal	<b>20</b>
	2.6 Site visit and verification of information	<b>20</b>
	2.7 Acknowledgement by Bidder	<b>20</b>
	2.8 Right to reject any or all Proposals	<b>21</b>
	<b>B. <u>Documents</u></b>	<b>21</b>
	2.9 Contents of the RFP	<b>21</b>
	2.10 Clarifications	<b>23</b>
	2.11 Amendment of RFP	<b>23</b>
	<b>C. <u>Preparation and submission of Proposal</u></b>	<b>24</b>
	2.12 Language	<b>24</b>
	2.13 Format and signing of Proposal	<b>24</b>
	2.14 Technical Proposal	<b>25</b>
	2.15 Financial Proposal	<b>26</b>
	2.16 Submission of Proposal	<b>27</b>
	2.17 Proposal Due Date	<b>28</b>
	2.18 Late Proposals	<b>28</b>

		2.19 Modification/ substitution/ withdrawal of Proposals	28
		2.20 Bid Security	28
		D. <b>Evaluation process</b>	29
		2.21 Evaluation of Proposals	29
		2.22 Confidentiality	30
		2.23 Clarifications	30
		E. <b>Appointment of Consultant</b>	30
		2.24 Negotiations	30
		2.25 Substitution of Key Personnel	31
		2.26 Indemnity	31
		2.27 Award of work	31
		2.28 Execution of Agreement	31
		2.29 Commencement of assignment	32
		2.30 Proprietary data	32
3.	<b>Criteria for Evaluation</b>		32
4.	<b>Fraud and corrupt practices</b>		35
5.	<b>Pre-Proposal conference</b>		36
6.	<b>Miscellaneous</b>		36
7.	<b>Guidance Note on Conflict of Interest</b>		37
	<b><u>Term of Reference</u></b>		39
1.	<b>Tender Notice For Modernization Of Land Records In Haryana</b>		41
2.	<b>Overview Of Digitization Of Village Maps</b>		43
		2.1 Introduction	43
		2.2 Objectives	43
3.	<b>Scope Of The Work</b>		44
4.	<b>Technical Specification</b>		52
		4.1 Creation Of GIS Ready Digitized Cadastral Maps	52
		4.2 Criteria For Digitization Of Cadastral Maps	52
5.	<b>Roles And Responsibilities</b>		62
		5.1 Roles And Responsibilities of The Vendor	62
		5.2 Roles And Responsibilities of User Department	63
		5.3 Roles And Responsibilities of HARSAC	64
6.	<b>Qualification Criteria</b>		66
7.	<b>Submission Of Techno commercial Offer</b>		66
		7.1 Earnest Money Deposit (EMD)	66
		7.2 Price Structure	67
		7.3 Non-Transferable Offer	67

		7.4 Offer Validity Period	67
		7.5 Preliminary Scrutiny	67
		7.6 Clarification Of Offers	68
		7.7 Format For Technical & Commercial Offer	68
		7.8 Evaluation And Comparison Of Bids	68
		7.9 Preliminary Examination	68
		7.10 Clarification	68
		7.11 Opening Of Eligibility Bids	69
		7.12 Opening Of Technical Bids	69
		7.13 Opening Of Techno commercial Bids	71
		7.14 Award Of Contract	71
<b>8.</b>	<b>Terms And Conditions</b>		<b>72</b>
		8.1 Performance Bank Guarantee	72
		8.2 Payment Terms	72
		8.3 Penalty	73
		8.4 Acceptance Test	74
		8.5 Order Cancellation	74
		8.6 Non Disclosure Agreement	75
		8.7 Security	75
		8.8 Termination Of The Contract	75
		8.9 Indemnity	75
		8.10 Force Majeure	75
		8.11 Publicity	76
		8.12 Service Level Agreement	76
		8.13 Resolution Of Disputes	76
<b>9.</b>	<b>The Tender Process</b>		<b>76</b>
<b>10.</b>	<b>Instructions To Prospective SPs</b>		<b>77</b>
		10.1 to 10.3 Three Stage Bidding Process	77

	10.4 Clarification Of This Document	77
	10.5 Amendment In This Document	77
	10.6 Technical Offer	78
	10.7 Techno commercial Offer	78
	10.8 Techno commercial Offer Currencies	78
	10.9 Format Of Techno commercial Offer	78
	10.10 Late Offer	78
	10.11 Modification And Withdrawal Of Offers	78
	<b>Annexure I: Eligibility Bid</b>	<b>79</b>
	<b>Annexure II :Technical Bid</b>	<b>80</b>
	<b>Annexure III : Financial Proposal</b>	<b>81</b>
	<b>Annexure IV: Award Of Order</b>	<b>86</b>
	<b>Annexure V : Manpower Details</b>	<b>87</b>
	<b>Annexure VI :Format For Performance Bank Guarantee</b>	<b>88</b>
	<b>Annexure-VII :Declaration Regarding Acceptance Of Terms &amp; Conditions</b>	<b>89</b>
	<b>Annexure-VIII: Declaration Regarding Clean Track Record</b>	<b>90</b>
	<b>Annexure-IX: Technical Proposal</b>	<b>91</b>
	Form1. Letter of Proposal	92
	Form2. Particulars of the Bidder	95
	Form3. Statement of Legal Capacity	97
	Form4. Power of Attorney	98
	Form5. Financial Capacity of the Bidder	102
	Form6. Particulars of Key Personnel	103
	Form7. Proposed Methodology and Work Plan	104
	Form8. Abstract of Eligible Assignments of the Bidder	105
	Form9. Abstract of Eligible Assignments of Key Personnel	106
	Form10. Eligible Assignments of Bidder	107
	Form11. Eligible Assignments of Key Personnel	108
	Form12. Curriculum Vitae (CV) of Key Personnel	109
	Form13. Deployment of Personnel	110
	Form14. Survey and Field Investigations	111
	Form15. Proposal for Sub-Consultant(s)	112

## PREFACE

For modernization of land records system in the country, a modified program, viz., the National Land Records Modernization Program (NLRMP) has been formulated by merging two Centrally-sponsored schemes of Computerization of Land Records (CLR) and Strengthening of Revenue Administration and Updating of Land Records (SRA&ULR). The NLRMP was approved by the Central Cabinet on 21.08.2008. The program has been rolled out with a technical interaction conducted on 24th – 25th September, 2008 in New Delhi which was attended by the officers from the Revenue and Registration Departments of the States. The ultimate goal of the NLRMP is to usher in the conclusive titling system with title guarantee, to replace the current presumptive title system in the country.

One of the key factors that would determine the quality of documents as well as the outcome of the bid process is the professional competence of the vendors engaged for a project. It is, therefore, important to follow a selection process that would ensure appointment of qualified and experienced vendors. The international best practices for selection of vendors rely on the four rules of transparency, fairness, cost-effectiveness and elimination of conflict of interest. A transparent process eliminates doubt and arbitrariness, and is a pre-requisite to the participation of reputed firms, which may stay away if the selection process is opaque. Fairness is achieved when all parties are treated equally, when they receive the same information at the same time, and are evaluated on the same criteria. Costs can be minimized by choosing the appropriate method for selecting Vendors, e.g., competitive bidding for lump sum contracts. The effort should be to minimize costs without compromising on quality. Imparting clarity to the criteria for selection of Vendors and specifying the scope of work precisely would also help reduce costs through the competitive process. Last but not the least, the selection process should avoid both actual and perceived conflict of interests, which may include the participation of firms that may be involved in later stages of the project.

The General Financial Rules, 2005 and the Manual of Policies and Procedure for Employment of Vendors issued by the \_ of Expenditure, Ministry of Finance constitute the framework that governs the selection and employment of Vendors. However, there was considerable divergence in the practices followed by different departments and statutory entities. A variety of technical, financial and other criteria were being used by the Project Authorities, and some of the qualification parameters appeared subjective and were, therefore, prone to disputes and controversy. A comprehensive review of the ongoing practices had, therefore, become necessary. The present volume contains a model document which has been evolved after extensive consultations with the relevant scientists, stakeholders and experts. It provides a ready-to-use Model Request for Proposal (RFP) for selection of technical Vendors. The Model RFP affords adequate flexibility for introducing project-specific modifications, as may be necessary for meeting the requirements in each case. The processes and procedures contained in the RFP conform to international best practices as well as the extant rules on this subject. It would also serve as a best practice document for the State Governments to adopt. It is hoped that adoption of this document would enhance the possibilities of a fair, transparent and competitive selection of Vendors for delivery of successful projects in all discipline.

I wish to bring on record our thanks and appreciation for those Agencies and Individuals who spared their valuable time to contribute towards framing the RFP.

Chief Scientist  
HARSAC



## Glossary

1. ASCII – American Standard Code for Information Interchange
2. ASPRS - American Society of Photogrammetry and Remote Sensing
3. AOI- Area of interest
4. CBS - Cost based selection system
5. CIS - Cadastral Information System
6. CLR - Computerization of Land Records
7. CPSUs – Central Public Sector Undertakings
8. CQCBS – Combined Quality-cum-cost based selection system
9. CRD – Cadastral Reference database
10. CSR - Corporate Social Responsibility
11. CV- Curriculum Vitae
12. DD District Code
13. DGPS - Differential Global Positioning System
14. DLR- Directorate of Land Record
15. DoR&DM –Dept. of Revenue & Disaster Management
16. EMD - Earnest Money Deposit
17. EQC- External Quality Check
18. ESCOI – Empowered Sub-Committee of Committee of Infrastructure
19. ETS – Electronic Total Station
20. F - Amount Of Financial Proposal
21. FM - Lowest Financial Proposal
22. FS – Financial Score
23. FW - Weights Assigned To Financial Proposal
24. GCP - Ground Control Point
25. GFR – General Financial Rules
26. GoH - Government of Haryana
27. HARSAC – Haryana Space Applications Centre
28. HHH Halka Number
29. HRSI - High Resolution Satellite Image
30. IMG – Inter Ministerial Group
31. IPR - Intellectual Property Rights
32. ISO – International Organization for Standardization
33. LAN – Local Area Network
34. LISS – Linear Imaging Self Scanner
35. LOA - Letter of Award
36. LRD- Land Recourse Department
37. MIS/GIS – Management Information System/ Geographical Information System
38. NIC – National Informatics Center
39. NLRMP - National Land Records Modernization Program
40. NN Sheet Number
41. PAN – Panchromatic
42. PBG- Performance of Bank Guarantee
43. PDD - Proposal Due Date
44. PPP – Public Private Partnership
45. QA - Quality Assurance

46. QB – Quick Bird
47. QBS - Quality Based Selection System
48. QC – Quality Check
49. QCBS – Quality-cum-Cost Based Selection System
50. QE - Quality Evaluation
51. QM - Quality Management
52. RDBMS – Relational Database Management System
53. RFP - Request for Proposal
54. RMS errors – Root Mean Square errors
55. RR Revenue Circle
56. RRSSC- Regional Remote Sensing Service Centre
57. S - Combined Technical & Financial Scores
58. SF - Financial Score
59. SLA - Service Level Agreement
60. SOI – Survey of India
61. SP - Service Provider
62. SRA&ULR - Strengthening of Revenue Administration and Updating of Land Records
63. ST - Combined Technical Scores
64. ToR – Terms of Reference
65. TS - Technical Score
66. TT Tehsil Code
67. Tw - Weights Assigned To Technical Proposal
68. UPS- Un-Disrupted Power Supply
69. VVV Village Number
70. WV – World View

## Disclaimer

Department of expenditure, Ministry of Finance, GOI has formulated model Request For Proposal (RFP) for appointment of technical consultants vide file number 24 (23) IPF-2/2008 dated 21-05-2009. These guidelines have been followed in preparation of this RFP document.

The information contained in this RFP document or subsequently provided to the Bidder, whether verbally or in documentary or any other form by or on behalf of the Authority or any of its employees or advisers, is provided to the Bidder on the terms and conditions set out in this RFP document and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer nor invitation to the prospective Bidders or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in the formulation of their Proposals pursuant to this RFP. This RFP includes statements, which reflect various assumptions and assessments arrived at by the Authority in relation to the consultancy. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. It is not possible for the Authority, its employees or advisers to consider the objectives, technical expertise and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in this RFP, may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments and information contained in this RFP and obtain independent advice from appropriate sources.

Information provided in this RFP to the Bidders is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Authority accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.

The Authority, its employees and advisers make no representation or warranty and shall have no liability to any person including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Selection Process.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise from reliance of any Bidder upon the statements contained in this RFP.

The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this RFP.

The issue of this RFP does not imply that the Authority is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Consultancy and the Authority reserves the right to reject all or any of the Proposals without assigning any reasons whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of the Proposal which include the cost of preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Bidder in preparation for submission of the Proposal, regardless of the conduct or outcome of the Selection Process.

# Invitation for Proposal

## 1.0 INTRODUCTION

### 1.1 Background

1.1.1 Department of Revenue and Disaster Management Government of Haryana, has received grants from Ministry of Rural Development, GOI on partial sharing basis for MODERANIZATION OF LAND RECORDS (INCLUDING DIGITIZATION OF CADASTRAL MAPS, INTEGRATION WITH RECORDS OF RIGHTS AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN HARYANA. The Department has decided to outsource the work of this project through Haryana Space Applications Centre (HARSAC), being the nodal agency in the state for remote sensing and GIS related work.

1.1.2 HARSAC under Department of Science and Technology, Haryana, represented by Director, HARSAC and Chief Scientist, HARSAC (**the Authority**) will get the work done through the already shortlisted vendors by the committee constituted by Financial Commissioner, Revenue and Disaster Management through a competitive bidding process. Technical and financial bids are being invited through this RFP from these shortlisted vendors. If found technically feasible and financially viable, the Project may be awarded to the Vendor(s) selected through a competitive bidding process. The Project would be implemented in accordance with the terms and conditions stated in the agreement to be entered into between the Authority and the service provider.

1.1.3 In pursuance of the above, the Authority has decided to carry out the process for selection of a Vendor through HARSAC which will be acting as its Technical Consultant (HARSAC) shall prepare the Request For Proposal (RFP) in accordance with the Terms of Reference specified at "**TOR**".

### 1.2 Request for Proposal

The Authority invites Proposals (the "**Proposals**") for selection of Vendors (the "**Vendor**") who shall work for MODERANIZATION OF LAND RECORDS (INCLUDING DIGITIZATION OF CADASTRAL MAPS, INTEGRATION WITH RECORDS OF RIGHTS AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN HARYANA. The Authority intends to select the vendors through a competitive bidding/ limited tender enquiry process in accordance with the procedure set out herein.

### 1.3 Due Diligence by Bidders

Vendors are encouraged to inform themselves fully about the assignment and the local conditions before submitting the Proposal by paying a visit to the Authority and the Project site (HARSAC), sending written queries to the Authority, and attending a Pre-Proposal Conference on the date and time specified in Clause 1.10.

### 1.4 Sale of RFP Document

RFP document can be obtained between 1000 hrs and 1600 hrs on all working days on payment of a fee of Rs. 5000 in the form of a demand draft or banker's cheque drawn on any Scheduled Commercial Bank in India in favor of Chief Scientist, HARSAC and payable at Hisar. The document can also be downloaded from the official website of HARSAC

(www.harsac.org). In case of a downloaded form, the vendor needs to deposit the aforesaid fee along with proposal.

### 1.5 Validity of the Proposal

The Proposal shall be valid up to 31.03.2011.

### 1.6 Brief description of the Selection Process

The Authority has adopted a two stage selection process (collectively the “**Selection Process**”) in evaluating the Proposals comprising technical and financial bids to be submitted in two separate sealed envelopes. In the first stage, a technical evaluation will be carried out as specified in Clause 3.1. Based on this technical evaluation, a list of short-listed vendors shall be prepared as specified in Clause 3.2. In the second stage, a financial evaluation will be carried out as specified in Clause 3.3. Proposals will finally be ranked according to their combined technical and financial scores as specified in Clause 3.4. Four vendors will be selected based upon the combined technical and financial scores and the work will be divided amongst the four as described in clause 3.4.2 at page no. 34 of the RFP.

### 1.7 Currency conversion rate and payment

All payments to the vendor shall be made in INR in accordance with the provisions of this RFP. However, in case of a foreign currency involvement, if any, the conversion rate of Rs. 50 per US\$ shall be considered as the applicable current conversion rate for the purpose of conversion.

### 1.8 Schedule of Selection Process

Event Description	Expected Date
1. Proposed due date(PDD): Last date for submission of proposals	:04.10.2010 (10:30 AM)
2. Last date for receiving queries/clarifications (executed)	: 03.09.2010
3. Pre-Proposal Conference (executed)	: 07.09.2010
4. Authority response to queries (executed)	: 24.09.2010
5. Opening of Technical Proposals On Proposal Due Date	: 04.10.2010 (10:30 AM)
6. Opening of Financial Bid	: 12.10.2010 (11.00 AM)

(Above dates may be changes if required under some compelling circumstances)

### 1.9 Pre-Proposal visit to the Site (Lab) and inspection of data

Prospective Vendors may visit the site [HARSAC, CCS HAU Campus, Hisar, Haryana] and review the available data at any time prior to PDD. For this purpose, they will give at least two days' notice to the nodal officer specified below:

**Dr. Sultan Singh,  
Project Coordinator**

Modernization of Land Records in Haryana,  
Haryana Space Applications Centre (HARSAC)  
CCS Haryana Agricultural University Campus,  
Hisar- 125 004  
Phone: 01662-225122

However, for the convenience of the Vendors, a Pre-Proposal visit to the Site (Lab) has been arranged on -03.09.2010-, at 1100 hrs. The Bidders who desire to avail this facility may visit -03.09.2010- on the date and time mentioned above.

### 1.10 Pre-Proposal Conference

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

Date : 07.09.2010

Time : 1100 hrs

Venue : Conference Hall, HARSAC, Hisar

### 1.11 Communications

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

Chief Scientist  
Haryana Space Applications Centre (HARSAC),  
CCS Haryana Agricultural University Campus,  
Hisar 125 004  
Phone 01662-232632  
Fax: 01662-225958

1.11.2 The official website of the HARSAC is:

<http://www.harsac.org>

1.11.3 All communications related to the project should clearly indicate the RFP notice number and marked as "**MODERANIZATION OF LAND RECORDS IN HARYANA**" at the top of the envelop.

## 2.0 INSTRUCTIONS TO BIDDERS

### A. GENERAL

#### 2.1 Scope of Proposal

- 2.1.1** Detailed description of the objectives, scope of services, deliverables and other requirements relating to this project are specified in this RFP. The shortlisted vendors, as indicated in para 1.1.2 may participate in the Selection Process either individually (the "**Sole Firm**") or as lead member of a consortium of firms (the "**Lead Member**") in response to this invitation. The term Bidder (the "**Bidder**") means the Sole Firm or the Lead Member, as the case may be. The manner in which the Proposal is required to be submitted, evaluated and accepted is explained in this RFP.
- 2.1.2** Bidders are advised that the selection of Consultant shall be on the basis of an evaluation by the Authority through the Selection Process specified in this RFP. Bidders shall be deemed to have understood and agreed that no explanation or justification for any aspect of the Selection Process will be given and that the Authority's decisions are without any right of appeal whatsoever decision of authority shall be final and binding.
- 2.1.3** The Bidder shall submit its Proposal in the form and manner specified in the TOR .The Technical proposal shall be submitted in the form at Annexure-IX and the Financial Proposal shall be submitted in the form at Annexure III. Upon selection, the Bidder shall be required to enter into an agreement with the Authority in the form specified at TOR
- 2.1.4 Key Personnel:** The vendors Team shall consist of the following key personnel (the "**Key Personnel**") who shall discharge their respective responsibilities as specified below:

S. No.	Key Personnel	Professional Experience	Responsibilities
1	Project Manager-cum-Team leader	10 years	A scientist/ engineer having complete knowledge of cadastral databases will act as the team leader. He will co-ordinate and supervise the multidisciplinary <b>Team</b> for execution of the project.
2	Remote sensing and GIS Expert	7 years	Having good knowledge of remote sensing and GIS, will look after the work related to spatial data management in GIS
3	Software expert	5 years	Having knowledge of software development required to link the RoR data with the spatial data in GIS.
4	Revenue Expert	5 years	Should have complete knowledge of the Land Records of the states where consolidation has been done. He will look after all revenue record activity
5	Surveyor	5 years	Survey related issues and work
6	Documentation officer	5 years	Look after all documentation activity

## 2.2 Conditions of Eligibility of Bidders

- 2.2.1** Expression of Interest was invited by Department of Revenue and Disaster Management, Government of Haryana to shortlist the qualified vendors for assigning the work. After presentations by the vendors before the committee constituted under the Chairmanship of Financial Commissioner and Principal Secretary, Department of Revenue and Disaster Management, Government of Haryana, 15 vendors were found eligible and shortlisted for inviting RFPs from them.
- 2.2.2** To be eligible for further evaluation of its Proposal, the Bidder shall fulfill the following:
- (A) **Technical Capacity:** The Bidder should have at least 5 (five) years of experience preceding the PDD, of undertaken assignments as specified in Clause 3.1.3 & 3.1.4. Relevant documents are to be submitted as per TOR (Clause 6 of TOR).
  - (B) **Financial Capacity:** The Bidder shall have a minimum turnover of Rs.2.0 (two) crores from geo-spatial activity during the last 3 (three) financial years preceding the Proposal Due Date. For the purpose of evaluation, Bidders having comparatively larger revenues from geo-spatial works shall be given added weightage.
  - (C) **Availability of Key Personnel:** The Bidder shall offer and make available all Key Personnel having the knowledge and experience as indicated under clause 2.1.4 above.
- 2.2.3** The Bidder shall enclose with its Proposal, certificate(s) from its Statutory Auditors stating its total revenues from geo-spatial activities during each of the past three financial years and the revenue received in respect of each of the assignments specified in the Proposal. In the event that the Bidder does not have a statutory auditor, it shall provide the requisite certificate(s) from the firm of Chartered Accountants that ordinarily audits the annual accounts of the Bidder.
- 2.2.4** The Bidder should submit a Power of Attorney as per the format at Form-4 of **Annexure IX**; provided, however, that such Power of Attorney would not be required if the Application is signed by a partner of the Bidder, in case the Bidder is a partnership firm or limited liability partnership.
- 2.2.5** Any entity which has been barred by the Central Government, any State Government, a statutory authority or a public sector undertaking, as the case may be, from participating in any project, and the bar subsists as on the date of Proposal, would not be eligible to submit a Proposal either by itself or through its Associate.
- 2.2.6** A Bidder or its Associate should have, during the last three years, neither failed to perform on any agreement, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder or its Associate, nor been expelled from any project or agreement nor have had any agreement terminated for breach by such Bidder or its Associate.
- 2.2.7** While submitting a Proposal, the Bidder should attach clearly marked and referenced Continuation sheets in the event that the space provided in the specified forms in the Appendices is insufficient. Alternatively, Bidders may format the specified forms making due provision for incorporation of the requested information.

## 2.3 Conflict of Interest

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

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

**2.3.3** Some guiding principles for identifying and addressing Conflicts of Interest have been illustrated in the Guidance Note at section-7. Without limiting the generality of the above, a Bidder shall be deemed to have a Conflict of Interest affecting the Selection Process, if:

- (a) The Bidder, its consortium member (the “**Member**”) or Associate (or any constituent thereof) and any other Bidder, its consortium member or Associate (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding or ownership interest of a Bidder, its Member or Associate (or any shareholder thereof having a shareholding of more than 5 per cent of the paid up and subscribed share capital of such Bidder, Member or Associate, as the case may be) in the other Bidder, its consortium member or Associate is less than 5% (five per cent) of the subscribed and paid up equity share capital thereof; provided further that this disqualification shall not apply to any ownership by a bank, insurance company, pension fund or a public financial institution referred to in section 4A of the Companies Act, 1956. For the purposes of this Clause 2.3.3(a), indirect shareholding held through one or more intermediate persons shall be computed as follows: (aa) where any intermediary is controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the “**Subject Person**”) shall be taken into account for computing the shareholding of such controlling person in the Subject Person; and (bb) subject always to sub-clause (aa) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on a proportionate basis; provided, however, that no such shareholding shall be reckoned under this sub-clause (bb) if the shareholding of such person in the intermediary is less than 26% (twenty six per cent) of the subscribed and paid up equity shareholding of such intermediary; or

- (b) A constituent of such Bidder is also a constituent of another Bidder; or
- (c) Such Bidder or its Associate receives or has received any direct or indirect subsidy or grant from any other Bidder or its Associate; or
- (d) Such Bidder has the same legal representative for purposes of this Application as any other Bidder; or
- (e) Such Bidder has a relationship with another Bidder, directly or through common third parties, that puts them in a position to have access to each others' information about, or to influence the Application of either or each of the other Bidder; or
- (f) There is a conflict among this and other consulting assignments of the Bidder (including its personnel and Sub-consultant) and any subsidiaries or entities controlled by such Bidder or having common controlling shareholders. The duties of the Consultant will depend on the circumstances of each case. While providing consultancy services to the Authority for this particular assignment, the Consultant shall not take up any assignment that by its nature will result in conflict with the present assignment; or
- (g) a firm which has been engaged by the Authority to provide goods or works or services for a project, and its Associates, will be disqualified from providing consulting services for the same project save and except as provided in Clause 2.3.4; conversely, a firm hired to provide consulting services for the preparation or implementation of a project, and its Members or Associates, will be disqualified from subsequently providing goods or works or services related to the same project; or
- (h) the Bidder, its Member or Associate (or any constituent thereof), and the bidder or Concessionaire, if any, for the Project, its contractor(s) or sub-contractor(s) (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding or ownership interest of an Bidder, its Member or Associate (or any shareholder thereof having a shareholding of more than 5% (five per cent) of the paid up and subscribed share capital of such Bidder, Member or Associate, as the case may be,) in the bidder or Concessionaire, if any, or its contractor(s) or sub-contractor(s) is less than 5% (five per cent) of the paid up and subscribed share capital of such Concessionaire or its contractor(s) or sub-contractor(s); provided further that this disqualification shall not apply to ownership by a bank, insurance company, pension fund or a Public Financial Institution referred to in section 4A of the Companies Act, 1956. For the purposes of this sub-clause (h), indirect shareholding shall be computed in accordance with the provisions of sub-clause (a) above.

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

**2.3.4** An Bidder eventually appointed to provide vendors for this Project, and its Associates, shall be disqualified from subsequently providing goods or works or services related to the construction and operation of the same Project and any breach of this obligation shall be construed as Conflict of Interest; provided that the restriction herein shall not apply after a period of 5 (five) years from the completion of this assignment or to consulting assignments granted by banks/ lenders at any time; provided further that this restriction shall not apply to consultancy/ advisory services performed for the Authority in continuation of this Consultancy or to any subsequent consultancy/ advisory services performed for the Authority in accordance with the rules of the Authority. For the avoidance of doubt, an entity affiliated with the Consultant shall include a partner in the Consultant's firm or a person who holds more than 5% (five per cent) of the subscribed and paid up share capital of the Consultant, as the case may be, and any Associate thereof.

## **2.4 Number of Proposals**

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

## **2.5 Cost of Proposal**

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

## **2.6 Site visit and verification of information**

Bidders are encouraged to submit their respective Proposals after visiting the Project site/ work and ascertaining for themselves of the existing data and the type of work, applicable laws and regulations or any other matter considered relevant by them. Visits shall be organized for the benefit of prospective Bidders on dates, time and venue as specified in Clause 1.9.

## **2.7 Acknowledgement by Bidder**

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

- (a) made a complete and careful examination of the RFP;
- (b) received all relevant information requested from the Authority;
- (c) Acknowledged and accepted the risk of inadequacy, error or mistake in the information provided in the RFP or furnished by or on behalf of the Authority or relating to any of the matters referred to in Clause 2.6 above;
- (d) Satisfied itself about all matters, things and information, including matters referred to in Clause 2.6 herein above, necessary and required for submitting an informed Application and performance of all of its obligations there under;
- (e) Acknowledged that it does not have a Conflict of Interest; and
- (f) Agreed to be bound by the undertaking provided by it under and in terms hereof.

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

**2.8 Right to reject any or all Proposals**

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

**2.8.2** Without prejudice to the generality of Clause 2.8.1, the Authority reserves the right to reject any Proposal if:

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

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

**B. DOCUMENTS**

**2.9 Contents of the RFP**

**2.9.1** This RFP comprises the Disclaimer set forth hereinabove, the contents as listed below and will additionally include any Addendum / Amendment issued in accordance with Clause 2.11

Request for Proposal

1. Introduction
2. Instructions to Bidders
  - A. General
  - B. Documents
  - C. Preparation and submission of Proposal
  - D. Evaluation process
  - E. Appointment of Consultant
3. Criteria for Evaluation
4. Fraud and corrupt practices
5. Pre-Proposal conference
6. Miscellaneous
7. Guidance Note on Conflict of Interest

Term of Reference

1. Tender Notice For Modernization Of Land Records In Haryana

2. Overview Of Digitization Of Village Maps
  - 2.1 Introduction
  - 2.2 Objectives
3. Scope Of The Work
4. Technical Specification
  - 4.1 Creation Of GIS Ready Digitized Cadastral Maps
  - 4.2 Criteria For Digitization Of Cadastral Maps
5. Roles And Responsibilities
  - A. Roles And Responsibilities of The Vendor
  - B. Roles And Responsibilities of User Department
  - C. Roles And Responsibilities of HARSAC
6. Qualification Criteria
7. Submission of Techno commercial Offer
  - 7.1 Earnest Money Deposit (EMD)
  - 7.2 Price Structure
  - 7.3 Non-Transferable Offer
  - 7.4 Offer Validity Period
  - 7.5 Preliminary Scrutiny
  - 7.6 Clarification of Offers
  - 7.7 Format For Technical & Commercial Offer
  - 7.8 Evaluation and Comparison Of Bids
  - 7.9 Preliminary Examination
  - 7.10 Clarification
  - 7.11 Opening Of Eligibility Bids
  - 7.12 Opening Of Technical Bids
  - 7.13 Opening of Techno commercial Bids
  - 7.14 Award Of Contract
8. Terms and Conditions
  - 8.1 Performance Bank Guarantee
  - 8.2 Payment Terms
  - 8.3 Penalty
  - 8.4 Acceptance Test
  - 8.5 Order Cancellation
  - 8.6 Non Disclosure Agreement
  - 8.7 Security
  - 8.8 Termination Of The Contract
  - 8.9 Indemnity
  - 8.10 Force Majeure
  - 8.11 Publicity
  - 8.12 Service Level Agreement
  - 8.13 Resolution Of Disputes
9. The Tender Process
10. Instructions To Prospective Sps
  - 10.1 Three Stage Bidding Process
  - 10.4 Clarification Of This Document
  - 10.5 Amendment In This Document
  - 10.6 Technical Offer
  - 10.7 Techno commercial Offer
  - 10.8 Techno commercial Offer Currencies
  - 10.9 Format Of Techno commercial Offer
  - 10.10 Late Offer
  - 10.11 Modification And Withdrawal Of Offers

Annexure I: Eligibility Bid  
 Annexure II :Technical Bid  
 Annexure III : Financial Proposal  
 Annexure IV: Award Of Order  
 Annexure V : Manpower Details  
 Annexure VI :Format For Performance Bank Guarantee  
 Annexure-VII :Declaration Regarding Acceptance Of Terms & Conditions  
 Annexure-VIII: Declaration Regarding Clean Track Record  
 Annexure-IX: Technical Proposal

Form1. Letter of Proposal  
 Form2. Particulars of the Bidder  
 Form3. Statement of Legal Capacity  
 Form4. Power of Attorney  
 Form5. Financial Capacity of the Bidder  
 Form6. Particulars of Key Personnel  
 Form7. Proposed Methodology and Work Plan  
 Form8. Abstract of Eligible Assignments of the Bidder  
 Form9. Abstract of Eligible Assignments of Key Personnel  
 Form10. Eligible Assignments of Bidder  
 Form11. Curriculum Vitae (CV) of Key Personnel  
 Form12. Deployment of Personnel  
 Form13. Survey and Field Investigations  
 Form14. Proposal for Sub-Consultant(s)  
 Form15. Covering Letter

Appendix-II: Financial Proposal  
 COMMERCIAL BID FORMAT

## **2.10 Clarifications**

**2.10.1** Bidders requiring any clarification on the RFP may send their queries to the Authority in writing before the date mentioned in the Schedule of Selection Process at Clause 1.8. The envelopes shall clearly bear the following identification:

“Queries/Request for Additional Information concerning RFP”

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

**2.10.2** The Authority reserves the right not to respond to any questions or provide any Clarifications, in its sole discretion, and nothing in this Clause 2.10 shall be construed as obliging the Authority to respond to any question or to provide any clarification.

## **2.11 Amendment of RFP**

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

- 2.11.2** All such amendments will be notified in writing through fax or e-mail to all Bidders who have purchased the RFP document. The amendments will also be displayed on the Official Website along with the revised RFP containing the amendments and will be binding on all Bidders.
- 2.11.3** In order to afford the Bidders a reasonable time for taking an amendment into account, or for any other reason, the Authority may, in its sole discretion, extend the Proposal Due Date.

## **C. PREPARATION AND SUBMISSION OF PROPOSAL**

### **2.12 Language**

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

### **2.13 Format and signing of Proposal**

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

A copy of the Power of Attorney certified under the hands of a partner or director of the Bidder and notarized by a notary public in the form specified in Annexure IX (Form- 4) shall accompany the Proposal.

- 2.13.4** Bidders should note the Proposal Due Date, as specified in Clause 1.8, for submission of proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by the Authority, and that evaluation will be carried out only on the basis of Documents received by the closing time of Proposal Due Date as specified in Clause

2.17.1. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected. For the avoidance of doubt, the Authority reserves the right to seek clarifications under and in accordance with the provisions of Clause 2.23. Bidder shall not submit any document after PDD except in response to any clarification sought by HRSAC and in response to clarification no change shall be made

## **2.14 Technical Proposal**

**2.14.1** Bidders shall submit the technical proposal in the formats at Annexure IX (the "**Technical Proposal**").

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

- (a) The Bid Security is provided;
- (b) All forms are submitted in the prescribed formats and signed by the prescribed signatories;
- (c) Power of Attorney, if applicable, is executed as per Applicable Laws;
- (d) CVs of all Professional Personnel have been included;
- (e) Key Personnel have been proposed only if they meet the Conditions of Eligibility laid down at Clause 2.1.4 (d) of the RFP;
- (f) No alternative proposal for any Key Personnel is being made and only one CV for each position has been furnished;
- (g) The CVs have been recently signed and dated in blue ink by the respective Personnel and countersigned by the Bidder. Photocopy or unsigned / countersigned CVs shall be rejected;
- (h) The CVs shall contain an undertaking from the respective Key Personnel about his/her availability for the duration specified in the RFP;
- (i) Professional Personnel proposed have good working knowledge of English language;
- (j) Key Personnel would be available for the period indicated in the TOR;
- (k) No Key Personnel should have attained the age of 75 (seventy five) years at the time of submitting the proposal; and
- (l) The proposal is responsive in terms of Clause 2.21.3.

**2.14.3** Failure to comply with the requirements spelt out in this Clause 2.14 shall make the Proposal liable to be rejected.

**2.14.4** If an individual Key Personnel makes a false averment regarding his qualification, experience or other particulars, or his commitment regarding availability for the Project is not fulfilled at any stage after signing of the Agreement, he shall be liable to be debarred for any future assignment of the Authority for a period of 5 (five) years. The award of this service to the Bidder may also be liable to cancellation in such an event.

**2.14.5** The Technical Proposal shall not include any financial information relating to the Financial Proposal.

**2.14.6** The proposed team shall be composed of experts and specialists (the "**Professional Personnel**") in their respective areas of expertise and managerial/support staff (the "**Support Personnel**") such that the Consultant should be able to complete the Consultancy within the specified time schedule. The Key Personnel specified in Clause 2.1.4 shall be included in the proposed team of Professional Personnel. Other competent and experienced Professional Personnel in the relevant areas of expertise must be added as required for successful completion of these services. The CV of each such Professional Personnel, if any, should also be submitted in the format at Form-12 of Annexure IX

- 2.14.7** A Bidder may, if it considers necessary, propose suitable Sub-Consultants /Consortium in specific areas of expertise. Credentials of such firms should be submitted in Form-15 of **Annexure IX**. A Sub-Consultant/Consortium, however, shall not be a substitute for any Key Personnel.
- 2.14.8** The Authority reserves the right to verify all statements, information and documents, submitted by the Bidder in response to the RFP. Any such verification or the lack of such verification by the Authority to undertake such verification shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Authority there under.
- 2.14.9** In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith if not yet appointed as the Consultant either by issue of the LOA or entering into of the Agreement, and if the Selected Bidder has already been issued the LOA or has entered into the Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this RFP, be liable to be terminated, by a communication in writing by the Authority without the Authority being liable in any manner whatsoever to the Bidder or Consultant, as the case may be.

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

## **2.15 Financial Proposal**

- 2.15.1** Bidders shall submit the financial proposal in the formats at Annexure III (the “**Financial Proposal**”) clearly indicating the total cost of the services in both figures and words, in Indian Rupees, and signed by the Bidder’s Authorized Representative. In the event of any difference between figures and words, the amount indicated in words shall prevail. In the event of a difference between the arithmetic total and the total shown in the Financial Proposal, the lower of the two shall prevail.
- 2.15.2** While submitting the Financial Proposal, the Bidder shall ensure the following:
- (i) All the costs associated with the assignment shall be included in the Financial Proposal. These shall normally cover as per scope of work remuneration for all the Personnel (Expatriate and Resident, in the field, office etc), accommodation, air fare, equipment, printing of documents, surveys, geo-technical investigations etc. The total amount indicated in the Financial Proposal shall be without any condition attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and liable to be rejected.
  - (ii) The Financial Proposal shall take into account all expenses and tax liabilities. For the avoidance of doubt, it is clarified that all taxes shall be deemed to be included in the costs shown under different items of the Financial Proposal. Further, all payments shall be subject to deduction of taxes at source as per Applicable Laws.
  - (iii) Costs (including break down of costs) shall be expressed in INR.

## 2.16 Submission of Proposal

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

**2.16.2** The Proposal will be sealed in an outer envelope which will bear the address of the Authority as indicated at clause 1.11.1, RFP Notice number, project name as indicated at Clauses 1.11.3 and the name and address of the Bidder. It shall also bear on top, the following:

“Do not open, except in presence of the Authorized Person of the Authority”

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

**2.16.3** The aforesaid outer envelope will contain two separate sealed envelopes, one clearly marked ‘**Technical Proposal**’ and the other clearly marked ‘**Financial Proposal**’. The envelope marked “Technical Proposal” shall contain:

- i. Application in the prescribed format (Form-1 to Form-15 of Annexure IX) along with and supporting documents; and
- ii. Bid security as specified in Clause **2.20.1**

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

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

**2.16.5** The completed Proposal must be delivered on or before the specified time on Proposal Due Date. Proposals submitted by fax, telex, telegram or e-mail shall not be entertained.

**2.16.6** The Proposal shall be made in the Forms specified in this RFP. Any attachment to such Forms must be provided on separate sheets of paper and only information that is directly relevant should be provided. This may include photocopies of the relevant pages of printed documents. No separate documents like printed annual statements, company brochures, copy of contracts etc. will be entertained.

**2.16.7** The rates quoted shall be firm throughout the period of performance of the assignment up to and including acceptance of the Feasibility Report by the Authority and discharge of all obligations of the Consultant under the Agreement.

## 2.17 Proposal Due Date

- 2.17.1** Proposal should be submitted on or before 1100 hrs on the Proposal Due Date specified at Clause 1.8 at the address provided in Clause 1.11.1 in the manner and form as detailed in this RFP. A receipt thereof should be obtained from the person specified therein.
- 2.17.2** The Authority may, in its sole discretion, extend the Proposal Due Date by issuing an Addendum in accordance with Clause 2.11 uniformly for all Bidders.

## 2.18 Late Proposals

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

## 2.19 Modification/ substitution/ withdrawal of Proposals

- 2.19.1** The Bidder may modify, substitute, or withdraw its Proposal after submission, provided that written notice of the modification, substitution, or withdrawal is received by the Authority prior to Proposal Due Date. No Proposal shall be modified, substituted, or withdrawn by the Bidder on or after the Proposal Due Date.
- 2.19.2** The modification, substitution, or withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 2.16, with the envelopes being additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL", as appropriate.
- 2.19.3** Any alteration / modification in the Proposal or additional information or material supplied subsequent to the Proposal Due Date, unless the same has been expressly sought for by the Authority, shall be disregarded.

## 2.20 Bid Security

- 2.20.1** The Bidder shall furnish as part of its Proposal, a bid security of **Rs. 20 lakhs** (twenty lakhs) in the form of a Demand Draft issued by one of the Nationalized/ Scheduled Banks in India in favour of Chief Scientist, HARSAC payable at Hisar (the "**Bid Security**"), returnable not later than 90 (Ninety) days from PDD except in case of the two highest ranked Bidders as required in Clause 2.24.1. In the event that the first ranked Bidder commences the assignment as required in Clause 2.29, the second ranked Bidder (R2), who has been kept in reserve, shall be returned its Bid Security forthwith, but in no case not later than 180 (one hundred and eighty days) from PDD. The Selected Bidder's Bid Security shall be returned, upon the Bidder signing the Agreement and completing the Deliverables assigned to it for the first 2 (two) months of the Consultancy in accordance with the provisions thereof.
- 2.20.2** Any Bid not accompanied by the Bid Security shall be rejected by the Authority as nonresponsive.
- 2.20.3** The Authority shall not be liable to pay any interest on the Bid Security and the same shall be Interest free.
- 2.20.4** The Bidder, by submitting its Application pursuant to this RFP, shall be deemed to have acknowledged that without prejudice to the Authority's any other right or remedy hereunder or in law or otherwise, the Bid Security shall be forfeited and appropriated by the Authority as the mutually agreed pre-estimated compensation and damage payable to the Authority for, *inter alia*, the time, cost and effort of the Authority in regard to the

RFP including the consideration and evaluation of the Proposal under the following conditions:

- (a) If a Bidder submits a non-responsive Proposal;
- (b) If a Bidder engages in any of the Prohibited Practices specified in clause 4.0 of this RFP;
- (c) If a Bidder withdraws its Proposal during the period of its validity as specified in this RFP and as extended by the Bidder from time to time;
- (d) In the case of the Selected Bidders, if any of the Bidders fails to reconfirm its commitments during negotiations as required vide Clause 2.24.1;
- (e) In the case of a Selected Bidder, if the Bidder fails to sign the Agreement or commence the assignment as specified in Clauses 2.28 and 2.29 respectively; or
- (f) If the Bidder is found to have a Conflict of Interest as specified in Clause 2.3.
- (g) In case any of the four selected vendors fails to reconfirm its commitment of working at the lowest quoted rates as per clause 3.4.2 at page 34.

## **D. EVALUATION PROCESS**

### **2.21 Evaluation of Proposals**

**2.21.1** The Authority shall open the Proposals at 1030 hours on the Proposal Due Date, at the place specified in Clause 1.11.1 and in the presence of the Bidders who choose to attend. The envelopes marked "Technical Proposal" shall be opened first. The Financial Proposal will only be opened if the technical proposal secures the minimum marks as per the clause 3.1.3. The envelopes marked "Financial Proposal" shall be kept sealed for opening at a later date.

**2.21.2** Proposals for which a notice of withdrawal has been submitted in accordance with Clause 2.19 shall not be opened.

**2.21.3** Prior to evaluation of Proposals, the Authority will determine whether each Proposal is responsive to the requirements of the RFP. The Authority may, in its sole discretion, reject any Proposal that is not responsive hereunder. A Proposal shall be considered responsive only if:

- (a) The Technical Proposal is received in the form specified at Annexure IX;
- (b) It is received by the Proposal Due Date including any extension thereof pursuant to Clause 2.17;
- (c) It is accompanied by the Bid Security as specified in Clause 2.20.1.
- (d) It is signed, sealed, bound together in hard cover and marked as stipulated in Clauses 2.13 and 2.16;
- (e) It is accompanied by the Power of Attorney as specified in Clause 2.2.4;
- (f) It contains all the information (complete in all respects) as requested in the RFP;
- (g) It does not contain any condition or qualification; and
- (h) It is not non-responsive in terms hereof.

**2.21.4** The Authority reserves the right to reject any Proposal which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the Authority in respect of such Proposals.

**2.21.5** The Authority shall subsequently examine and evaluate Proposals in accordance with the Selection Process specified at Clause 1.6 and the criteria set out in Section 3 of this RFP.

**2.21.6** After the technical evaluation, the Authority shall prepare a list of pre-qualified and shortlisted Bidders in terms of Clause 3.2 for opening of their Financial Proposals. A date,

time and venue will be notified to all Bidders for announcing the result of evaluation and opening of Financial Proposals. Before opening of the Financial Proposals, the list of pre-qualified and shortlisted Bidders along with their Technical Score will be read out. The opening of Financial Proposals shall be done in presence of respective representatives of Bidders who choose to be present. The Authority will not entertain any query or clarification from Bidders who fail to qualify at any stage of the Selection Process. The financial evaluation and final ranking of the Proposals shall be carried out in terms of Clauses 3.3 and 3.4.

**2.21.7** Bidders are advised that Selection will be entirely at the discretion of the Authority. Bidders will be deemed to have understood and agreed that no explanation or justification on any aspect of the Selection Process or Selection will be given.

**2.21.8** Any information contained in the Proposal shall not in any way be construed as binding on the Authority, its agents, successors or assigns, but shall be binding against the Bidder if the Consultancy is subsequently awarded to it.

## **2.22 Confidentiality**

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

## **2.23 Clarifications**

**2.23.1** To facilitate evaluation of Proposals, the Authority may, at its sole discretion, seek clarifications from any Bidder regarding its Proposal. Such clarification(s) shall be provided within the time specified by the Authority for this purpose. Any request for clarification(s) and all clarification(s) in response thereto shall be in writing.

**2.23.2** If a Bidder does not provide clarifications sought under Clause 2.23.1 above within the specified time, its Proposal shall be liable to be rejected. In case the proposal is not rejected, the Authority may proceed to evaluate the proposal by construing the particulars requiring clarifications to the best of its understanding, and the bidder shall be barred from subsequently questioning such interpretation of the authority.

## **E. APPOINTMENT OF VENDORS**

### **2.24 Negotiations**

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

**2.24.2** The Authority will examine the CVs of all other Professional Personnel and those not found suitable shall be replaced by the Bidder to the satisfaction of the Authority.

**2.24.3** The Authority will examine the credentials of all Sub-Consultants/Consortium proposed for this Consultancy and those not found suitable shall be replaced by the Bidder to the satisfaction of the Authority.

**2.25 Substitution of Key Personnel**

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

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

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

**2.26 Indemnity**

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

**2.27 Award of work**

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

**2.28 Execution of Agreement**

After acknowledgement of the LOA as aforesaid by the Selected Bidder, it shall execute the Agreement within the period prescribed in Clause 1.8. The Selected Bidder shall not be entitled to seek any deviation in the Agreement.

### **2.29 Commencement of assignment**

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

### **2.30 Proprietary data**

Subject to the provisions of Clause 2.22, all documents and other information provided by the Authority or submitted by an Bidder to the Authority shall remain or become the property of the Authority. Bidders and the Consultant, as the case may be, are to treat all information as strictly confidential. The Authority will not return any Proposal or any information related thereto. All information collected, analyzed, processed or in whatever manner provided by the Consultant to the Authority in relation to the Consultancy shall be the property of the Authority.

## **3.0 CRITERIA FOR EVALUATION**

### **3.1 Evaluation of Technical Proposals**

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

**3.1.2** The Bidder must score a minimum of 60 points out of 100 to be eligible for the award of work. Financial bid shall not be opened in such cases.

**3.1.3** The scoring criteria based upon the concept of **Quality-cum-Cost Based Selection (QCBS)** will be followed for evaluation. For this weightage as provided below shall be given:

**Technical BID Evaluation Criteria:**

<b>Item Code</b>	<b>Parameter</b>	<b>Evaluation Criteria</b>	<b>Maximum Marks</b>
1	Relevant Experience of the Bidder	a) Implemented at least one project related to cadastral map digitization. (5) b) At least Three GIS Project related to digitization using scanned maps and High resolution satellite Image(HRSI) and implementation of project value not less than 50 lakhs (6) c) At least one project of spatial data integration (5) d) Overall experience and Credential of the firm: (10) i. Financial strength, capacity of firm: (5) <2 crore=0 , 1 marks for each 2 crore, maximum marks 5. ii. Turnover from Software Development Services, (3). 1 mark for each 1 crore with a maximum marks of 3. iii. Year of Experience in MIS/GIS: (2) 1 marks for each 2 years, with maximum marks of 2. e) Cadastral experience of Haryana/ Punjab/ Delhi/ Western U.P. (un-divided) : (6)	32
2	Approach & Methodology:	a) Clear understanding of scope of services (15), including their interpretation. b) Team organization and scheduling : Team and its Optimization work plan to meet an efficient activity scheduling (10)	25
3	Key Personnel (minimum 50 GIS and CAD personal are required)	a) Experience and competence of the Key staff for the assignment b) Experience, competence and hands-on experience of the Team Leader in execution and co-ordination of such projects. c) Profile and Experience of Key Staff in man years on similar MIS/GIS projects d) Extent of on-site commitment/ engagement of the key staff for the project  Senior Cadastral Scientist/Engineer -cum-Team leader(4), Software Engineer(4) Revenue officer, Surveyor, Documentation officer(2)	10
4	Evaluation Committee observation	a) Demonstration / presentation of the pilot village related to desired accuracy as per the scope of this project (20) [Fathehabad district is selected as pilot district for trial basis] b) Presentation of capabilities of the organization and implementation plan for this project(5) c) Corporate Social Responsibility(CSR) performances (5) d) ISO or equivalent Certification (3)	33
		G. Total	100

**Note:** Minimum 60 marks are required in technical bid evaluation for consideration for financial bid opening. The score given by the Evaluation Committee will stand final and no representation in this regard will be entertained and Haryana Space Applications Centre's (HARSAC) decision will be final and binding on all the vendors

### 3.1.4 Eligible Assignments

Expression of Interest (EOI) was invited by Revenue and Disaster Management Department and 15 vendors have been shortlisted as eligible for the assignment for inviting RFP by a Committee under the Chairmanship of Financial Commissioner, Revenue, Haryana.

### 3.2 Short-listing of Bidders

Out of the Bidders securing 60 points and above will be ranked as aforesaid and shall be pre-qualified and shortlisted for financial evaluation in the second stage. However, if the number of such prequalified Bidders is less than two, the Authority may, in its sole discretion, pre-qualify the Bidder(s) whose technical score is less than 60 points even if such Bidder(s) do(es) not qualify in terms of Clause 3.1.2; provided that in such an event, the total number of pre-qualified and short-listed Bidders shall not exceed two.

### 3.3 Evaluation of Financial Proposal

**3.3.1** In the second stage, the financial evaluation will be carried out as per this Clause 3.3. Each Financial Proposal will be assigned a financial score (SF).

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

**3.3.3** The Authority will determine whether the Financial Proposals are complete, unqualified and unconditional. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfill its obligations as per the TOR within the total quoted price shall be that of the Consultant. The lowest Financial Proposal (FM) will be given a financial score (SF) of 100 points. The financial scores of other proposals will be computed as follows:

$$SF = 100 \times FM/F$$

(F = amount of Financial Proposal)

### 3.4 Combined and final evaluation

**3.4.1** Proposals will finally be ranked according to their combined technical (ST) and financial (SF) scores as follows:

$$S = ST \times Tw + SF \times Fw$$

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

### 3.4.2 Selection of multiple vendors:-

Keeping in view the time limitation of NLRMP, four vendors will be selected for award of work. The vendors will be ranked R1, R2, R3 and R4 etc. based upon the combined score of technical and financial weightage described above. The work will be allotted to four

vendors in order of merit of the combined score. However, all the selected vendors will be bound to work at the lowest rates quoted by any one of the four selected vendors (R1, R2, R3 and R4) in its financial bid. All the four vendors (R1, R2, R3 and R4) have to submit their written acceptance for the above to qualify for award of the work in a distributed manner as indicated in the example.

For example, if the work is allotted to four vendors R1, R2, R3 and R4, and the rates of R3 are the lowest in its financial bid, the rest of three R1, R2 and R4 will be bound to work at the rates quoted by R3. The work among four vendors will be divided by the Evaluation Committee based upon geographical location, topographical conditions and volume of work.

#### 4.0 FRAUD AND CORRUPT PRACTICES

4.1 The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Selection Process. Notwithstanding anything to the contrary contained in this RFP, the Authority shall reject a Proposal without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice (collectively the “**Prohibited Practices**”) in the Selection Process. In such an event, the Authority shall, without prejudice to its any other rights or remedies, forfeit and appropriate the Bid Security or

Performance Security, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the Authority for, *inter alia*, time, cost and effort of the Authority, in regard to the RFP, including consideration and evaluation of such Bidder’s Proposal.

4.2 Without prejudice to the rights of the Authority under Clause 4.1 hereinabove and the rights and remedies which the Authority may have under the LOA or the Agreement, if an Bidder or Consultant, as the case may be, is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the LOA or the execution of the Agreement, such Bidder or Consultant shall not be eligible to participate in any tender or RFP issued by the Authority during a period of 2 (two) years from the date such Bidder or Consultant, as the case may be, is found by the Authority to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.

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

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

connected with the Selection Process); or (ii) save as provided herein, engaging in any manner whatsoever, whether during the Selection Process or after the issue of the LOA or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Agreement, who at any time has been or is a legal, financial or technical consultant/ adviser of the Authority in relation to any matter concerning the Project;

- (b) **“Fraudulent Practice”** means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process;
- (c) **“Coercive Practice”** means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person’s participation or action in the Selection Process;
- (d) **“Undesirable Practice”** means
  - (i) Establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or
  - (ii) Having a Conflict of Interest; and
- (e) **“Restrictive Practice”** means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Selection Process.

## 5.0 PRE-PROPOSAL CONFERENCE

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

## 6.0 MISCELLANEOUS

- 6.1 The Selection Process shall be governed by, and construed in accordance with, the laws of India and the Courts at Hisar, Haryana shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the Selection Process.
- 6.2 The Authority, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to:
  - (a) Suspend and/or cancel the Selection Process and/or amend and/or supplement the Selection Process or modify the dates or other terms and conditions relating thereto;
  - (b) Consult with any Bidder in order to receive clarification or further information;

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

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

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

**6.4** All documents and other information supplied by the Authority or submitted by an Bidder shall remain or become, as the case may be, the property of the Authority. The Authority will not return any submissions made hereunder. Bidders are required to treat all such documents and information as strictly confidential.

**6.5** The Authority reserves the right to make inquiries with any of the clients listed by the Bidders in their previous experience record.

**7.0 GUIDANCE NOTE ON CONFLICT OF INTEREST** *(See Clause 2.3.3)*

**7.1** This Note further explains and illustrates the provisions of Clause 2.3 of the RFP and shall be read together therewith in dealing with specific cases.

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

**7.3** Conflict of interest may arise between the Authority and a consultant or between consultants and present or future concessionaries/ contractors. Some of the situations that would involve conflict of interest are identified below:

**(a)** Authority and consultants:

**(i)** Potential consultant should not be privy to information from the Authority which is not available to others; or

**(ii)** Potential consultant should not have defined the project when earlier working for the Authority; or

**(iii)** Potential consultant should not have recently worked for the Authority overseeing the project.

**(b)** Consultants and concessionaires/contractors:

**(i)** No consultant should have an ownership interest or a continuing business interest or an on-going relationship with a potential concessionaire/ contractor save and except relationships restricted to project-specific and short-term assignments; or

(ii) no consultant should be involved in owning or operating entities resulting from the project; or

(iii) no consultant should bid for works arising from the project.

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

- 7.4** The normal way to identify conflicts of interest is through self-declaration by consultants. Where a conflict exists, which has not been declared, competing companies are likely to bring this to the notice of the Authority. All conflicts must be declared as and when the consultants become aware of them.
- 7.5** Another approach towards avoiding a conflict of interest is through the use of “Chinese walls” to avoid the flow of commercially sensitive information from one part of the consultant’s company to another. This could help overcome the problem of availability of limited numbers of experts for the project. However, in reality effective operation of “Chinese walls” may be a difficult proposition. As a general rule, larger companies will be more capable of adopting Chinese walls approach than smaller companies. Although, “Chinese walls” have been relatively common for many years, they are an increasingly discredited means of avoiding conflicts of interest and should be considered with caution. As a rule, “Chinese walls” should be considered as unacceptable and may be accepted only in exceptional cases upon full disclosure by a consultant coupled with provision of safeguards to the satisfaction of the Authority.
- 7.6** Another way to avoid conflicts of interest is through the appropriate grouping of tasks. For example, conflicts may arise if consultants drawing up the terms of reference or the proposed documentation are also eligible for the consequent assignment or project.
- 7.7** Another form of conflict of interest called “scope–creep” arises when consultants advocate either an unnecessary broadening of the terms of reference or make recommendations which are not in the best interests of the Authority but which will generate further work for the consultants. Some forms of contractual arrangements are more likely to lead to scope-creep. For example, lump-sum contracts provide fewer incentives for this, while time and material contracts provide built in incentives for consultants to extend the length of their assignment.
- 7.8** Every project contains potential conflicts of interest. Consultants should not only avoid any conflict of interest, they should report any present/ potential conflict of interest to the Authority at the earliest. Officials of the Authority involved in development of a project shall be responsible for identifying and resolving any conflicts of interest. It should be ensured that safeguards are in place to preserve fair and open competition and measures should be taken to eliminate any conflict of interest arising at any stage in the process.

**Terms of Reference (TOR)**

**SELECTION OF VENDOR**

**FOR**

**MODERANIZATION OF LAND RECORDS**

**(INCLUDING DIGITIZATION OF CADASTRAL MAPS, INTEGRATION WITH  
RECORDS OF RIGHTS AND MANAGEMENT OF OLD REVENUE DOCUMENTS)  
UNDER NLRMP IN HARYANA**

**FROM**

**HARYANA SPACE APPLICATIONS CENTER (HARSAC),  
DEPARTMENT OF SCIENCE AND TECHNOLOGY, GOVERNMENT OF HARYANA  
CCS HAU CAMPUS, HISAR**

**FOR**

**DEPARTMENT OF REVENUE & DISASTER MANAGEMENT  
GOVERNMENT OF HARYANA  
CHANDIGARH**



## 1.0 TENDER NOTICE FOR MODERNIZATION OF LAND RECORDS IN HARYANA

### INVITATION OF TECHNO COMMERCIAL OFFER FOR MODERNIZATION OF LAND RECORDS IN HARYANA

The Government of Haryana (herein referred to as 'GoH') invites tenders from the companies/ Vendors to select a Service Provider for modernization of land records(including digitization of cadastral maps, integration with Records of Rights (RoR) and management of old revenue documents) under NLRMP in Haryana & to preserve the data available in the documents, electronic storage and facilitate its easy access to the users, retrieval to the public and functionaries of the Department.

The assignment specifications, terms and conditions, and various Performa's for submitting the Tender offer are described in the Tender document.

The interested companies are requested to submit their Techno-Commercial offer.

Earnest Money Deposit (EMD) amounting to **20 lakhs** should be submitted in the form of Demand Draft raised from nationalized bank along with the offer favoring "**Chief Scientist, Haryana Space Applications Center (HARSAC),**" payable at Hisar.

The bidder will submit the response to the present tender in single packet which contains following envelopes. **ENVELOPE- I: Technical Bid** – (1 original + 1 copy ) + EMD + Documents Charges of Rs. 5000 (if not already deposited)

This packet is to be superscripted Reference Number, Due Date and with the wordings "DO NOT OPEN BEFORE DUE DATE":

Technical offer along with EMD and document charges (if not already deposited) should be put in single sealed envelope clearly marked "**TECHNICAL OFFER FOR MODERNIZATION OF LAND RECORDS(INCLUDING DIGITIZATION OF CADASTRAL MAPS, INTEGRATION WITH RECORDS OF RIGHTS (ROR) AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN HARYANA**"

The cover containing Commercial Offer should be put in single sealed envelope clearly marked **COMMERCIAL OFFER FOR MODERNIZATION OF LAND RECORDS(INCLUDING DIGITIZATION OF CADASTRAL MAPS, INTEGRATION WITH RECORDS OF RIGHTS (ROR) AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN HARYANA.**

INTEGRATION WITH RECORDS OF RIGHTS (ROR) AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN HARYANA.

The packet thus prepared should also indicate clearly the name, address and telephone number of the company to enable the offer to be returned unopened in case it is declared "Late" or submitted after the due date.

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

The copy of this document can be downloaded from website [http:// www.harsac.org](http://www.harsac.org) Or can be procured from Haryana Space Applications Center, CCS HAU Campus, Hisar 125004 by paying the cost of Rs 5,000/- only during office hours on working days in person by paying above said amount or by way of Demand Draft favoring "Chief Scientist, Haryana Space Applications Center (HARSAC)," payable at Hisar.

In case the company downloads the document from the website, the cost of document should be paid along with the submission of bid.

## 2.0 OVERVIEW OF DIGITIZATION OF CADASTRAL MAPS

### 2.1 Introduction

The Haryana state is located in northern India between 27° 37' to 30° 35' latitude and between 74° 28' to 77° 36' longitude.

It is surrounded by Uttar Pradesh (UP) on the east, Punjab on the west, Uttarakhand, Himachal Pradesh & Shivalik Hills on the north and Delhi, Rajasthan and Aravalli Hills on the south. An area of about 1,553 sq km of the state is covered by forests.

For administrative purpose, the state has been divided into four divisions (Ambala, Rohtak, Gurgaon and Hissar) and 21 districts. There are currently 69 Revenue Tehsils in the state.

Modernization of land records (including digitization of Musavis, its linkage with RoR and management of old revenue documents aimed at imparting the services related to land records and monitor revenue administration across the state in order to improve the revenue administration.

### 2.2 Objectives

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

- (i) A single window to handle land records (including the maintenance and updating of textual records, maps, survey and settlement operations and registration of immovable property)
- (ii) The “mirror” principle, which refers to the fact that cadastral records mirror the ground reality
- (iii) The “curtain” principle which indicates that the record of title is a true depiction of the ownership status, mutation is automated following registration and the reference to past records is not necessary, and
- (iv) Title insurance, which guarantees the title for its correctness and indemnifies the title holder against loss arising on account of any defect therein.

The present project has the main aim of development of Digital Cadastral Reference Database using village cadastral maps and has the following main components:

#### (a) Computerization of cadastral maps and generation of GIS products

The first component is the computerization of cadastral maps and generating GIS compatible softcopy products. This involves identifying the procedures for generating the softcopy products and standardization of each product for unique identification of each cadastral map in the entire country and content (legend) codification so that each feature in the map is uniquely defined.

**(b) Geo-referencing of cadastral maps**

The second component is geo-referencing of cadastral maps. The digital cadastral maps are carried forward for deriving geodetic coordinates for each parcel and in turn for each vertex of the cadastral map. This is achieved through geo-referencing the maps using real world coordinates of the ground control points (GCP's). The GCP's are derived from high-resolution satellite data. The accuracy of geo-referencing of the cadastral maps using ground coordinates from satellite data is analyzed.

**(c) Value addition**

The third component is value addition to the geo-referenced cadastral maps. The spatial information generated using remote sensing & GIS techniques, and development of socio-economic data will be integrated with geo-referenced cadastral maps. Village level planning will be attempted using spatial/non-spatial information. This will enrich the utility of cadastral maps in the present day context. The scope of applications of geo-referenced cadastral maps will be attempted with relevant examples.

The objective behind "MODERNIZATION OF LAND RECORDS(INCLUDING DIGITIZATION OF CADASTRAL MAPS, INTEGRATION WITH RECORDS OF RIGHTS (ROR) AND MANAGEMENT OF OLD REVENUE DOCUMENTS) UNDER NLRMP IN HARYANA" is digitizing the cadastral maps in the State and linking of the same with textual data (RoR). More services will be extended to the citizens. As of now, HALRIS software is being used in Haryana for maintaining the RoR, for registration of Land Deeds. The proposed system would create the database of cadastral maps in digitized form and the same would be linked into the existing HARLIS software through Bhu-Naksha already developed and tested by NIC. This would streamline the land revenue administration as the system would be temper proof with easy availability of data in the Tehsils/ Sub-Division/ District/ State/ CSCs.

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

**3. Scope of Work:**

The digitization of village (revenue) maps will help State Government to create database of the revenue maps/ musavis in digitized form and linking up with the existing database of Land Records Management Software i.e. HALRIS developed and maintained by National Informatics Centre, Haryana. Average no. Of plots per musavi are 400 (approx). However, the khasra nos. may increase after updation.

The Service provider is supposed to provide turnkey solution which includes existing cadastral maps to be digitized and linking the same with existing textual data i.e. RoR (jamabandi). For digitization of Cadastral maps, Musavi should be used as base. In case Cadastral Maps are not in a position to be scanned then regeneration of

musavis will be carried out by the department. Tentative number of such cases would be around 5-10%. The Updation of the hard copy Cadastral map (on musavies sheets/ paper) as per the existing RoR will be carried out by the department. In case due to non clarity / non availability of the updated parcel information at the department, the updation will be carried out by the service provider from field using ETS survey or satellite image. Thereafter, the digitized data will be updated to current stage by the Service Provider selected for this project using hard copy updated cadastral map (musavies sheets) provided by department. However the updation of the cadastral map from the field / satellite image will be done by vendors only.

The process of creation of Cadastral Information System (CIS) will involve Geo-referencing of High Resolution Satellite Image (HRSI), Digitization/redrawing of Musavis, Field Verification, Public Validation, Attribute addition, linking with RoR and fixing Sehad stones. After the successful completion of this job, the vendor should provide support for 2 years for maintaining record, updation, imparting training etc.

### **3.1 Digitization:**

- a) Revenue Department will provide the existing musavis and agency will scan the musavis and give the hard copy to the Revenue Department for updating. Revenue department will return the updated copy of the Musavi to the vendor agency for digitization (in defined time frame strictly). Digitized musavis will be geo-referenced with the help of High-Resolution Satellite Imagery (HRSI).
- b) If Musavies (hard copy) is not available with DLR/DRO or not readable then the creation and digitization of the New Musavies from field book.
- c) Digitized cadastral maps/musavis, integration with Records of Rights (RoR) in GIS layers depicting Geographic information (the property co-ordinates, the actual measurements as per ground reality and musavi), attributes information (based on RoR) Survey on), it's interlinking with optimum precision.
- d) To generate integrated, Geo-referenced village/tehsil/District mosaic of cadastral maps.
- e) To develop retrieval system to obtain the drawing of the land along with dimensions, area (as on ground and also as per RoR), attributes and neighborhood details.
- f) The property maps should be able to integrate with the Record of Rights and future web application/publishing.

### **3.2 Survey/resurvey and updation of the survey & settlement records (including ground control network and ground truthing) using the following modern technology options:**

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

- a) Pure ground method using Electronic Total Station (ETS) and Differential Global Positioning System (DGPS)

- b) High Resolution Satellite Imagery (HRSI) and ground truth by ETS and DGPS.  
The Purpose of ETS and DGPS survey are as follows:
- i. Updation of Maps / Parcel which could not be updated by the department due to the unavailability / clarity of record.
  - ii. Ground truthing of the features captured from satellite image
  - iii. Fixing of Sehada stone
  - iv. Georeferencing / Ortho rectification of the satellite image

### 3.3 Digitization and Management of Old Revenue Documents:

- a) Scanning of Misal Hakiyat copy of Jamabandi
- b) Scanning of all the deeds registered during last 12 years
- c) Cataloguing and indexing of all the scanned documents
- d) Storage of scanned documents in soft format
- e) Security of scanned documents
- f) Software for indexing and retrieval of scanned documents
- g) Scanning & preservation of old documents
- h) Geo-link with RoR Geo-link with Document management
- i) Modern record rooms/land records management centers at tehsil/taluk/circle/block level. It should be develop virtual record room, not to be set up physically.

### 3.4 Following points must be addressed during the digitization: -

- a) The missing (the features present on the ground but not on Mussavis) and invalid (the features present in Mussavis but not on the ground) features should be digitized and reflected in separate layers.
- b) Updated geo-referenced Mussavis should show the roads/canals/water bodies/railway lines as existing, missing or invalid features in separate layers as per RoR.
- c) The property dimensions and area should be shown in the metric system as well as the traditional system.
- d) Vendor will also generate the field book of the village from the digitized musavies.
- e) The details of the plots should be shown in the attribute table (Area as per RoR, Ownership details etc) along with actual ground/ maps dimensions.
- f) Comparison of area and dimensions should be done.
- g) Encroachments, excess areas and measurement discrepancies should be highlighted (different color scheme) in the Mussavis. The further course of action on that area is the responsibility of DLR.
- h) The precision in linear and area measurements should be 99%. Accuracy of <1 meter on ground should be achieved.
- i) **Linkage with ROR:** The vendor will provide the digitized musavies in the form of Shape files as per the format specified by the NIC. These shape files must contain the attribute data required to integrate with the Haryana Land Records Information System (HARLIS) of

NIC. Separate shape files should be provided for each layer digitized by the vendor. In case of discrepancies between ROR data and digitized musavies, vendor will do the ground survey for removing the discrepancies as per the DLR settlements.

- j) **Sehda Stone:** There should be one revenue stone (including Sehdas) per sq. km area as per the location of GCPs. The vendor will assign a unique ID and location coordinates to every revenue stone (including Sehdas). The data about the exact geo-referenced coordinates of Sehdas & other revenue stones should be communicated to the Revenue department. The Sehdas and revenue stones should be inscribed with unique code for access of coordinates.
- k) **High Resolution Satellite Image (HRSI), wherever required, will be provided by HARSAC, Hisar for which the cost would be separately provided by Revenue Department, Haryana to HARSAC.**
- l) Technically qualified bidders will be given one village each for assessing their technical capability to achieve above scope of work. Based on the evaluation of output further points will be allotted.
- m) Prepare detailed scope of work and system design document within 4 weeks from the award of contract. System Design document must include the following along with the details of the proposed Project:
  - n) Updation is required for the map/parcel which could not be updated by the development due to unavailability of records. However percentage of such parcel is about 1-5 % of total parcels.
- **Scanning, Digitization and linking with RoR data**
  - Methodology for creating index for village sheets, missing sheets, sheets to be retraced.
  - Methodology to be adopted for scanning & digitization of cadastral maps (musavis) and linking of the same with textual data (available in ASCII format) i.e. RoR which uses platform Visual Basic at front end & SQL Server 2000 as back end
  - Making available the village maps
  - Indexing, Coding & Scanning
  - Tiling map using GRID
  - Digitization of village maps
  - Attribute Data attachment
  - Hard copy output generation
  - Hard copy evaluation by LRD
  - Database Generation in GIS environment
  - Softcopy validation by DLR in GIS environment
  - Final hard copy generation
  - Final Hard copy validation
  - Satisfactory training to the departmental officials,
  - Security & Authentication Policies
  - Requirements if any at the Government level
  - Providing deliverable as per technical specifications.

- **Satellite data preparation**

- Acquisition of satellite data
- GRIDBASE generation
- MAPGRID generation
- Geo-referencing of LISS Images
- Registration of PAN /QB/WV data/ HRSI
- Merged product generation

- **Geo-Referencing of village maps**

- Acquisition of Ground Control Point (GCP)
- Geo-referencing of Village map
- Validation of geo-referenced output
- Edge-Matching of neighboring village maps
- Mosaic generation at RI, Taluk & District Level
- Get the design document approved from the Director Land Records, Haryana.

**o)** Get the design document approved from the Director Land Records, Haryana.

**p)** Mosaic clarification will be done by vendors where district boundaries clasher with other district boundaries covering all database

**q)** Printing (3 set) colored paper print

- One set of musavies for updation
- One set of Mosaic Sajara for final checking
- One set of final sajara map

**r)** The generalized work flow has been indicated below for clarity of the scope of work. In order to attain the desired accuracy or beast accuracy the vendor may fine tune the below mentioned work flow.

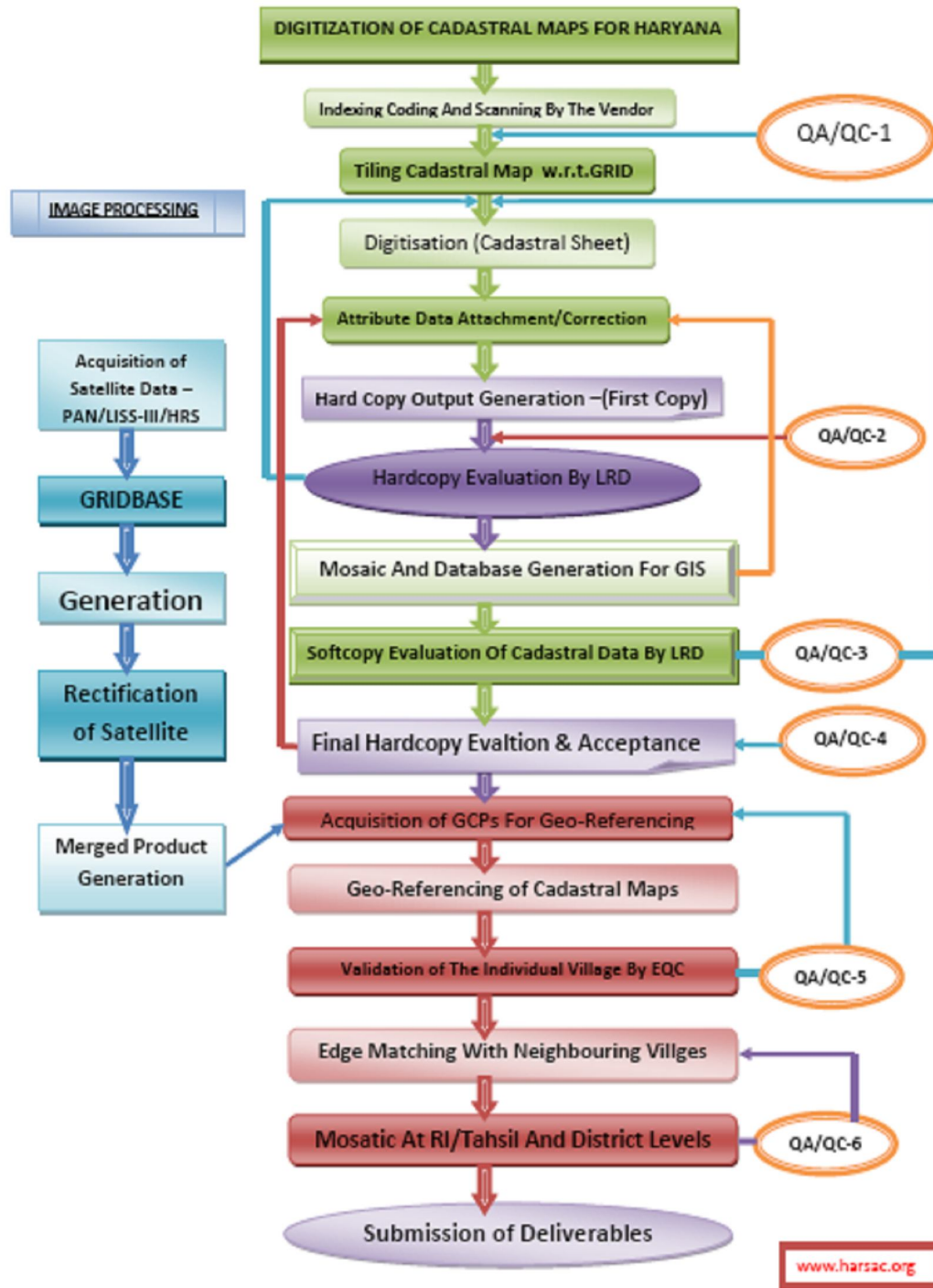


Fig 1. Methodology Flowchart for digitization of cadastral maps of Haryana

### 3.5 Training & capacity building

Agency/ Vendor would provide suitable training to all the Tehsildars, Naib-Tehsildars, Kanungoos and Patwaris of Revenue Departments Haryana who are working at 69 Tehsils Head Quarters of the state. The officials would be trained to implement the software and the system independently. Agency/Vendor also provide onsite post implementation support for two year

**3.6** The work of scanning & updating has to be done at space provided by State Govt. vendors will give an undertaking that integrity, secrecy and security of data shall be maintained. All the necessary hardware/software, LAN connectivity, UPS, etc. in Land Records and Settlements offices (District/Tehsil) if required would be done by the service provider

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

**3.7 Time bound completion of the work:** The work is to be completed in a time specific manner. Vendor would provide a time schedule / work plan for various activities. The duration of the project is \_\_\_\_\_ weeks.(to be given by Vendors)

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

- i. Scanning of the cadastral map or part of the village map and feeding this scanned map into the computer to create a computer image of the map which is known as a raster map. Every scanned output will be printed on 100 GSM paper for checking and final printout on 90 micron polyester matt film.
- ii. The next step involves going over the outline of the village boundary on the computer image of the map with the mouse and marking the outlines of each plot. This process, known as vectorisation, provides the coordinates of each point on the map.

**3.9** A printout of these vectorised maps would be given to the Revenue Department by the service provider for thorough checking with the original cadastral maps. The Revenue Department would then table check the vectorised map on a glass table with the original map placed below it. Every line and point on the two maps should

match. With Respect to RoR Dimension and same can be verified from HRIS. The correctness of the digitized map would be then certified by the Revenue Department. If any error is detected, the same has to be rectified by the Service Provider/digitizing agency. Necessary arrangement for this testing will be done by the Service Provider.

- 3.10** The software used in the digitization process creates a number of files. Each of these files pertains to a GIS-based layer and each layer consists of three files. The GIS data are organized in layers. Each layer contains a subset of information that would be present on a regular map. All the necessary files created are put in a storage device (e.g., a CD) and given to the Revenue Department for checking. If any error is detected, the same has to be rectified by the Service Provider.
- 3.11** Once the Revenue Department has approved the vectorised map and the files, the Service Provider proceeds to add each of the handwritten information on the original map except the signature at the bottom given out neatly typed. Distances (line lengths) as per musavis to be fed for each arm/ side of polygon/ plot.
- 3.12** Printout of the vectorised map on 90 micron transparency will be updated to current stage by the Service Provider along with the authorized official and the same will be verified by the revenue officer. Then the same will be fed in to the computer by the Service Provider. Final printout will be handed over to Department for its approval.
- 3.13** Integration of spatial database with textual RoR data would involve the following process:
- a)** Each plot of land is represented on the digital map as a closed polygon. Each polygon is identified by a unique plot number & each plot is also referenced by this unique plot number. This provides a basis for integration of digital map data with the textual RoR data.
  - b)** The basic textual RoR database consists of several tables which provide information on ownership, land classification, etc. The HALRIS software developed by NIC is being used in Haryana for the maintenance of land records.
  - c)** After integration of the textual and spatial RoR data, the digitized map may be shown on the computer, which indicates through colour codes depicting the plots which do not have a corresponding textual detail or plot number, or where the textual and spatial data (area) do not match each other. The corrections will have to be carried out by the Service Provider with the help of revenue official/officer.
- 3.14** Maintain registers for receiving the cadastral maps, scanning, checking, returned, digitizing, checking, returned, indexing and returning the same to the department.
- 3.15** While scanning adjustment of various parameters like contrast, brightness and density of images should be made to optimal level so that all the contents written on the village map are captured in readable format.

- 3.16** Maps should be properly digitized as per the specifications provided by the department in the contract. The project will cover all the fields mentioned in framework above. However, these fields are illustrative only.
- 3.17** The Agency (or Service Provider) can suggest changes in the scope of the work mentioned in this document on detailed system analysis and design as per the requirement of Land Records. However, the acceptance of the same is solely at the discretion of Director.
- 3.18** Service provider will get the digitization of cadastral maps updated to current stage and linking of the same with existing database of Land Records Management Software (i.e. HALRIS) approved from the tehsildar/ patwari or the concerned officer(s) mentioned in the Service Level Agreement (SLA) signed between State Government and the successful bidder for implementation of the project later on.
- 3.19** Indexing and storing of the village map should be done, as guided by the department. Scanned, digitized and hardcopy of maps must also be handed over to the concerned office.

#### **4.0 Technical Specification**

##### **4.1 Creation of GIS ready digitized Cadastral Maps**

Source document will be paper/cloth bound cadastral maps normally in A0 /A1 size on the scale of Rural & Urban revenue village. The Vendor has to scan at 200 dpi in tiff format (\*. tiff) or any other suitable format prescribed in the work order. The Director Land Records reserve the right to change the format as and when needed. The Vendor has to make sure that original document and printed document are 100% matching. Output will be submitted as scanned image on CD and hardcopy as mentioned above.

##### **4.2 Criteria for Digitization of Cadastral Maps:**

- a) Scanning:** The village maps provided by the office of Land Records and Settlements will be traced, wherever required before scanning. The maps will have to be traced in case:
- The quality of map is such that they can't be directly scanned and need to be scrubbed;
  - The information content is not legible; and
  - The information content is such that it would hinder heads- up digitization after scanning.

##### **b) Scanning Specification**

- i.** The indexing of each scanned map would be done as per the specification and standard naming conventions of NLRMP. The Naming of the scanned Mussavis will be done using the village, district codes Tehsil / block / halka code as provided / approved by HARSAC/DLR, Haryana. The alpha numeric code would be assigned to each mussavis. Village with more than one scanned sheet would be having the code with sheet number.

The final code will comprise of the following code following the convention specified by NLRMP

1. District code
  2. Tehsil code
  3. Halka Code
  4. Village code
  5. Sheet No.
- ii. The maps to be scanned at 200 dpi Colour (as per requirement) mode for normal cases, 400 dpi on 24 bit color for damaged or destroyed musavies whose boundaries are not clear
  - iii. Images should be stored in **tiff** format.
  - iv. The image orientation should be upright.
  - v. The image should be cleaned and de-speckled to remove noise.
  - vi. Legibility features should be good.
  - vii. Measured length and width within the bounding box of map should be +/- 0.1% of the original maps.
  - viii. The image should not be skewed or wrapped.
  - ix. Scanned image will be approved by officer/ official designated.

**c) Raster editing**

After getting the scanned maps in tiff format, the map is cleaned for unwanted entities. Before starting digitization, it is desired that the map should be cleaned from the unwanted speckles, noise, etc. Min 7 or more Geo reference ground control points may be noted per village as the Registered musavis has to be superimposed over the Geo referenced satellite Image for the finding the encroachments and updation of parcels etc.

**d) Digitization of Scanned Cadastral maps Activities**

GIS-ready digitized cadastral Village maps may be created in separate data base and they should be digitized in 3 layers i.e. area layers, line layers and point layers so as to facilitate digital capturing of all the features of the existing paper map.

- i. Identification of relevant features
- ii. Association of feature codes
- iii. Grouping them in layer/ coverage's as required.
- iv. Distances of various lines to be entered & shown as written on existing maps.
- v. Attaching polygon no/plotted /khasra no. to each & every polygon.
- vi. Digitized maps should match 1:1 with existing Musavis (With reference to RoR Dimension).
- vii. Standard symbology should be codified & used and has to be first approved by HARSAC, Haryana for entire State. Such symbols may be incorporated in the point layer/ Line / Polygon.
- viii. Each Musavi sheet to be separately digitized printed & checked. If a village has more no. of sheets the same also needs to be taken up.

**e) Editing/Cleaning of data**

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

**f) Digitization Specification**

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

- i. The Vendor will submit a check plot for accuracy and completion check. Exact specifications will be provided in the design document, along with agreement.
- ii. Digital data would be submitted in the required format for checking of topological correctness.
- iii. Vendor shall incorporate all omissions and rectify all identified errors using check plot and digital data.
- iv. Final data set and ink plot on polyester paper for one to one check of 100% data plots with original manuscript, would be provided after all corrections have been carried out.

**g) Digitization**

- i. Digitized vector data is supposed to be in planner form i.e. all intersections of lines and significant features on a line should be marked by nodes.
- ii. Labels marked on the map should be digitized as point and not as text or annotation including line lengths as mentioned on the map
- iii. The final vector data should be topologically completed and should be transformed, to the base data provided by DoR&DM, Haryana. However, each data may not be transformed, but it should be produced as per the requirement reflected in the design document.
- iv. Seem less data generation tehsil / district wise.
- v. The survey map of village is available in several sheets (sub-maps). The first sub-maps would be scanned to get a raster image and it would be vectorised to generate vector digital data. These digitized musavis will then be integrated to generate a map of the village using software tools. Thereafter, the digital maps of different villages of tehsil will be merged (mosaic) together through software to construct the map of tehsil. Similarly, the digital maps of tehsils would be merged together to form a map of the district.

- vi. The output format of the digitized cadastral map should be .shp file subject to change to some another format if decided by the Government later on.
- vii. The DLR will issue the certificate to service provider about successful implementation of project after receiving the satisfactory report from the authorities at District level
- viii. After successful implementation of project, service provider will handover Technical document as well as user manual for the database of digitized cadastral maps and Intellectual Property Rights (IPR) rights to Director, Land Records. A copy of the user manual would also be provided to authorities at District/ Tehsils/ Subdivision level. All the deliverables mentioned in this document would become the property of Director, Land Records and the same reserves the right to replicate the digitization process in as many tehsils etc.
- ix. Open standard may be used for creation of database/ application etc. As for the encoding standards are concerned, the UNICODE should be used for data storage and local language display and support.

**h) Registration of Vector Village data with DGPS coordinates**

The Village data to be superimposed over the geo-referenced satellite image for the updation of the land parcels and identification of the parcels under encroachment. The DGPS survey will be conducted for the ortho rectification of the high resolution satellite image

**i) Specification for the DGPS / ETS survey for Parcel updation , Ortho rectification of satellite image and Fixing of Sehda stone**

- i. Establishment of new Base control Bench Mark by using Dual Frequency DGPS observation for 72 hours.
- ii. Generation of Primary Grid of each 20KM/Tehsil Head Quarter spacing with observation time of 20 hours at each point
- iii. Generation of Secondary Grid at 10 Km spacing with observation of 4 hours at each point
- iv. Territory points at the distance of each Sehda stone at village boundary.

**j) Monumentation/Sehda**

The Monumentation of the surveyed point as per the specification mentioned above should be done by the vendor. The respective coordinates shall be grooved / embedded over the steel plate with unique id and steel plate shall be fixed in the permanent structure. The selection of the location for the Monumentation shall be done in such a fashion that it does not get damage due to the movement of vehicle etc. The monument constructed shall be properly fenced/ protected.

Monumentation to be developed by vendor for all primary, secondary points and territory points (clause 4.2.1).

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

**l) Feature Coding**

All the features digitized, as per the requirement, would be assigned feature codes, as specified in the design document released with the work order. Vendor will ensure complete and proper association of the corresponding feature codes for all features.

**m) Spatial Database**

Vendor is required to group various features in different classes /coverage, as specified in the design document with proper ground control reference points. Vendor will also provide a comprehensive coverage containing all control points, and similar important features.

**n) Topologically Complete**

The final data set should fulfill the following criteria for all classes/coverage:

- i. Polygons are closed properly. No undershoots or overshoots are acceptable.
- ii. All linear features should conform to planarity requirement, i.e. all intersections are properly termed as nodes.
- iii. All Polygons have individual and unique label.

**o) Accuracy, Quality, Inspection and Completeness**

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

- i. The quality assurance of the data will be carried out by HARSAC
- ii. This will include checks for topological correctness, unique feature coding, and completeness of data, naming conventions, and accuracy and RMS errors.
- iii. The quality assurance form duly filled in as per the specified format has to be submitted along with the soft copy data.
- iv. Data not complying with the standards and accuracy specifications will be sent to consultant for correction and will have to be re-submitted after necessary corrections.
- v. If the data complies with the quality assurance standards and error limits are in the prescribed range the data will be accepted.
- vi. The quality assurance should comply with the following aspects
  - (1) Positional accuracy
  - (2) Attribute accuracy
  - (3) Logical consistency
  - (4) Completeness
  - (5) Mosaicing fit of the data.
- vii. Quality assurance of database will be done within a specified time set by HARSAC
- viii. On sample basis, the geo-referencing files of individual villages and the mosaic will be digitally quality checked by HARSAC

**p) Output Format**

Maps should be scanned and made available in .tiff format to their true scale, vectorised and converted into shape file format consisting of three files i.e. the shape file (\*.shp), the index of the shape file (\*.shx) and the data associated with the shape file (\*.dbf). The Vendor / Digitizing agency may supply the digital data in \*.shp format or in suitable format as per the directions of HARSAC, Haryana & the data should be clean and built. The following three database tables should be developed from the data available in the paper map. This is done by carefully observing each plot in the map sheet. The other component of the original map which is non-map features

- Sheet heading
- Plot Numbers (Distance of each arm forming the polygon of plots or khasra nos.)
- Legends
- List of Conventional Signs
- List of Bata Plot Numbers
- Contents of the Certificate Block

**q) User's manual**

The User Manual for operation and complete indexing should also be provided in CD media as well as hard copy in two sets. The User Manual should be in English with complete indexing of the villages with respective details. 2 Copies each to be provided.

**r) Sehda Stone**

There should be one revenue stone (including Sehdas) per sq. km as per the location of GCPs. The vendor will assign a unique ID and location coordinates to every revenue stone (including Sehdas). The data about the exact geo-referenced coordinates of Sehdas & other revenue stones should be communicated to the Revenue department. The Sehdas and revenue stones should be inscribed with unique code for access of coordinates.

**s) Document Management of Old Records:**

- i. Scanning of Misal Hakiyat copy of Jamabandi
- ii. Scanning of all the deeds registered during last 12 years
- iii. Cataloguing and indexing of all the scanned documents
- iv. Storage of scanned documents in soft format
- v. Security of scanned documents
- vi. Software for easy indexing and retrieval of scanned documents

**t) Deliverables**

The project consists of following stages of deliverables:

- i. Digitized maps (Original Musavis) of every village along with symbol library on point/Line/Polygon layer on CD media as .shp file & pdf file. However, additional file formats (e.g. .dwg, .dxf etc) may be mentioned in the design document.

- ii. Digitized maps (musavis updated to current stage) on CD media as .shp file
  - iii. Data base of digitized maps as database file.
  - iv. The printouts in 3 copies on required photo paper has to be provided on 1:1 scale in the following manner:
    - a) First printout of scanned Original map on 75 micron transparency for validation,
    - b) Second printout of draft of digitized musavis corrected and updated from Original musavis at 75 micron transparency.
    - c) Vendor may have to print more numbers till final corrections.
    - d) Third printout of final updated and verified digitized musavis in 3 copies on (as per prescribed sample) of 90 micron matt polyester paper.
  - v. Scanned final maps with complete indexing on CD media.
  - vi. Digitized maps should be linked with RoR which is already computerized and available in Client Server.
  - vii. Final output should run on HARLIS system of land records computerization already developed and made operational at district headquarters of Haryana by NIC. It should be made operational at all the 69 Tehsil headquarters of the state.
  - viii. User Manual.
- Bidders shall follow the rules, regulations, laws and policies / guidelines of Government related to Land Records and Settlements. The missing or extra khasra nos. will be provided to the Vendor for correction.

#### 4.2.1 Setting up the Ground Control Network

- (a) 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., the Mean Sea Level.
  - iii) **Primary Control Points**

#### (b) Horizontal

The primary control points will be established by static GPS observation (72 hours) with dual frequency GPS receivers, should be used. The primary control points have been post-processed with precise ephemeris adjusted with the help of Bernese s/w to the ITRF co-ordinate system. All the secondary and tertiary control points should be connected to the primary control points of the NRSC/Sol, to ensure connection to the National Framework. . Every primary control point should be fixed by observing two masters and one rover in triangle. The loop closures of triangle should be less then 3cm.

The pillar should have the following characteristics

- i) Rock-stone or Sand-stone 24\*24\*100cm or RCC.
- ii) The control point should be 15 cm above the ground and 85 cm inside the ground.

- iii) The control points should be fixed to the ground using at least 15 cm of cement block.
- iv) Monuments shall bear a triangle on top with a plummet hole in the middle and a 15 cm steel rod inserted (flush with concrete surface).
- v) The control point number should be inscribed on the monument

**(b) 1) Vertical**

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

**(c) Secondary Control Points**

**i) Horizontal**

The secondary control points should be established. these should be provided 10 Km Network

- i. **Best places for affixation:** In protected areas like premises of government buildings including school buildings, veterinary hospitals, etc. and other protected structures, etc. The selected site should be open and clear to sky with a cut off angle of 15°. High-tension power lines, transformers, electric sub-stations, microwave towers, high-frequency dish antennas, radars, jammers, etc., which interfere with GPS signals, should be strictly avoided.
- ii. **Densification:** 10 km average
- iii. **Instrument to be used:** Dual-frequency GPS receivers
- iv. **Accuracy levels required:** 1 cm as determined by the residuals of the network adjustment with 95% confidence interval
- v. **GPS network design:** Secondary control points should be observed with a geometrically sound network plan, connected to primary control points in triangle.
  - vi. **Schedule of observations:** Observations should be scheduled with proper mission planning, considering the optimum availability and geometric dilution of precision (GDOP) of satellites less than 3 (i.e., geometric strength of satellite configuration on GPS accuracy). Minimum observation time should be 3 hours.
  - vii. **Monumentation of secondary control points**  
The pillar should have the following characteristics
    - a) It should be light in weight.
    - b) It should be easy to install.
    - c) Material used should be fire resistant.
    - d) It should stand for at least 50 years, if metal is proposed, it should be rust proof as well as should be difficult to uproot.
    - e) Should have provision of engraving/punching the name of organization.
    - f) Pillars/markers for sandy/swampy soil.

**(d) Vertical**

All the secondary control points should be connected by spirit-leveled heights. The leveling lines for such connections should terminate at precision control points and all errors adjusted within them.

Permissible error for leveling line:  $0.025 \sqrt{k}$  (in metres), where k is the length of leveling line in km.

### (e) Tertiary Control Points

- i) **Distribution:** The distribution and location of horizontal, vertical and full control points should be decided after preparing with the help of input images.
- ii) **GCP selection criteria:** The selection of location for a control point will depend on the identification of the image point and the measurement characteristics of the image point. But, at the same time, they should also meet the horizon parameters ( $15^\circ$  cut-off angle). Thus, the criteria for selection of such points should be:
  - a) GCP should be precisely identifiable on imagery as well as on the ground.
  - b) GCP should be a sharp point on image and ground.
  - c) The selected GCP shall be open and clear to the sky, without any obstruction to the sky.
- iii) **Post-pointing:** All tertiary control points should be post-pointed on imagery (i.e., the points should be identified on the image), preferably in softcopy. If post-pointing on hardcopy is to be done, the control point should be post-pointed at full resolution. In addition, a sketch magnifying the vicinity of control points and their detailed description should be prepared on the ground, to aid the photogrammetric operator.
- iv) **Additional points:** In addition, tertiary control points may be provided on structures like village boundary tri-junction or bi-junction, existing govt./non-govt. buildings like gram panchayat offices, school buildings, veterinary hospitals, etc., as per the field survey requirements.
- v) **Instrument :** Single/Double-frequency GPS, Total Station
- vi) **Accuracy levels required:** 5 cm
- vii) **Monumentation of tertiary control points**

Since the location of control points will be governed by photogrammetric requirements of the block of images and the selection criteria of the GCP, it will not be possible to construct a monument at most of the tertiary control. However, some additional control points provided with the objective of further survey by TS may be monumented. The specifications of monumentation are as given below:

The pillar should have the following characteristics

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

- g) In case some modern technology develops later, the details will be circulated separately.
- viii) **GPS network design:** Tertiary controls should be observed as triangular offsets. Single offset will not be allowed..
- ix) **Schedule of observations:** Observations should be carried out with proper mission planning. Minimum observation time should be 45 min to 1 hour.
- x) **Vertical control:** Single GPS offset up to 5 km from secondary vertical control may be allowed for connection of GPS heights in WGS 84 datum to MSL heights. However, such offsets should not be extended.

**(f) Auxiliary Control Points**

- i) **Best places for affixation:** Each secondary and monumented tertiary control point shall be paired with one auxiliary control point, which should be located on permanent structures like bridges, culverts, permanent building corners, etc. The auxiliary control points should be within the line of sight from the primary, secondary and tertiary control points.
- ii) **Densification:** There shall be one auxiliary point for each secondary and tertiary control point, typically 200 m or more.
- iii) **Instrument:** Dual/Single-frequency GPS Receiver (as used for main control).
- iv) **Accuracy levels required:** same as their respective primary, secondary and tertiary control points.

**Note:**

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

**(g) General Requirements**

- i) Village boundaries are to be marked.
- ii) The (X, Y, Z) coordinates for the control points should be given in spherical coordinates, i.e., geometric figures in three dimensions using three coordinates, as well as in Cartesian coordinates, i.e., each point defined uniquely in a plane through two numbers, called the *x-coordinate* or abscissa and the *y-coordinate* or ordinate of the point, separately.
- iii) The (X, Y) coordinates should be in WGS 84.
- iv) The survey agency should specify the specifications of the instruments used to achieve the required accuracy.
- v) Some baselines for calibration of the monumentation should be maintained at selected locations.
- vi) A sketch for each category of the control points shall be submitted, showing the location of the control points along with their description for easy identification.

- vii) A district map showing all the primary, secondary and tertiary control points along with their coordinates shall be submitted to the State Land Revenue and Survey authorities.
- viii) The survey agency shall submit a village map showing the primary, secondary and tertiary control points along with their description and coordinates in the prescribed format to the State/UT Land Revenue and Survey authorities.
- ix) The grid supplied by the State Land Revenue and Survey authorities has to be superimposed on the geodetic network of the Survey of India to derive the control point numbering.
- x) Control points should be on the boundaries of the land parcels and not in between.
- xi) When located in govt. premises, the control point should be at a corner of the building or the premises.

**4.3** The survey map of village is available in several sheets (sub-maps). The first sub maps would be scanned to get a raster image and it would be vectorised to generate vector digital data. These digitized musavis will then be integrated to generate a map of the village using software tools. Thereafter, the digital maps of different villages of tehsil will be merged (mosaiced) together through software to construct the map of tehsil. Similarly, the digital maps of tehsils would be merged together to form a map of the district.

**4.4** The output format of the digitized cadastral map should be .shp file subject to change to some another format.

**4.5** Maintenance/ Technical Support will be have to be provided for a period of 2 years after the successful completion of project and 2 Technical Support person will have to be deployed at central location in every district. It can be extended as per the end user requirement.

**4.6** After successful implementation of project, Vendor will handover Technical document as well as user manual for the database of digitized cadastral maps and Intellectual Property Rights (IPR) rights to with user, Haryana. A copy of the user manual would also be provided to authorities at District/ Tehsils/ Subdivision level. All the deliverables mentioned in this document would become the property of DoR&DM, Haryana and the same reserves the right to replicate the digitization process in as many tehsils etc.

## **5 ROLES AND RESPONSIBILITY**

### **5.1 Roles and Responsibilities of the Vendors**

1. Vendors will provide necessary Hardware (Laptop or PC, Scanner, Printing, Stationery) & Software Tools at Scanning centre at one centralized location provided by Department. All expenditure for operating the aforementioned equipment shall be borne by the vendors.

2. Vendor will ensure that the digital vector data is accurate and complete, as per the requirement detailed out in the bid document
3. To keep liaising with Land Records and Settlements offices (District/Tehsil) to study the whole system related cadastral maps and jamabandis etc. and submit design document to HARSAC, Haryana within 4 weeks from the date of award of contract.
4. Identification of System Design Document & requirement by the Government will have to be incorporated in the document during implementation of the project.
5. To identify requirements across Land Records (District/Tehsil) and to help to digitize the cadastral maps in generic manner so that the same can be used by all the concerned offices across the state.
6. To impart satisfactory training to users by solution provider after implementing the software. All necessary changes, suggested during training & implementation will be incorporated in the project.
7. To prepare Technical Document as well as User Manual for digitization of cadastral maps and it's linking with textual data.
8. Project will be deemed to be completed after establishing the completeness of the work in all respects along with accuracy.
9. Completion of the work is defined as accomplishment of all intended features and the logical grouping, as specified in the bid/ design document.
10. Accuracy is defined in terms of positional correctness, digital vector data and topological completeness, subject to various tolerance limits, as specified in design document
11. After successful implementation of project, Vendor will handover Technical document as well as user manual for the scanned images & digitized maps & all their copyrights shall be the sole property of the user department Haryana.
12. Final output should run on HARLIS system already developed and made operational at district headquarters of Haryana by NIC. It should be made operational at all the 69 Tehsil headquarters of the state.
13. Vendor will ensure that the digital vector data is accurate and complete, as per the requirement detailed out in the work order. Completion of the work is defined as accomplishment of all intended features and the logical grouping, as specified in the design document. Accuracy is defined in terms of positional correctness, digital vector data and topological completeness, subject to various tolerance limits, as specified in design document.
14. Even, if an error is detected at later stage after the project period & during the maintenance period, the vendors will carry out the correction in the digitized data.

## **5.2 Roles and Responsibilities of User Department**

1. DoR&DM, Haryana will constitute a high power committee for monitoring the project activity & its implementation.
2. Arrange to provide funding to HARSAC for outsourcing of the work defined in RFP document and for purchase of High Resolution Satellite Imageries (HRSI), wherever required.
3. HARSAC will interact with this team during the entire project implementation cycle.
4. Facilitate liaison of HARSAC/Vendor with identified offices of the State.
5. Existing RoR Jamabandi record data in HALRIS should be provided in compatible format for linking with the digital cadastral maps.

6. Regularly reviewing the progress of work carried out by HARSAC/ Vendor.
7. Facilitate the Public validation process and deploy a representative for accompany the vendor during Public validation.
8. To supply the existing Mussavis and other records to vendors.
9. Revenue department will ensure return the updated copy of the Mussavies to the vendor agency for digitization in defined time frame.
10. To conduct field verifications of updated Mussavis as provided by Vendor.
11. To bring about legal changes wherever required enabling updating of records as per ground reality/field Validation.
12. Respective DROs of various districts may be designated as the nodal officers for the project who would make available the mussavies and other related information, arrange to make updation as per Sajra maps through Patwaries and validate/ authenticate the maps.
13. Continuous supply of cadastral maps, updation and validation of the digitized maps through individual village Patwaries should be ensured by the nodal officers within the specified time limits to avoid delays in the schedules.
14. One Kanungo and one Patwari of the concerned District would be required to be deputed at HARSAC for the project period to assist with regards to understanding the cadastral system and its terminologies, reading of mussavies, language etc.
15. Quality of the output will depend on the input map provided. Hence, the cadastral maps should be of good quality as far as possible.
16. District administration may be required to provide the logistic support to the visiting scientists in the field.
17. District administration will furnish necessary data, information and documents and other materials related to the work.
18. DoR&DM will provide all support and required authorization for procurement of the spatial data from its various divisions, related department of the user agency.

### **5.3 Roles and Responsibilities of HARSAC**

1. Being a nodal agency of the state government for geo spatial activities HARSAC will execute this project upto the end through outsourcing to the service providers.
2. Financial Commissioner & Secretary, Science & Tech. and Chairman, HARSAC will constitute an empowered team for executions and monitoring the project activities & its implementation.
3. Vendor will interact with this team during the entire project implementation cycle.
4. Approval of System design document submitted by the Vendor for digitization cadastral maps & linking of the same with textual data.
5. Processing and payment of the bills submitted by the Vendors.
6. Purchase of High Resolutions Satellite Imageries (HRSI), wherever required and providing the same to the service provider.
7. To check and verify the quantity and quality of the work and authentication of the deliverable to be supplied by the vendor.
8. Quality assurance will comprises the following aspects:-
  - (a) Positional Accuracy
  - (b) Attribute Accuracy
  - (c) Logical consistency

- (d) Completeness
- (e) Mosaicing fit of the data
- (f) Standardization of Spatial information data infrastructure

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

File naming	100%
Directory structure	100%
Data readability	100%
Data structure	100%
Data format	100%
Topology	100%
Attribute correctness	99-100%
Attribute completeness	100%
Data mosaicing	98-100%

9. At each step of the process, adopted for computerization and geo-referencing of the village map, quality check will be applied to ensure error free database generation. However, the following major quality checks are designed to ensure the project objectives:
  - Quality check on merged product generation using satellite data (QC 0)
  - Quality check for Inventory and coding of the maps (QC 1)
  - Quality check on first hardcopy output (QC 2)
  - Quality check on softcopy of village maps (QC 3)
  - Quality check on final hardcopy output (QC 4)
  - Quality check on geo-referenced village maps (QC 5)
  - Quality check on mosaic of geo-referenced village maps (QC 6)
  - Quality check on final deliverables (QC 7)
10. The following criteria for testing digital vector data for completion and accuracy may include, but not limit the number:
  1. Physical Verification of test plot on tracing paper on random sample basis.
  2. Random checking of features, during which, not more than 10% of points tested should be +/- 0.1% of the original maps.
  3. Verification of topological correctness by actually constructing the topology.
  4. Verification of job requirements reflected in design document.
11. The digital data failing to conform these tests will not be accepted. Vendor shall be given an opportunity to rectify errors to the satisfaction of HARSAC within a stipulated time, failing which the work order shall stand terminated. In such a case, HARSAC reserves the right to get the work executed by another Vendor at the cost of defaulting party. However, NLRMP guidelines may be referred.
12. Standards for data structure for integration with other data defined by HARSAC/ DOS, GOI will be followed.

## 6. QUALIFICATION CRITERIA

The vendors should meet the following criteria as on the date of submission of the bid:

1. RFP will be issued to the service provider shortlisted after EOI stage.
2. Bidder will have to give the Registration No. of the firm, CST No., EPF account(Annexure-V)/ Sales/ Service Tax/ VAT documents in their respective bid document
3. The bidder should have credential for digitization of cadastral maps and GIS oriented work in Government department / private (Nationally and internationally). The work completion certificate / Work order / performance Certificate should be enclosed in the Technical Bid.
4. Turnover of the firm must exceed Rs.2 (Two) crore per annum from geo-spatial activity during each of the 3 (three) financial years preceding the Proposal Due Date.
5. The bidder should submit Income Tax return statement and auditor's report and at least three duly signed copies of orders in support of Turnover details.
6. The bidder should have at least 50 GIS and CAD Professionals on their payroll for the activities related to Map Scanning and Digitization (Attach the list of key Employees with exposure to Projects and Technologies).
7. Bidder having ISO (9001:2000) or equivalent certificate would be preferred.

## 7. SUBMISSION OF TECHNO COMMERCIAL OFFER

HARSAC, Haryana invites sealed Techno commercial offer along with the EMD in single sealed envelope from the prospective bidders.

This document may be obtained during office hours on all working days in person by paying an amount of Rs. \_\_\_\_\_/- in the form of Demand Draft favoring " \_\_\_\_\_ " payable at \_\_\_\_\_. The set of the tender document is also available at \_\_\_\_\_ between \_\_\_\_\_ hours and can be collected in person during the dates given on page:

The cost of processing and submission of techno commercial offer is entirely the responsibility of vendors, regardless of the conduct or outcome of the whole process. Techno-Commercial Offer duly sealed should be sent on or before the Due Date and Time as mentioned in the table \_\_\_\_\_.

Offers received after due date and time will not be accepted under any circumstances.

### 7.1 Earnest Money Deposit (EMD)

- i. EMD equivalent to 20 Lakhs in the form of Demand Draft from nationalized bank should be submitted along with the offer favoring " \_\_\_\_\_ " payable at \_\_\_\_\_. it is clarified that the EMD will be opened just before opening of the Techno commercial Bid.
- ii. The EMD shall be denominated in Indian Rupees, and shall be in the form of a DD issued by a Nationalized Bank in favor of the \_\_\_\_\_ payable at \_\_\_\_\_

- iii. Unsuccessful Vendor's EMD will be discharged/ returned after award of contract to the successful vendors. No interest will be paid by the \_\_\_\_\_ on the EMD.
- iv. The successful Vendor's EMD will be discharged on submission of Bank Guarantee (in the format given at Annexur- VI) after signing the Agreement. No interest will be paid by the \_\_\_\_\_ on the EMD.
- v. The EMD will be forfeited in following cases namely:
  - a) If a Vendor withdraws its offer during the period of validity of offer specified by the \_\_\_\_\_ in the Document;
  - b) In the case of a successful Vendor, if the Vendor fails to sign the Contract in accordance with conditions of this Document or to furnish Bank Guarantee for contract performance.
  - c) During the whole process, if prospective/ successful vendor indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of evaluation and finalization of offer.
  - d) Violates any of such essential conditions of this document or indulges in any such activity as would jeopardize the interest of the HARSAC, Haryana. The decision of the Do R&DM, Haryana regarding forfeiture of Earnest Money Deposit (EMD) shall be final & shall not be called upon question under any circumstances.

## 7.2 Price Structure

The price quoted should be inclusive of all applicable duties and taxes. No price variation due to variation in duty, tax, exchange rate fluctuation etc. will be permitted. The price should be mentioned in terms of the amount payable by HARSAC, Haryana for design, development, implementation and maintenance (for a period of three year after successful implementation) of **Digitization & Updating of Cadastral Maps (Mussavis) and Complete Document Management of Old Records** project" as per the scope of Work. All costs and charges in the offer should be expressed in Indian Rupees without any dependence on exchange rate, duty or tax structure.

## 7.3 Non-transferable offer

This offer document is not transferable.

## 7.4 Offer validity Period

Offer submitted by the vendors shall remain valid for a period of 180 days (as mentioned in RFP) from the last date for submission of the offer. An offer valid for a shorter period shall be rejected by HARSAC, Haryana as a non-responsive offer.

## 7.5 Preliminary Scrutiny

The Evaluation Committee will scrutinize the offers to determine whether it is complete in all respect i.e. includes Tender Fees, EMD, whether any errors have been made in the

offer, whether the documents have been properly signed and whether items are quoted as per the schedule, etc. Offers incomplete in any form will be rejected.

#### **7.6 Clarification of Offers**

To assist in the scrutiny, evaluation and comparison of offers, HARSAC, Haryana may at its sole discretion ask some or all vendors for any clarification pertaining to their submitted offer. The request for such clarifications and the response will necessarily be in writing.

#### **7.7 Format for Technical & Commercial Offer**

The format for submission of techno commercial offer is given below:

- i. Index
- ii. Covering letter
- iii. Eligibility Bid- Annexure I
- iv. Technical Offer Format – Annexure II
- v. Techno commercial Offer Format – Annexure III

#### **7.8 Evaluation and Comparison of bids**

The Vendor's offer must be complete in all respect and covering the entire scope of work as stipulated in this document.

- I. The Vendors selected during EOI stage will be eligible for the bidding
- II. The Vendor must submit declaration regarding acceptance of Terms and Conditions contained in this document (as per format enclosed at **Annexure VII**).
- III. The Vendor must submit declaration regarding clean track record (as per format enclosed at **Annexure VIII**).
- IV. The evaluation process of the offer proposed to be adopted by the HARSAC, Haryana is indicated under this clause. The purpose of this clause is only to provide the vendors an idea of the evaluation process that HARSAC, Haryana may adopt. However, the HARSAC, Haryana reserves the right to modify the evaluation process at any time during the whole process, without assigning any reason, whatsoever, and without any requirement of intimating the Vendors of any such change.

#### **7.9 Preliminary Examination**

The Evaluation Committee will examine and evaluate the offers.

An offer determined as not substantially responsive will be rejected by the Evaluation Committee and may not subsequently be made responsive by the Vendor by correction of the nonconformity.

The Evaluation Committee may waive out any informality or non-conformity or irregularity in the offer which does not constitute a material deviation according to the Evaluation Committee, provided such waiver does not prejudice or affect the relative ranking of any Vendors.

#### **7.10 Clarification**

When deemed necessary, during the evaluation process, the Evaluation Committee may seek clarifications or ask the Vendors to make Technical presentations on any aspect from any vendor or from all the Vendors. However, that would not entitle the bidder to change or cause any change in the substance of the offer submitted or price quoted.

**7.11 Opening of Eligibility Bids:**

The Evaluation Committee will determine the eligibility of all the bidders and will examine the same as per given at format given at Annexure I. Technical bids will be opened of only those Vendors who would be found eligible.

**7.12 Opening of Technical Bids:**

The Evaluation Committee will open the Technical Offers of only those Vendors who qualify the eligibility criteria in the presence of the representatives of the Vendors who shall attend & demonstrate the methodology & proposed solution, at the time, date and place, as decided by the Do R&DM, Haryana. The evaluation committee shall evaluate the bids further (subsequent to qualification in preliminary evaluation), based on the documents submitted including the proposed approach and methodology, proposed timelines and proposed resources. Each bidder would essentially be required to make a visual presentation for the same before the evaluation committee. The Bidder must provide in the bid the abovementioned details in format specified in Annexure II.

**Technical Bid Evaluation Criteria based on QCBS system stated below:**

Technical BID Evaluation Criteria

Item Code	Parameter	Evaluation Criteria	Maximum Marks
1	Relevant Experience of the Bidder	a) Implemented at least one project related to cadastral map digitization. (5) b) At least Three GIS Project related to digitization using scanned maps and High resolution satellite Image(HRSI) and implementation of project value not less than 50 lakhs (6) c) At least one project of spatial data integration (5) d) Overall experience and Credential of the firm: (10) <ul style="list-style-type: none"> <li>i. Financial strength, capacity of firm: (5)                &lt;2 crore=0 , 1 marks for each 2 crore maximum marks is (5)</li> <li>ii. Turnover from software Development Services, (3) 1 marks for each 1 crore maximum marks is (3)</li> <li>iii. Year of Experience in MIS/GIS: (2)1 marks for each 2 year maximum marks is (2)</li> </ul> e) Haryana/Punjab/Delhi/Western U.P. (un-divided) Cadastral experience(6)	32
2	Approach & Methodology :	a) Clear understanding of scope of services (15 including their interpretation) b) Team organization and scheduling : Team and its Optimization work plan to meet an efficient activity scheduling(10)	25
3	Key Personnel (minimum 50 GIS and CAD personal required)	a) Experience and competence of the Key staff for the assignment b) Experience, competence and hands-on experience of the Team Leader in execution and co-ordination of such projects. c) Profile and Experience of Key Staff in many years on similar MIS/GIS projects d) Extent of on-site commitment/ engagement of the key staff for the project Senior Cadastral Scientist/Engineer -cum-Team leader(4), Software Engineer(4) Revenue officer, Surveyor, Documentation officer(2)	10
4	Evolution Committee observation	a) Demonstration / presentation of the pilot village related to desired accuracy as per the scope of this project (20) [Fathehabad district is selected as pilot district for trial basis] b) Presentation of capabilities of the organization and implementation plan for this project(5) c) Corporate Social Responsibility(CSR) performances (5) d) ISO or equivalent Certification (3)	33
		G. Total	100

**Note: Minimum 60 marks are required in technical bid evaluation for consideration of financial bid opening. The score given by the Evaluation Committee will stand final and no representation in this regard will be entertained and the Chief Scientist, HARSAC, Haryana decision will be final and binding on all the vendors**

The minimum technical score (TS) required to qualify is 60 Points.

The financial scores shall be determined by the formula  $PS = 100 \times P_{min} / P$  where  $P_{min}$  is the lowest price and P is the price of the proposal under consideration.

Those who secure 60 points and above as a result of evaluation of the technical proposal shall become eligible for opening of their Financial Proposal.

Immediately after evaluation of technical proposal, the client shall notify both the parties/consultants who have qualified and those who have not qualified.

Proposals shall be ranked according to their combined technical (TS) and financial (PS) scores using the weights (T = 0.70 for technical and P = 0.30 for financial proposal) through the use of a formula  $S = TS \times T \% + PS \times P \%$ .

### **7.13 Opening of Techno commercial Bids:**

The Evaluation Committee will open the Techno commercial Offers of qualified Vendors i.e. who will obtain minimum 60 marks in the technical evaluation, in the presence of the representatives of the Vendors who choose to attend, at the time, date and place, as decided by the HARSAC, Haryana . The Bidder must provide in the bid the abovementioned details in format at Annexure III.

### **7.14 Award of Contract:**

The process of award of contract is elaborated at Annexure IV. The contract will be awarded to the Vendor whose Techno-Commercial offer will be lowest and will be ranked as R1.

**7.14.1** The award of contract would be decided on the basis of Weighted Score (70%) for the normalized score as per the marks awarded by Evaluation Committee for the Technical Offer and Weighted Score (30%) for the normalized score as per the financial bids.

**7.14.2** After evaluation of all accepted proposals by the evaluation committee, the contract may be awarded to the four top ranked bidders in order of merit.

**7.14.3** Keeping in view the time limitation of NLRMP, four vendors will be selected for award of work. The vendors will be ranked R1, R2, R3 and R4 etc. based upon the combined score of technical and financial weightage described above. The work will be allotted to four vendors in order of merit of the combined score. However, all the selected vendors will be bound to work at the lowest rates quoted by any one of the four selected vendors (R1, R2, R3 and R4) in its financial bid. All the four vendors (R1, R2, R3 and R4) have to submit their written acceptance for the above to qualify for award of the work in a distributed manner as indicated in the example.

For example, if the work is allotted to four vendors R1, R2, R3 and R4, and the rates of R3 are the lowest in its financial bid, the rest of three R1, R2 and R4 will be bound to work at the rates quoted by R3. The work among four vendors will be divided by the Evaluation Committee based upon geographical location, topographical conditions and volume of work

**7.14.4** The techno commercial offers shall be evaluated by the HARSAC, Haryana for completeness and accuracy. If there is a discrepancy between words and figures, the amount in words will prevail. The Gross Bid Value as per Annexure-III shall be used by the HARSAC, Haryana for the purpose of techno commercial evaluation of offers.

## 8. TERMS AND CONDITIONS

The terms & conditions are illustrative only and the detailed terms & conditions will be referred in the Service Level Agreement (SLA) to be signed with the successful bidder.

### 8.1 Performance Bank Guarantee

The Vendor must submit a Performance Bank Guarantee for project phase till commissioning of this project from any Nationalized Bank @20% of Gross Bid Value in the name of Do R&DM, Haryana for a period of 12 months as per the format given at "Annexure VI" within 15 days of the signing of Agreement. Thereafter, separate PBG @30% as per format given at "Annexure VI" will be submitted for period of 2 years from the date of completion of the digitization of musavis and its linking to the textual database 2 months prior to the expiry of previous PBG.

### 8.2 Payment Terms

HARSAC, Haryana will make payment for the entire services rendered, calculated given as table below:

S. No.	Event	Completion Date	Payment % of total contract value
K- Key Events			
K1	System study and design(SDD)(Including Hardware requirement, System software requirement, Design of security ,Architecture, Data Migration Strategy and Data backup strategy	T+4WEEKS	NIL
K2	<ol style="list-style-type: none"> <li>1. <b>Digitization of Cadastral maps and integration of textual and Spatial data</b></li> <li>2. <b>Survey/resurvey and updation of the survey &amp; settlement records (including ground control network and ground truthing) using the modern technology.</b></li> <li>3. <b>Document Management</b></li> </ol>	T+28 WEEKS	20% ( As per the break up mentioned in the event)

	<b>(Virtual Modern record room/ land record management center at Tehsil/taluk/circle/block)</b> <b>4. Training of Technical Field Staff at each Tehsil and AMC</b>		
K3	Verification & Final User Acceptance Test of Project	T+32 WEEKS	15%
K4	Handholding/ Customization (Comprehensive training of employees on packages development)	T+ 36 WEEKS	20%
K5	Handling over of all the documents and manuals for packages development	T+36 WEEKS	
K6	Commissioning of Project (including mosaicing)	T+38 WEEKS	25%
K7	Annual Maintenance of project and operational support for two years  AMC	K6+3 years	20% against Performance Bank Guarantee (PBG) of 20% of total contract value for a period of 2 years
<b>*T-Date of signing SLA with vendors</b>		<b>*K- Key EVENTS</b>	

### 8.3 Penalty

Vendors are supposed to achieve the milestones in the specified time frame. Non adherence to the specified time frame will attract penalty @1% of Gross Bid value per week maximum to 15% of the contract value of the work in the form of forfeiture of the amount of Bank Guarantee or Demand Draft duly deposited.

Subsequent changes recommended by Government of Haryana during implementation and maintenance phase and after development phase AMC will attract penalty @0.5% per week. Penalty shall also imposed as follows for inaccuracy/ errors detected during checking of work:

SN.	Numbers of errors (in each Map/Record)	Penalty (in % of the build amount of that map data)
1	Less than 15	No Penalty
2	15-25	5%
3	25-35	8%
4	35-50	10%
5	>50	15%

Musavis should be returned immediately after scanning of the same. In case of damage of the musavi, penalty would be imposed by Government of Haryana as elaborated in SLA.

#### **8.4 Acceptance Test**

HARSAC, Haryana will carry out the acceptance test for every deliverable. The Vendor has to arrange for demonstration of Digitization & Updating of Cadastral Maps (Musavis) and Complete Document Management of Old Records project at their own level for undertaking the acceptance test on the date and time fixed by HARSAC, Haryana.

#### **8.5 Order Cancellation**

HARSAC, Haryana reserves its right to cancel the order in the event of one or more of the following situations:

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

**8.5.2** Delay in submitting the Deliverables and all related services beyond the stipulated period.

The HARSAC, Haryana shall have the right to inspect the work or get it inspected by his representative or any authorized officer at any stage. The HARSAC, Haryana reserves the right to inspect, the process of the scanning, digitization, indexing, storing methodology and the equipments during the contract period at any time.

The Vendor shall provide all possible information and extend such cooperation as desired by the inspecting authority of the department during the inspection work. In case, the Inspecting authority finds that the services and the equipments used are adversely affecting the quality of work, the department reserves the right to treat this as an act of breach of contract. As a result, the contract shall be terminated at the expenses of the Vendor.

**8.5.3** Delay in Project as per the agreed project timelines.

**8.5.4** In addition to the cancellation of purchase order, HARSAC, Haryana reserves the right to levy appropriate damages and deduct from the earnest money deposit (EMD) given by the Vendor or foreclose the Bank Guarantee given in lieu of performance guarantee. HARSAC reserves the right to get the work executed by another vendor at the cost of defaulting vendor.

## **8.6 Non Disclosure Agreement**

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

## **8.7 Security**

The vendors should ensure that all security (both physical and logical) to protect department's data, site, etc by incorporating standard security measures.

## **8.8 Termination of the Contract**

HARSAC, HARYANA reserves the right to terminate the entire and / or part of the contract by giving one month notice in writing.

## **8.9 Indemnity**

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

## **8.10 Force Majeure**

The vendor shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that its delay in performance or other failure to perform its obligations under the contract is the result of an event of force Majeure. For purposes of this Clause, "Force Majeure" means an event beyond the control of the vendor and not involving the Vendor's fault or negligence and not foreseeable. Such events may include, but are not limited to, Acts of God or of public enemy, acts of Government of India in their sovereign capacity or either in fires, floods, strikes, lockouts and freight embargoes.

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

### **8.11 Publicity**

Any publicity by the Vendor in which the name of HARSAC, Haryana is to be used should be done only with the explicit written permission of HARSAC, Haryana.

### **8.12 Service Level Agreement (SLA)**

Vendor would be required to enter into a Service Level Agreements with the Do R&DM, Haryana at the mutually agreed terms within three weeks from the date of issuance of Letter of Intent. In case the SLA is not executed within the said stipulated period, HARSAC, Haryana will be at liberty to forfeit the EMD and R2 will be invited to sign Service Level Agreement.

Any modification to the existing tender which includes proposed amendment till the date of final bid will form part of SLA. However, any deviation/ modification from the tender clause will be at the sole discretion of HARSAC, Haryana.

### **8.13 Resolution of Disputes**

HARSAC, Haryana and the Vendor shall make every effort to resolve amicably, by direct informal negotiation, any disagreement or dispute arising between them under or in connection with the contract. If after thirty days from the commencement of such informal negotiations, Do R&DM, Haryana and the Vendor are unable to resolve amicably a contract dispute; either party may require that the dispute be referred for resolution by formal arbitration.

All questions, disputes or differences arising under and out of, or in connection with the contract, shall be referred to two Arbitrators: one Arbitrator to be nominated by Do R&DM, Haryana and the other to be nominated by the Vendor. In the case of the said Arbitrators not agreeing, then the matter will be referred to an umpire to be appointed by the Arbitrators in writing before proceeding with the reference. The award of the Arbitrators, and in the event of their not agreeing, the award of the Umpire appointed by them shall be final and binding on the parties. The arbitration and reconciliation act 1996 shall apply to the arbitration proceedings and the venue & jurisdiction of the arbitration shall be in the State of Haryana.

## **9. THE TENDER PROCESS**

HARSAC, Haryana invites Vendors among those selected during EOI stage to respond to this RFP document. This document is aimed at Digitization & Updating of Cadastral Maps (Mussavis) and Complete Document Management of Old Records. Instructions for preparing and submitting information are set forth below.

- 9.1** Upon this document, the prospective Vendor is in a position to prepare and submit the response. On subsequent receipt & evaluation of responses by the HARSAC, Haryana it does not commit to award a contract to any Software Developer even if all of the requirements stated in these documents are met.
- 9.2** HARSAC, Haryana reserves the right to make no selection and enter into no agreement as a result of this tender document.
- 9.3** HARSAC, Haryana will not be responsible for the reimbursement of any cost or expenses, which any prospective vendors may incur as a direct or indirect consequence of preparing or submitting their response to this tender document.

## 10 INSTRUCTIONS TO PROSPECTIVE Vendors

The Turnkey Solution Provider will submit the response to the present tender in single envelope which contains following items:

**ENVELOPE- I:** Technical Offer– (1 original + 1 copy) + EMD + Document Charges

**ENVELOPE- II:** Commercial Offer – (1 original + 1 copy)

**ENVELOPE-III:** EMD

All the envelopes must be super-scribed with the following information:

**Type of Bid:** Technical or Commercial.

**Bid Title:**

**Bid Reference Number:**

**Name and address of the Vendor:** -----XXXXXX-----

### 10.1 ENVELOPE-I

The Technical Offer should give all relevant Technical Details as per the format provided

In this RFP and should not contradict this Document in any manner.

### 10.2 ENVELOPE-III

The Commercial Offer should give all relevant price information and should not contradict this Document in any manner. The price should be mentioned in terms of the Amount payable for all the services as per the prescribed format.

### 10.3 Deleted

### 10.4 Clarification of this Document

A prospective Solution Provider (SP) / vendor requiring any clarification with regard to this document may notify the HARSAC, HARYANA in writing or by fax or by email at the mailing address of HARSAC, Haryana and they will respond to any request for clarification, which it receives not later than \_\_\_\_\_ (at the time of pre-bid meet). Email of response of Do R&DM, Haryana (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective Vendors, which have received this document.

### 10.5 Amendment in this Document

At any time not less than three days prior to the deadline for submission of offer, HARSAC, Haryana may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Vendor, modify this document by amendment. Prospective Vendors are advised to visit "The tender Page" website regularly to see any changes in the document.

All prospective Vendors who have received this document will be notified of the amendment in writing or by fax or by email, and will be binding on them. In such case all the prospective vendors will be allowed reasonable time preparing and submitting their offer HARSAC, Haryana will have the discretion to extend the deadline for submission of offer.

**10.6 Technical Offer**

The Vendor shall quote the Technical Details as per the **Annexure II** for the entire scope of work mentioned in this document.

**10.7 Techno commercial Offer**

The Vendor shall quote the Price Schedule as per the **Annexure III** for the entire scope of work mentioned in this document.

**10.8 Techno commercial Offer Currencies**

Prices shall be quoted in Indian Rupees.

**10.9 Format of Techno commercial Offer**

The original and all copies of Techno commercial Offer shall be typed or written in indelible ink and shall be signed by the Vendor or a person or persons duly authorized to bind the vendors to the Contract. The letter of authorization shall be indicated by written power-of-attorney accompanying the offer. All pages of the offer, except for not amended printed literature, shall be initialed by the person or persons signing the offer.

Any interlineations, erasures or overwriting shall be valid only if they are initialed by the persons or persons signing the offer.

**10.10 Late Offers**

Any offer received by HARSAC, HARYANA after the deadline for submission of offers will be rejected and/or returned unopened to the prospective Turnkey Solution Provider.

**10.11 Modification and Withdrawal of Offers**

No offer may be modified subsequent to the deadline for submission of offer.

No offer may be withdrawn in the interval between the deadline for submission of offer and the expiration of the period of offer validity specified by the Vendor on the offer form. Withdrawal of an offer during this interval may result in the Service Provider's forfeiture of its EMD.

**Annexure I****Eligibility Bid (Checklist)**

	<b>Item</b>	<b>Complied (Yes/ No)</b>	<b>Document attached</b>
1	Cover letter		
2	All pages of bid are numbered, signed by authorized signatory and bids are sealed properly		
3	Proof of authorized signatory (Power of attorney/ Board declaration)		
4	EMD and Draft for RFP cost (if not paid already)		
5	CVs of Key resources proposed, Details on the total number of resources proposed and resource deployment plan		
6	Sealed Technical & Financial bid		
7	Bids should be submitted as per Clause 9 in instruction to prospective bidders		
8	Turnover (Balance Sheets to be attached) (Qualification Criteria)		
9	Lists of Departments/ Offices where scanning and digitization of maps have been done along with the successful implementation certificate obtained from the Heads of these offices		

The bidder should attach following checklist for compliance with important criterion in the eligibility bid to be submitted

**Annexure-II****Name of the Company:  
Technical Bid Format**

Item Code	Parameter	Evaluation Criteria	Maximum Marks	Points Scored	Remarks
1	Relevant Experience of the Bidder	a. Implemented at least one project related to cadastral map digitization. (5) b. At least Three GIS Project related to digitization using scanned maps and High resolution satellite Image(HRSI) and implementation of project value not less than 50 lakhs (6) c. At least one project of spatial data integration (5) d. Overall experience and Credential of the firm: (10) i. Financial strength, capacity of firm: (5) <2 crore=0 , 1 marks for each 2 crore maximum marks is (5) ii. Turnover from software Development Services, (3) 1 marks for each 1 crore maximum marks is (3) iii. Year of Experience in MIS/GIS: (2)1 marks for each 2 year maximum marks is (2) e. (Haryana/Punjab/Delhi/Western U.P. (un-divided) Cadastral experience(6)	32		
2	Approach & Methodology:	1) Clear understanding of scope of services (15 including their interpretation) 2) Team organization and scheduling : Team and its Optimization work plan to meet an efficient activity scheduling(10)	25		
3	Key Personnel (minimum 50 personal required)	a. Experience and competence of the Key staff for the assignment b. Experience, competence and hands-on experience of the Team Leader in execution and co-ordination of such projects. c. Profile and Experience of Key Staff in man years on similar MIS/GIS projects d. Extent of on-site commitment/ engagement of the key staff for the project Senior Cadastral Scientist/Engineer -cum-Team leader(4), Software Engineer(4) Revenue officer, Surveyor, Documentation officer(2)	10		
4	Evolution Committee observation	a. Demonstration / presentation of the pilot village related to desired accuracy as per the scope of this project (20) [Fathehabad district is selected as pilot district for trial basis] b. Presentation of capabilities of the organization and implementation plan for this project(5) c. Corporate Social Responsibility(CSR) performances (5) d. ISO or equivalent Certification (3)	33		
		G. Total	100		

**Annexure-III**

**FINANCIAL PROPOSAL**

**Covering Letter**

(On Applicant's letter head)

(Date and Reference)

To,

\*\*\*\*\*

\*\*\*\*\*

\*\*\*\*\*

Dear Sir,

Subject: Appointment of service provider for Modernization of Land Records (Including Digitization of Cadastral Maps, Integration with Records of Rights and Management of Old Revenue Documents) Under NLRMP in Haryana

I/We, \_\_\_\_\_ (Applicant's name) herewith enclose the Financial Proposal for selection of my/our firm as Consultant for above.

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

Yours faithfully,

(Signature, name and designation of the authorized signatory)

**Note:** The Financial Proposal is to be submitted strictly as per forms given in the RFP.

## TECHNO COMMERCIAL BID FORMAT

Name of the Company:

Please provide the component wise break up of prices of the following:

S. No	Job Work	Units	Quantity	Amount In Rs. per	Total Amount
<b>1 Digitization of Cadastral maps and integration of textual and Spatial data</b>					
1.1	Indexing of cadastral map /musavis(All sheets to be indexed)	No. of Mussavis	1. Ambala 0		
1.2	Scanning of cadastral map /musavis in <b>tiff format</b>		2. Sirsa 0		
1.3	Coloured printing of scanned musavis using 100GSM paper for current updation		3. Jind 3704		
1.4	Provide scanned musavis database in suitable soft copy format		4. Gurgaon 1856		
1.5	Parcel boundaries with Khasra No. as mentioned in the map, (line length of every polygon as available in the map)		5. Mewat 2511		
1.6	All features in different layers as available in current Updated Musavis		6. Palwal 2094		
1.7	Administrative boundaries of a revenue Village boundary with name of village / Tehsil / District		7. Faridabad 1395		
1.8	Geo-Linking of digitized spatial database (GIS)with RoR non-spatial database(HALRIS)	No. of Parcels	8. Kurukshetra 3552		
			9. Rohtak 2017		
			10. Jhajjar 2720		
			1. Ambala 393500		
			2. Sirsa 1069250		
			3. Jind 675500		
			4. Gurgaon 313500		
			5. Mewat 464750		
			6. Palwal 339750		
			7. Faridabad 438000		
1.9	Printing of each draft original Musavi sheet on 75 micron polyester matt film on 1:1 Scale for verification	No. of Musavi Sheets	8. Kurukshetra 382500		
			9. Rohtak 438000		
			10. Jhajjar 346000		
			1. Ambala 2792		
			2. Sirsa 5514		
			3. Jind 3704		
			4. Gurgaon 1856		
			5. Mewat 2511		
			6. Palwal 2094		
			7. Faridabad 1395		
		8. Kurukshetra 3552			
		9. Rohtak 2017			
		10. Jhajjar 2720			

1.10	Printing of each final Musavi sheet on 75 micron polyester matt film (3 copies) on 1:1 Scale.		1. Ambala 2792 2. Sirsa 5514 3. Jind 3704 4. Gurgaon 1856 5. Mewat 2511 6. Palwal 2094 7. Faridabad 1395 8. Kurukshetra 3552 9. Rohtak 2017 10. Jhajjar 2720		
1.11	Merged village map by mosaicing all village sheets/Musavis on DVD & A0 / A1 size paper	No. of sheets (one sheet Per Village)	1. Ambala 491 2. Sirsa 325 3. Jind 307 4. Gurgaon 289 5. Mewat 491 6. Palwal 282 7. Faridabad 414 8. Kurukshetra 419 9. Rohtak 146 10. Jhajjar 260		
1.12	Mosaiced Tehsil and District maps provided on DVD & A0 size paper	No. of sheets per District	1. Ambala 7 2. Sirsa 6 3. Jind 5 4. Gurgaon 5 5. Mewat 5 6. Palwal 3 7. Faridabad 2 8. Kurukshetra 6 9. Rohtak 4 10. Jhajjar 5		
<b>2.0</b>	<b>Survey/resurvey and updation of the survey &amp; settlement records (including ground control network and ground truthing) using the modern technology.</b>				
2.1	Updation of maps due to transactions including DGPs / ETS survey (for missing Mussavis/data not available)	Area in acres	1. Ambala 3935 2. Sirsa 1069 3. Jind 6755 4. Gurgaon 3135 5. Mewat 4647 6. Palwal 3397 7. Faridabad 4380 8. Kurukshetra 3825 9. Rohtak 4380 10. Jhajjar 3460		
2.2	Satellite data preparation/processing as per TOR requirement and Geo-referencing of digitized village using HRSI	No. of mussavies	1. Ambala 2792 2. Sirsa 5514 3. Jind 3704 4. Gurgaon 1856 5. Mewat 2511 6. Palwal 2094 7. Faridabad 1395		

2.3	Geo-referenced Administrative boundaries of a revenue Village with name of village / Tehsil / District (UTM projection)		8. Kurukshetra 3552 9. Rohtak 2017 10. Jhajjar 2720		
2.4	Establishment of Ground Control Points (GCPs) using dual frequency DGPS for Geo-referencing of Satellite image.  The GCP should be established on each and every Sehedra stone and one or two Locations within village/musavi boundary so that image can be geo-referenced within required accuracy. The DGPS network should established using dual frequency DGPS as per technical guidance in TOR.	No. of different type of control point	Primary 70 Secondary 200 Territory 10000		
2.5	Monumentation of DGPS location & installation of Survey Markers ( <b>with desired Specification as per TOR</b> )	No. of different type of control point	Primary 70 Secondary 200 Territory 10000		
<b>3</b>	<b>Document Management (Virtual Modern record room/ land record management center at Tehsil/taluk/circle/block)</b>				
3.1	Scanning of Misal Hakiyat, Field book, Jamabandi (A4 size)	No. of pages	Ambala 491000 Sirsa 325000 Jind 307000 Gurgaon 289000 Mewat 491000 Palwal 282000 Faridabad 414000 Kurukshetra 419000 Rohtak 146000 Jhajjar 260000		
3.2	Scanning of Misal Hakiyat, Field book Jamabandi (A3 size)				
3.3	Scanning of Misal Hakiyat, Field book Jamabandi (A2 size)				
3.4	Quality true <b>indelible</b> colour Printing of all scanned documents on Deo-mett100 GSM paper with quality binding.				
3.5	Scanning of all the deeds registered during last 12 years				
3.6	Cataloguing and indexing of all the scanned documents				
3.7	Storage of scanned documents in soft format				
3.8	Security of scanned documents				
3.9	To develop/ customize a software for easy indexing and retrieval of scanned documents along with drawing of land parcel with dimension (from map and RoR) attribute information, neighborhood details and printing the maps and data on existing HARLIS of NIC.  <i>As this is an individual component which will be assigned to a single user and all other co-vendors will be using the same software. The vendor will be selected based upon the combined technical and financial scores for this component only.</i>	Lumpsum	Payment will be made on actual		
<b>4</b>	<b>Training of Technical Field Staff and Data base AMC at each Tehsil</b>				

4.1	Annual support for 2 years. At least 2 GIS engineers should be provided for annual support at each district head quarter. Training of minimum 50 persons & 2 Master Trainers in each Tehsil and preparation of user manual is the responsibility of the service Provider.	Per district Manpower (cost per month)	Total Cost for two years for two resource i.e. $12*2*2=48$ months		
	Total (excluding tax)				
Total	Total (including tax & S.T)				
	Gross Value of Bid inclusive of all taxes and duties				

- The figures provided in the above table are tentative and actual figures may vary. However, these figures may be used for computing the estimates and evaluation.

Total Bid Value (inclusive of all taxes duties / levies etc.) for one office i.e. 1+2+3+4 = Rs.

.....

(In Words).....

Gross Bid Value (inclusive of all taxes duties / levies etc.) for records i.e. 1+2+3+4

Rs. ....

(In Words).....

(For financial evaluation only the gross bid value be consider for financial weight age under clause 3.3 and 3.4)

**Note:**

- Quote / rates will remain valid till March 2011 and the additional similar work for the remaining districts may be allotted on the same rate if the Department receives funding for it. The vendor will be bound to take up the additional work, if allotted, at the same rates till March 2011.
- Mosaicing will be done by vendors only for the adjacent districts. If district boundaries clashes between two different vendors then concerned Vendors are responsible for mosaicing all relevant database (no extra will be paid for the work).
- Miscellaneous Expenses shall not exceed 5% (five percent) of the total amount.
- All payments will be made in Indian Rupees and are subject to applicable Indian Laws.
- Rates should be inclusive of all duties, levies & taxes.
- The rate should be quoted including cost of collecting cadastral maps & delivery of digital data from/at Corresponding District/Tehsil for which cadastral maps has to be Scanned Digitized and printed.
- All the work has to be done at HARSAC campus or space provided by HARSAC only.

### Annexure IV

#### Award of Order

The final score used for calculating the most responsive bid shall be calculated based on a Quality Cum Cost based evaluation, following table shows the weightage to be used for calculating the total overall score of the bidders:

The Normalization of Technical and Financial score shall be done by awarding maximum marks to the bidder having highest technical score and lowest financial bid respectively.

The total score shall be arrived by using the following formulae:

**Total score, S** =  $0.70 \times (\text{Technical score of bidder} / \text{Highest Technical score}) + 0.30 \times (\text{Lowest Financial bid received} / \text{Financial bid of bidder})$ . The bidders will be ranked as R1, R2, R3, R4....etc. based upon the combined merit of the technical and financial scores.

#### Calculation for R1, R2, R3 and R4

Sr No	Bidders	Financial Score (Sf = $30 \times \text{FM}/\text{F}$ ) Normalized to 30 %	Technical score = $70 \times \text{FM}/\text{T}$ ) Normalized to 70 %	Total Marks	Rank of Bidder
	a	b	c	B+C	
1.					
2.					
3.					
4.					
5.					

\*Where Sf means financial score, Fm means lowest price offered and F means the price of the proposal under consideration

**Annexure V****Name of the Company:****Manpower Details****Note:** - Details filled in this form must be accompanied by sufficient documentary evidence, in Order to verify the correctness of the information.

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

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

Place: \_\_\_\_\_

**Seal & Signature of the vendors**

**Annexure VI****Format for Performance Bank Guarantee**

To  
 The Chief Scientist  
 HARSAC, Hisar.  
 Haryana

1. Whereas M/s \_\_\_\_\_ (hereinafter called "Supplier") has to undergo "PROJECT NAME \_\_\_\_\_ " Project implementation assignment as per agreement dated \_\_\_\_\_ signed between \_\_\_\_\_ on behalf of \_\_\_\_\_ (hereinafter called "Client") and Supplier.

2. NOW THEREFORE KNOW ALL THE MAN THESE PRESENTS THAT WE, \_\_\_\_\_ having its Head Office at \_\_\_\_\_

\_\_\_\_\_ (hereinafter called "the Bank") are bound upto the "Client" in the sum of Rs. \_\_\_\_\_ ( \_\_\_\_\_ ) for which payment will and truly to be made to the "Client", the Bank binds itself, its successors and assignees by these presents.

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

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

5. Sealed with the Common Seal of the said Bank this \_\_\_\_ day of \_\_\_\_\_ 200\_\_\_\_.

In witness whereof the Bank, through its authorized officer, has set its hand and stamp on this \_\_\_\_\_ Day of \_\_\_\_\_ 200\_\_\_\_

For Bank \_\_\_\_\_

Witness

Signature

Name

M/s \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

Date: \_\_\_\_\_2010

Tender Reference No.:

**To,**  
The Chief Scientist  
HARSAC, Hisar.  
Haryana

Subject: **Acceptance of Terms and Conditions contained in this document**

Sir,

I have carefully gone through the Terms &amp; Conditions contained in the RFP

Document [No. Rev \_\_\_\_\_] regarding \_\_\_\_\_

\_\_\_\_\_ (Project name).

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

Yours very truly,

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

Designation: \_\_\_\_\_

Company: \_\_\_\_\_

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

**Note:** - Copy of authorization by competent authority in the bidders company pertaining to not Only this form but entire bid should be enclosed.

**Annexure – VIII**

**DECLARATION REGARDING CLEAN TRACK RECORD**

Date: \_\_\_\_\_ 2010 Tender Reference No.:

To  
The Chief Scientist  
HARSAC, Hisar.  
Haryana

Subject: **Declaration regarding clean track record of the firm**

Sir,

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

Yours very truly,

Name: \_\_\_\_\_  
Designation: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_

**Annexure-IX**  
*(See Clause 2.1.3)*

**TECHNICAL PROPOSAL : Form 1-15**

1. Letter of proposal
2. Details of Bidders
3. Statement of legal capacity
4. Power of attorney or Power of Attorney for Lead Member of Consortium
5. Financial capacity of Bidder
6. Particulars of key personnel
7. Proposed methodology and Work Plan
8. Abstract of eligible assignment of Bidders
9. Abstract of eligible assignment of key personnel
10. Eligible assignments of Bidders
11. Eligible assignments of key personnel
12. CV of key personnel
13. Development of personnel
14. Survey and field investigations
15. Proposal for Sub-consultant/consortium

**ANNEXURE-IX***(See Clause 2.1.3)***TECHNICAL PROPOSAL**

Form-1

**Letter of Proposal**

(On Bidder's letter head)

(Date and Reference)

To,

\*\*\*\*\*\_-----

\*\*\*\*\*\_-----

\*\*\*\*\*\_-----

Sub: Appointment of Consultant for preparation of Feasibility Report

Dear Sir,

With reference to your RFP Document dated ....., I/we, having examined all relevant documents and understood their contents, hereby submit our Proposal for selection as .....(Name of the project)..... The proposal is unconditional and unqualified.

2. All information provided in the Proposal and in the Appendices is true and correct and all documents accompanying such Proposal are true copies of their respective originals.
3. This statement is made for the express purpose of appointment as the Consultant for the aforesaid Project.
4. I/We shall make available to the Authority any additional information it may deem necessary or require for supplementing or authenticating the Proposal.
5. I/We acknowledge the right of the Authority to reject our application without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.
6. I/We certify that in the last three years, we or any of our Associates have neither failed to perform on any contract, as evidenced by imposition of a penalty by an arbitral or judicial authority or a judicial pronouncement or arbitration award against the Bidder, nor been expelled from any project or contract by any public authority nor have had any contract terminated by any public authority for breach on our part.
7. I/We declare that:
  - (a) I/We have examined and have no reservations to the RFP Documents, including any Addendum issued by the Authority;
  - (b) I/We do not have any conflict of interest in accordance with Clause 2.3 of the RFP Document;
  - (c) I I/We have not directly or indirectly or through an agent engaged or indulged in any corrupt practice, fraudulent practice, coercive practice,

undesirable practice or restrictive practice, as defined in Clause 4.3 of the RFP document, in respect of any tender or request for proposal issued by or any agreement entered into with the Authority or any other public sector enterprise or any government, Central or State; and

- (d) I/We hereby certify that we have taken steps to ensure that in conformity with the provisions of Section 4 of the RFP, no person acting for us or on our behalf will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
8. I/We understand that you may cancel the Selection Process at any time and that you are neither bound to accept any Proposal that you may receive nor to select the Consultant, without incurring any liability to the Bidders in accordance with Clause 2.8 of the RFP document.
9. I/We declare that we/any member of the consortium, are/is not a Member of a/any other Consortium applying for Selection as a Consultant.
10. I/We certify that in regard to matters other than security and integrity of the country, we or any of our Associates have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which would cast a doubt on our ability to undertake the Consultancy for the Project or which relates to a grave offence that outrages the moral sense of the community.
11. I/We further certify that in regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a Court of Law for any offence committed by us or by any of our Associates.
12. I/We further certify that no investigation by a regulatory authority is pending either against us or against our Associates or against our CEO or any of our Directors/Managers/employees.
13. I/We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Authority [and/ or the Government of India] in connection with the selection of Consultant or in connection with the Selection Process itself in respect of the above mentioned Project.
14. The Bid Security of Rs. \*\*\*\*\* (Rupees \*\*\*\*\* ) in the form of a Demand Draft is attached, in accordance with the RFP document
15. I/We agree and understand that the proposal is subject to the provisions of the RFP document. In no case, shall I/we have any claim or right of whatsoever nature if the Consultancy for the Project is not awarded to me/us or our proposal is not opened or rejected.
16. I/We agree to keep this offer valid for 90 (ninety) days from the Proposal Due Date specified in the RFP.

17. A Power of Attorney in favour of the authorized signatory to sign and submit this Proposal and documents is attached herewith in Form 4.
18. In the event of my/our firm/ consortium being selected as the Consultant, I/we agree to enter into an Agreement in accordance with the format Schedule-2 of the RFP. We agree not to seek any changes in the aforesaid form and agree to abide by the same.
19. I/We have studied RFP and all other documents carefully and also surveyed the Project site. We understand that except to the extent as expressly set forth in the Agreement, we shall have no claim, right or title arising out of any documents or information provided to us by the Authority or in respect of any matter arising out of or concerning or relating to the Selection Process including the award of Consultancy.
20. The Financial Proposal is being submitted in a separate cover. This Technical Proposal 156 read with the Financial Proposal shall constitute the Application which shall be binding on us.
21. I/We agree and undertake to abide by all the terms and conditions of the RFP Document. In witness thereof, I/we submit this Proposal under and in accordance with the terms of the RFP Document.

Yours faithfully,

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

**Annexure IX**  
Form 2  
**Details of Bidder**

1. (a) Name:  
(b) Country of incorporation:  
I Address of the corporate headquarters and its branch office(s), if any, in India:  
(d) Date of incorporation and/ or commencement of business:
2. Brief description of the Company including details of its main lines of business and proposed role and responsibilities in this Project:
3. Details of individual(s) who will serve as the point of contact/ communication for the Authority:  
(a) Name:  
(b) Designation:  
I Company:  
(d) Address:  
(e) Telephone Number:  
(f) E-Mail Address:  
(g) Fax Number:
4. Particulars of the Authorized Signatory of the Bidder:  
(a) Name:  
(b) Designation:  
I Address:  
(d) Phone Number:  
(e) Fax Number:
5. 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 Jt. Bidding Agreement, as envisaged in Clause 2.2.6 (g) should be attached to the Application.  
I Information regarding the role of each Member should be provided as per table below:

<b>S.No.</b>	<b>Name of Member</b>	<b>Role*</b> (Refer Clause )	<b>Percentage of equity in the consortium</b> (Refer Clause )
1.			
2.			
3.			
4.			

\* The role of each Member, as may be determined by the Bidder, should be indicated in accordance with instruction 4 at Annex-IV.

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

**Name of Bidder/ member of Consortium:**

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

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

**Annexure IX**

Form-3

**Statement of Legal Capacity**

*(To be forwarded on the letter head of the Bidder)*

Ref. Date:

To,

Dear Sir,

Sub: RFP for Modernization of Land Record of Haryana.

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

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

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

Yours  
faithfully,

(Signature, name and designation of the authorized  
signatory)

For and on behalf of

.....

**Annexure IX**  
Form-4  
**Power of Attorney**

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

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

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

For .....

(Signature, name, designation and address)

Witnesses:

- 1.
- 2.

Notarized

Accepted

.....

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

*Notes:*

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

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

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

## Form-4 (a)

**Power of Attorney (for Lead Member of Consortium)**

*[Not: Bidder should submit a power of attorney as per below format to authorized the signatory of the application in commit the Bidder in case of a consortium, the member should submit a power of attorney in favour of lead member as per the format below]*

Whereas the \*\*\*\*\* ("the Authority") has invited applications from interested parties for the  
\*\*\*\*\*

Project (the "Project").

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

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

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS

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

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

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

For .....  
(Signature)

.....  
(Name & Title)

For .....  
(Signature)

.....  
(Name & Title)

For .....  
(Signature)

.....  
(Name & Title)

Witnesses:

1.

2.

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

Notes:

*\_ The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*

*\_ Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favor of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.*

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

**Annexure IX**  
Form-5  
**Financial Capacity of the Bidder**  
(Refer Clause 2.2.2 (B))

S. No.	Financial Year	Annual Revenue (Rs. In Crore)
1.		
2.		
3.		

**Certificate from the Statutory Auditor<sup>\$</sup>**

This is to certify that .....(name of the Bidder) has received the payments shown above against the respective years on account of professional/services/consultancy fees.

Name of the audit firm:

Seal of the audit firm:

Date:

(Signature, name and designation of the authorized signatory)

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

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

**Annexure IX**  
Form-6  
**Particulars of Key Personnel**

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

#Refer Form 9 of Annexure-IX Experience of Key Personnel

**Annexure IX**

## Form-7

**Proposed Methodology and Work Plan**

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

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

The Bidder will submit its methodology for carrying out this assignment, outlining its approach toward achieving the Objectives laid down in the TOR. The Bidder will submit a brief write up on its proposed team and 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 carrying out the Consultancy Services.

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

**Annexure IX**

Form-8

**Abstract of Eligible Assignments of the Bidder/ other Consortium Partner***(Refer Clause 3.1)*

<b>S. No.</b>	<b>Name of Project</b>	<b>Name of Client</b>	<b>Estimated capital cost of Project (Rs. In Crore)</b>	<b>Payment of professional/services/consultancy fees received by the Bidder (Rs. In Crore)</b>
(1)	(2)	(3)	(4)	(5)
1				
2				
3				
4				

- The Bidder should provide details of only those projects that have been undertaken by it under its own name.
- Exchange rate should be taken as Rs. [50] per US \$ for conversion to Rupees.

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

**Certificate from the Statutory Auditors**

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

Name of the audit firm:

Seal of the audit firm

Date:

(Signature, name and designation of the authorized signatory)

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

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

**Annexure IX**

Form-9

**Abstract of Eligible Assignments of Key Personnel@/***(Refer Clause 3.1)*

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

@ Use separate Form for each Key Personnel.

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

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

**Annexure IX**

Form-10

**Eligible Assignments of Bidder/ other Consortium Partner***(Refer Clause 3.1.4)*

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

**Notes:**

1. Use separate sheet for each Eligible Project.
2. The Bidder may attach separate sheets to provide brief particulars of other relevant experience of the Bidder.
3. Exchange rate should be taken as Rs. [50] per US \$ for conversion to Rupees

**Annexure IX**  
Form-11  
**Eligible Assignments of Key Personnel**  
(Refer Clause 3.1.4)

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

**Notes:**

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

**Annexure IX**  
Form-12  
**Curriculum Vitae (CV) of Key Personnel**

1. Proposed Position:
  2. Name of Personnel:
  3. Date of Birth:
  4. Nationality:
  5. Educational Qualifications:
  6. Employment Record:  
(Starting with present position, list in reverse order every employment held.)
  7. List of projects on which the Personnel has worked
- | Name of project responsibilities | Description | of |
|----------------------------------|-------------|----|
|----------------------------------|-------------|----|

8. Details of the current assignment and the time duration for which services are required for the current assignment.

Certification:

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

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

Place.....  
Personnel)

(Signature and name of the Key

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

**Notes:**

1. Use separate form for each Key Personnel
2. The names and chronology of assignments included here should conform to the project-wise details submitted in Form-8 of Annexure IX.
3. Each page of the CV shall be signed in ink by both the Personnel concerned and by the Authorized Representative of the Bidder firm along with the seal of the firm. Photocopies will not be considered for evaluation.

**Annexure IX**  
**Form-13**  
**Deployment of Personnel**

S. N.	Designation	Name	Man days		Week Numbers																			
			At Project site	Away from Project site (specify)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1.																								
2.																								
3.																								
4.																								
5.																								
6.																								
7.																								
8.																								
9.																								
10																								
11																								
<b>Total Main days</b>																								



**Annexure IX**  
Form-15  
**Proposal for Sub-Consultant(s)/consortium**

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

(Signature and name of the authorized signatory)

**Note:**

1. The Proposal for Sub-Consultant(s) shall be accompanied by the details specified in Forms 12 and 13 of Annexure IX
2. Use separate form for each Sub-Consultant