
Advertisement No. 107

Date: 18.06.2016

Request for Proposal

Selection of Implementation Agency for
Integrated Land Administration System (ILAS)
in Punjab

Punjab Land Records Society, Department of Revenue

Contents

DISCLAIMER.....	4
PROJECT FACT SHEET	6
INTRODUCTION	7
A. EXECUTIVE SUMMARY	8
1 INSTRUCTIONS TO BIDDERS	12
1.1 PARTICULARS OF TENDER.....	12
1.2 BID SECURITY AND TENDER FEE	13
1.3 CERTIFICATES REQUIRED	13
1.4 SCHEDULE FOR INVITATION TO TENDER.....	13
1.5 CONTENTS OF THE TENDER DOCUMENT	15
1.6 COST OF TENDER	16
1.7 PROCEDURE FOR SUBMISSION OF BIDS	16
1.8 CLARIFICATION ON TENDER DOCUMENT	18
1.9 AMENDMENT OF TENDER DOCUMENT	19
1.10 LANGUAGE OF BIDS	19
1.11 DOCUMENTS COMPRISING THE BIDS.....	20
1.12 BID PRICE	21
1.13 FIRM PRICES.....	21
1.14 DISCOUNT	21
1.15 BIDDER AUTHORIZATION.....	22
1.16 PARTICULARS FOR BID SECURITY	22
1.17 PERIOD OF VALIDITY OF BIDS	22
1.18 FORMAT AND SIGNING OF BID.....	23
1.19 REVELATION OF PRICES.....	23
1.20 DEVIATIONS BY THE BIDDERS	23
1.21 DEADLINE FOR RECEIPT OF BIDS.....	24
1.22 LATE BIDS	24
1.23 MODIFICATION AND WITHDRAWAL OF BIDS	24
1.24 ADDRESS FOR CORRESPONDENCE.....	24
1.25 CONTACTS DURING BID EVALUATION	24
1.26 OPENING OF BIDS BY PURCHASER	25
1.27 CONDITIONS FOR PRE-QUALIFICATION OF BIDDERS	25
1.28 EVALUATION OF TECHNICAL BIDS	27
1.29 EVALUATION OF COMMERCIAL BIDS	30
1.30 POST QUALIFICATION AND AWARD CRITERIA	32
1.31 PURCHASER'S RIGHT TO VARY SCOPE OF CONTRACT	32
1.32 PURCHASER'S RIGHT TO ACCEPT AND REJECT BIDS	32
1.33 NOTIFICATION OF AWARD.....	33
1.34 SIGNING OF CONTRACT	34
1.35 PERFORMANCE BANK GUARANTEE	34
1.36 CONFIDENTIALITY OF THE DOCUMENT	34
1.37 BIDDER RELATED CONDITIONS.....	35

1.38	CONSORTIUM RELATED CONDITIONS	36
1.39	REJECTION CRITERIA	36
1.40	OTHER CONDITIONS	37
2	GENERAL CONDITIONS OF THE CONTRACT	39
2.1	DRAFT CONTRACT	39
2.2	KEY TERMS AND THEIR DEFINITIONS	40
2.3	INTERPRETATION.....	45
2.4	SCOPE OF WORK	46
2.5	KEY PERFORMANCE MEASUREMENTS.....	46
2.6	COMMENCEMENT AND PROGRESS	46
2.7	SUB – CONTRACT.....	47
2.8	PROJECT MANAGER OR IMPLEMENTATION AGENCY’S REPRESENTATIVE	47
2.9	IMPLEMENTATION AGENCY’S OBLIGATIONS.....	48
2.10	CONTRACT ADMINISTRATION	57
2.11	PURCHASER’S OBLIGATIONS	58
2.12	PAYMENTS	58
2.13	INTELLECTUAL PROPERTY RIGHTS.....	60
2.14	OWNERSHIP AND RETENTION OF DOCUMENTS	63
2.15	DATA AND HARDWARE	63
2.16	REPRESENTATIONS AND WARRANTIES OF THE SELECTED BIDDER / IMPLEMENTATION AGENCY.....	63
2.17	PUBLICITY	65
2.18	TIME IS OF THE ESSENCE.....	65
2.19	STIPULATED TIME SCHEDULE.....	66
2.20	CONTRACT PERIOD AND TERMS FOR CONTRACT EXTENSION	66
2.21	PAYMENT SCHEDULE.....	66
2.22	EVENTS OF DEFAULT BY THE IMPLEMENTATION AGENCY	71
2.23	CONSEQUENCES IN THE EVENT OF DEFAULT	72
2.24	TERMINATION	73
2.25	CONSEQUENCES OF TERMINATION	74
2.26	FORCE MAJEURE.....	75
2.27	PERFORMANCE BANK GUARANTEE	76
2.28	CHANGE ORDERS / ALTERATIONS / VARIATIONS	77
2.29	WARRANTY	80
2.30	PASSING OF PROPERTY	80
2.31	CONFLICT OF INTEREST	81
2.32	INSURANCE	81
2.33	LIMITATION OF IMPLEMENTATION AGENCY’S LIABILITY TOWARDS THE PURCHASER	82
2.34	LIQUIDATED DAMAGES AND PENALTY	82
2.35	SUSPENSION OF WORK.....	83
2.36	EXIT MANAGEMENT	84
2.37	CONFIDENTIALITY.....	86
2.38	INDEMNITY.....	87
2.39	DISPUTE RESOLUTION	87
2.40	“NO CLAIM” CERTIFICATE.....	88
2.41	NO ASSIGNMENT	88
2.42	GENERAL	88

3	CONTENTS OF THE BID	91
3.1	PRE-QUALIFICATION BID.....	91
3.2	TECHNICAL BID.....	100
3.3	COMMERCIAL BID	126
4	SCOPE OF WORK	150
4.1	INTRODUCTION.....	150
4.2	PROJECT VISION AND OBJECTIVE.....	150
4.3	HIGH LEVEL PROJECT ACTIVITIES & APPROACH.....	152
4.4	COMPONENT WISE SCOPE OF WORK OF IA	163
4.5	COMPONENT A – LEGACY DATA CONVERSION.....	164
4.6	COMPONENT B – CREATION OF CENTRALIZED DATABASE ON CLOUD	169
4.7	COMPONENT C - DEVELOPMENT / CUSTOMIZATION OF CORE SOFTWARE MODULES	170
4.8	COMPONENT C.2 - REGISTRATION OF DOCUMENTS - MODULES	177
4.9	COMPONENT D - PORTAL DEVELOPMENT	184
4.10	COMPONENT E - INTEGRATION WITH THIRD PARTY APPLICATIONS	185
4.11	COMPONENT F – DESIGNING A GIS SOLUTION	188
4.12	COMPONENT G - COMMISSIONING OF OTHER SUPPORT SOFTWARE MODULES	192
4.13	COMPONENT H - MANAGED SERVICES	201
4.14	COMPONENT I - HARDWARE, EQUIPMENT AND COMPONENTS	204
4.15	COMPONENT J - TRAINING & CHANGE MANAGEMENT	208
4.16	COMPONENT K - IMPLEMENTATION AND ROLLOUT.....	213
4.17	COMPONENT L - ONGOING ADMINISTRATION AND MAINTENANCE REQUIREMENTS	216
4.18	COMPONENT M - CONSTITUTION OF THE TEAM	216
4.19	COMPONENT N - ACCEPTANCE OF SYSTEM	221
4.20	COMPONENT O - CIVIL INFRASTRUCTURE REQUIREMENT FOR SRO'S	224
4.21	TIMELINES.....	240
4.22	TRANSACTION DETAILS	248
5	SERVICE LEVEL AGREEMENT	276
5.1	PURPOSE	276
5.2	DEFINITIONS	276
5.3	SERVICE LEVEL AGREEMENT AND TYPES	277
5.4	ISSUE MANAGEMENT PROCEDURES	286
5.5	SLA CHANGE CONTROL	287
5.6	RESPONSIBILITIES OF THE PARTIES	288
5.7	MANAGEMENT ESCALATION PROCEDURES & CONTACT MAP	288
	ABBREVIATIONS & FULL FORMS	289

Disclaimer

The information contained in this Request for Proposal document (the “**Tender Document**”) or subsequently provided to Bidder(s), whether verbally or in writing or any other form by or on behalf of Punjab Land Records Society (PLRS) or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this Tender.

This Tender document is not an agreement and is neither an offer nor invitation by PLRS to the prospective Bidders or any other person. The purpose of this Tender document is to provide interested parties with information that may be useful to them in making their technical and financial offers pursuant to this Tender document. This Tender document includes statements, which reflect various assumptions and assessments arrived at by PLRS in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This Tender document may not be appropriate for all persons, and it is not possible for PLRS, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this Tender document. The assumptions, assessments, statements and information contained in the Bidding Documents 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, statements and information contained in this Tender Document and obtain independent advice from appropriate sources.

Information provided in this Tender document to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. PLRS accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

PLRS, its employees and advisors 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, costs or expenses which may arise from or be incurred or suffered on account of anything contained in this Tender document or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the Tender document and any assessment, assumption, statement or information contained therein or deemed to form part of this Tender Document or arising in any way for participation in this Bid Process. PLRS also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this tender document.

PLRS may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this Tender Document. The issue of this Tender Document does not imply that PLRS is bound to select a Bidder or to appoint the Selected Bidder or Implementation Agency (IA), as the case may be, for the Project and PLRS reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by PLRS or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and PLRS shall not be liable in any manner whatsoever for the same or for any other costs or other expenses

incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

This tender document describes indicative requirements of envisaged Integrated Land Administration System (I-LAS) in Punjab. This tender document may or may not cover all the processes and functions of the Department. Hence, the selected bidder will hire domain experts to understand the processes of the department and cover them in the scope of work.

Project Fact Sheet

Nodal Agency	Punjab Land Records Society (PLRS)
Project Title	Selection of Implementation Agency for Integrated Land Administration System (I-LAS) in Punjab
Date of Issue of Tender Documents	18 th June 2016
Bid Security	Bid Security of Rs. 50,00,000/- (Rupees Fifty Lakh only) to be submitted in the form of Bank Guarantee issued by a Nationalised / Scheduled Bank in favour of " Punjab Land Records Society, Jalandhar " payable at " Jalandhar ", valid for 180 days from the last date of proposal submission.
Tender Fee	Tender fee of Rs. 25,000/- (Rupees Twenty Five Thousand only) is to be submitted in the form of Demand Draft in favour of " Punjab Land Records Society, Jalandhar " payable at " Jalandhar ". Tender fee is non-refundable.
Pre-bid Meeting	Pre-bid Meeting will be held on 29th June 2016 at 12:00 Noon in the Committee Room, Punjab Bhawan, Sector 3, Chandigarh
Proposal Submission Date	Proposals must be submitted no later than 3:00 pm on 11th July 2016
Proposal Opening Date	3:30 pm on 11th July 2016

Introduction

Department of Revenue, Rehabilitation and Disaster Management (DoR), Government of Punjab through the aegis of Punjab Land Records Society (PLRS) is circulating this Tender Document for the Selection of Implementation Agency for Integrated Land Administration System (I-LAS) in Punjab. The selected Implementation Agency would be responsible for executing all the project components in totality, as per the provisions laid out in this Tender Document and factoring all the applicable Laws and Statutory Compliances. This Tender Document comprises of the following sections / annexures:

#	Section / Annexure	Name	Page Number
Request for Proposal			
1	Section 1	Instruction to Bidders	12
2	Section 2	Draft Contract – General Conditions of the Contract	39
3	Section 3	Contents of Bid	91
4	Section 4	Scope of Work	150
5	Section 5	Service Level Agreement (SLA)	276
Annexures			
6	Annexure I	Technical Requirement Specifications	7
7	Annexure II	Civil Specifications	76
8	Annexure III	Furniture Specifications	119
9	Annexure IV	Functional Requirement Specifications	157
10	Annexure V	Minimum Qualification for the Staff Proposed	248
11	Annexure VI	Non-Disclosure Agreement	256
12	Annexure VII	Technology Architecture Requirements	260

A. Executive Summary

State Administration (Revenue)

Revenue Department is one of the most important Departments of the Government of Punjab with Land Records Management and Registration being the main activities of the Department. State of Punjab is divided into five Revenue Divisions and 22 districts with the Commissioner being in-charge of the Revenue Division and Deputy Commissioner being in-charge of the district. Commissioners' are subject to general superintendence and control of Financial Commissioner who under the Revenue Department is the head of the Revenue Administration. A district is divided into tehsil and sub-tehsils to each of which a Tehsildar and Naib-Tehsildar are appointed. Tehsildar and Naib Tehsildar exercise administrative and judicial functions within the limits of their own tehsil and sub-tehsils.

For the purpose of Registrations, the Deputy Commissioners act as the Registrar, Tehsildar as Sub-Registrar and Naib-Tehsildar as Joint Sub Registrar. Director of Land Records (DLR) is the ex-officio Inspector General of Registration (IGR).

Purpose of this RFP

As the digital economy evolves, the concept of good Governance assumes greater significance in bringing qualitative changes to delivery of Government services to citizens. The increased adoption of e-Governance is expected to improve transparency, quicker information dissemination, and greater efficiency in delivery of public services in a multitude of sectors.

Comprehensive and reliable data is undoubtedly the basis for effective working. Consequently, the proposed I-LAS solution should introduce a planned transition from the current paper-intensive model of operations to a near paperless environment. This should have provision for electronic submission of requests by the stakeholder for all transactions like registration, mutation, nakal, etc. and their subsequent processing at the back office along with associated provision for electronic payments. The idea is to come up with a method that will significantly simplify compliance while ensuring that all information necessary for Enforcement is available with the Department.

The purpose of this RFP is to provide details about the project requirements to the potential bidders enabling them to put together their technical and commercial proposals. The solution proposed by the bidders for the Integrated Land Administration System should be in accordance to the National Land Records Modernization Program (NLRMP) Guidelines.

Vision

Integrated Land Administration System (I-LAS) in Punjab has been envisaged with a vision of having:

- Transparent land titles with clarity on area, share, and maps.
- Full information on disputes
- Digital procedures, documents and communication
- Digital interface between citizens and the Department
- Online transactions accessible through the mobile and the web
- Simplified procedures for all Departmental activities like Registration, Revenue Record Management and Recoveries among others
- Seamless interface with other systems like the Finance, Accounts, HR, Disaster Relief, Town

Planning, etc.

Project Objective

The fundamental focus of I-LAS Project is to computerize various services of the Department of Revenue, to minimize the manual way of working leveraging ICT and to bring in efficiency and transparency in the existing processes/services. The new system would boost revenue collection, provide better and faster services to the citizens and considerably reduce the workload of Revenue officials.

Key objectives of the project include:

- Improving citizen service delivery and providing a standardized service delivery experience to the citizens by enabling process and technology transformation from de-centralized solution to a centralized solution
- Removing inconsistencies in procedures due to difference in units, perceptions, terminology, practices, etc. with standardization of systems
- Providing complete access to the dynamically updated land records and registration data to the citizens in read only mode
- Facilitating easy and transparent transfer of Title
- Making all holdings as per Record of Rights (RoR) positively identifiable on cadastral maps and on the ground
- Providing for inbuilt checks and balances to avoid litigation, fraud, duplication of title, unauthorized transfer of title, etc.
- Developing a land evaluation method for assessing commercial potential of land for government levies, fee, taxes and mortgage purposes
- Providing secure access to third party organizations such as financial institutions, banks, courts, UIDAI, Income Tax Department, etc. for financial and legal purposes
- Ensuring multi-layered data security for all the systems
- Providing mobile based access to the citizens as well as officials from the Department, PLRS and other line Departments

Envisaged Citizen Services

Project has been conceptualized to digitally provide following services to the citizens:

S. No.	Citizen Services
1	Registration of document with online appointment and e-Stamping
2	Circle Rate Due-Diligence
3	Marriage Registration
4	Rent Deed Registration
5	Mutation
6	Nakal Registration
7	Nakal Jamabandi

8	Other Nakals (Khasra Girdawari, Shajra Nasb, Field Book, Rapat etc.)
9	Nakal Mutation
10	Nakal of Map/ Musavi
11	Non-Encumbrance Certificate

Key Project Activities

Implementation Agency shall be responsible for the following key activities. Details are provided in Section 4 – Scope of Work.

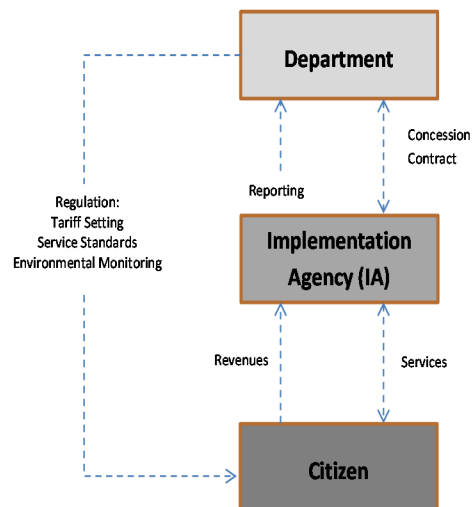
- Preparation of Project Charter, Project Plan, Specification of IT and Non- IT infrastructure along with detailed solution requirement
- Design and development of an integrated Software modules for following categories:
 - Land Records Modules
 - Registration Modules
 - Other Supporting Modules
- Modernization of Sub-Registrar Office (Site Readiness)
 - Modernization of all the 170 Sub-Registrar Offices (SROs) across the Punjab State shall be covered under this project. These SROs have been categorized on the basis of per day registration of deeds into three categories - Category A – 14 Sites, Category B – 42 Sites and Category C – 114 Sites. Department of Revenue shall provide space for all the categories of SROs across the State. Selected Implementation Agency “IA” shall modify the design as indicated in section 4.20 – “Component O” which comprises civil work, electrical work, public health and furniture. IA shall install IT and Non IT infrastructure, networking etc. at the SR offices
 - IA shall commission the Data centre (on cloud), Data recovery centre(on cloud), near line data centre (on cloud), SR offices etc.
 - Apart from sub registrar offices, citizen shall be able to access the services through Seva Kendra / Unified Service Delivery Centres (USDC) and online portal
- Networking
 - All the offices of Department of Revenue (DoR) including Deputy Commissioner offices, SROs, JSROs and other Revenue Offices, etc. shall be networked through primary and secondary connectivity. These offices shall be further connected with Data Centre. Data Centre, which will be established at State Data Centre, shall be further connected with Near Line Data Centre and Disaster Recovery Centre. Primary connectivity shall be provided by the Department of Governance Reforms through PAWAN (Punjab Wide Area Network) and Secondary connectivity shall be provided by IA.
- Legacy Data Conversion
 - Data Entry & Scanning is an essential part of the I-LAS project. IA shall digitize the Land record, Registration and Musavis data. It is expected that the digitized data shall be vetted and audited by the concerned officials of the Department
- Data Migration
 - Data Migration in the context of I-LAS shall entail migration of existing data (available in 170 databases at tehsil/sub-tehsil level) to the newly developed centralized system
- Training and Change Management

- Training and Change management are essential components of the I-LAS project which shall ensure capacity building and acceptance, by the stakeholders, of the envisaged program
- Manpower Deployment
 - IA needs to deploy manpower for accomplishing the project objectives and ensuring smooth day to day operations
- Go live
- Operations and Maintenance
 - IA is expected to be responsible for Operations and Maintenance of the entire project for a period of 5 years from the date of Project Go-Live. IA would be expected to deliver all the services as per the SLA defined in this Tender Document across all SR offices (Category A, B and C) till the expiry or early termination of the contract in accordance with the provisions thereof. This phase will include following activities but not limited to:
 - Service delivery across all the offices
 - Maintenance and support of all IT & Non-IT Infrastructure
 - Monthly log of service calls and problem resolution reports for Helpdesk
 - Quarterly Performance Monitoring Reports for the system
 - Updation of user manuals, administration manuals, training manuals etc.
 - Manpower deployment
 - Security services

Implementation Model

Implementation Agency selected through this Tender Document will be expected to implement and manage the project to deliver the expected outcome around all the envisaged project components. The project is proposed to follow steps comprising of Analysis of the legacy system, Architect the proposed System followed by Designing, Building, Implementing and Operating (“ADBIO”) the system to meet the project objectives.

Pricing model for the project will be on milestone basis which is mentioned in the Section 2.21 “Payment Schedule”. The overall duration of the contract will be inclusive of 12 months of implementation period and 5 years of operations and maintenance. The Parties shall ensure that they continue to co-operate with each other and carry out their respective obligations during the exit management period as set out in the Exit Management Plan formulated and updated from time to time by the Parties in consultation with each other, to facilitate seamless transition of services from the Implementation Agency to either PLRS or its nominated agency or new implementing agency selected and appointed by PLRS.



1 Instructions to Bidders

1.1 Particulars of Tender

- 1.1.1** This Tender/ Bid invitation is for “Selection of Implementation Agency for I-LAS in Punjab” (the “Project”). In pursuance of the aforesaid invitation, Punjab Land Records Society (PLRS) invites proposals/ bids (the “Bid”) from interested parties (the “Bidder”) for implementing the Project. The term Bidder includes and means a sole bidder or the consortium, as the case may be. The manner in which the Bid is required to be submitted, evaluated and accepted by PLRS is explained in this Tender Document.
- 1.1.2** The statements and explanations contained in this Tender Document are intended to provide a better understanding to the Bidders about the proposed project and should not be construed or interpreted as limiting in any way or manner the scope of services and obligations of the Implementation Agency set forth in the Tender Document / Contract or the PLRS’s rights to amend, alter, change, supplement or clarify the scope of work, the contract to be awarded pursuant to this tender document or the terms thereof or herein contained. Consequently, any omissions, conflicts or contradictions in the Bidding Documents including this Tender Document are to be noted, interpreted and applied appropriately to give effect to this intent, and no claims on that account shall be entertained by PLRS.
- 1.1.3** Bidders are advised to study this Tender Document carefully. Submission of Tender shall be deemed to have been done after careful study and examination of the Tender Document with full understanding of its implications. Sealed offers prepared in accordance with the procedures enumerated in Clause 1.7 should be submitted to the Member Secretary, Punjab Land Records Society not later than the date and time laid down, and at the address given in the Schedule for Invitation to Tender under Clause 1.4.
- 1.1.4** This Tender Document is not transferable.
- 1.1.5** The Tender document can be obtained during working hours on all working days at the office address from the start date of sale of Tender till the last date of sale of Tender Document as prescribed in Clause 1.4 below. The Tender document can also be downloaded from <http://punjabrevenue.nic.in> or <http://plrs.org.in>
- 1.1.6** PLRS shall receive Bids pursuant to this tender document in accordance with the terms set forth in this Tender Document and other documents to be provided by PLRS pursuant to this tender document, as modified, altered, amended and clarified from time to time by PLRS (collectively the “Bidding Documents”), and all Bids shall be prepared and submitted in accordance with such terms on or before the date specified in Clause 1.4 for submission of Bid (the “Bid Due Date”).

1.2 Bid Security and Tender fee

1.2.1 All bids must be accompanied with following:

- a) Bid Security of Rs. 50,00,000 /- (Rupees Fifty Lakh only) to be submitted in the form of Bank Guarantee issued by a Nationalized / Scheduled Bank in favour of "Punjab Land Records Society, Jalandhar" payable at Jalandhar", valid for 180 days from Bid Due Date in the format provided under Section 3 – Annexure 3.1.5 - Bank Guarantee for Bid Security.
- a) Tender fee of Rs. 25,000 /- (Rupees Twenty Five Thousand only) to be submitted in the form of Demand Draft in favour of "**Punjab Land Records Society, Jalandhar**" payable at Jalandhar. Tender fee is non-refundable.

1.3 Certificates Required

Following certificates and letters duly signed by authorized signatory of the Bidder must be submitted along with the Pre-Qualification Bid:

- 1.3.1 The Bidder and all members of the consortium, in case of consortium, are not under a declaration of ineligibility/ banned/ blacklisted by any State or Central Government / PSU / any other Government Institution in India or convicted for economic offence in India for any reason as on the Date of Bid Submission
- 1.3.2 The Bidder and all members of the consortium, in case of consortium, shall furnish an affirmative statement as to non-existence of any potential conflict of interest on the part of the Bidder, due to prior, current or proposed contracts, engagements or affiliations with PLRS, that may have an impact on this contract with PLRS
- 1.3.3 Board Resolution / Authorisation Letter, in the name of person signing the Bid, authorising him / her to submit the Bid and execute the Contract if awarded the work.

1.4 Schedule for Invitation to Tender

1.4.1 Name of the Tender Inviting Authority / the Purchaser:
Punjab Land Records Society (PLRS)

1.4.2 Addressee and Address at which Tenders / Bids to be submitted:
Member Secretary,
Punjab Land Records Society, Room No. 3,
4th Floor, Punjab Civil Secretariat, Sector – 1,
Chandigarh - 160001

1.4.3 Contact person for any clarification or Pre-bid Meeting:

1. Sh. Dilraj Singh
Member Secretary
Punjab Land Records Society
Room No. 3,4th Floor, Punjab Civil Secretariat, Sector- 1
Chandigarh – 160001
Phone: 0172- 2748469
Email: dlr.land@punjab.gov.in

2. Smt. Sunita Thakur
Project Manager
Punjab Land Records Society
Room No. 16, 4th Floor, Punjab Civil Secretariat, Sector –1,
Chandigarh – 160001
Phone: 0172-2740611 (Ext. 4332)
Email: projmgr.chd.plrs@punjab.gov.in

1.4.4 Deadline for submission of written queries / clarifications on Tender document
3:00 PM on 27th June 2015 at the address mentioned in section 1.4.7 A soft copy of the queries for clarifications on Tender document is also required to be sent to projmgr.chd.plrs@punjab.gov.in.

1.4.5 Pre-bid Meeting - Venue, Date and Time:

Committee Room, Punjab Bhawan,
Sector 3, Chandigarh
12:00 Noon on 29th June 2016

It will be mandatory for the prospective bidders, who intend to participate in the pre-bid meeting deliberations, to deposit the Tender Fee before the pre-bid meeting.

1.4.6 Date and Time for Submission of Tenders / Bids

On or before 3:00 PM, 11th July 2016 at the below mentioned place

1.4.7 Place, Time and Date for opening of Bids:

Member Secretary,
Punjab Land Records Society, Room No. 3,
4th Floor, Punjab Civil Secretariat, Sector – 1, Chandigarh - 160001
3:30 PM on 11th July 2016

1.4.8 Date till which the proposal/bid in response to this Tender Document should be valid:
180 days from the Bid Submission Due Date

1.4.9 Important dates for this Tender:

Activity	Date	Time
Sale of Tender Document	From 18 th June 2016 to 11 th July 2016	11 th July 2016 at 1:00 PM
Deadline for submission of written queries for clarifications on Tender document	27 th June 2016	3:00 PM
Pre-Bid Conference	29 th June 2016	12:00 Noon
Pre-bid clarifications	To be communicated	
Deadline for Submission of Bids	11 th July 2016	3:00 PM
Opening Pre-Qualification Documents	11 th July 2016	3:30 PM
Opening of Technical Bids	To be communicated later	

Activity	Date	Time
Technical Presentation	To be communicated later	
Commercial Bids opening	To be communicated later	

1.4.10 Note:

- a) PLRS shall not responsible for non-receipt / no-delivery of the Bid due to any reason whatsoever by the Bid due Date i.e. the deadline for submission of Bids
- b) Any Bid submitted/ delivered after the deadline for submission of bids will not be considered and returned unopened
- c) Bid (and any additional information requested subsequently) shall bear the signature of the authorised signatory and stamp of the Bidder thereof on each page of the Bid, except for the un-amended printed literature.

1.5 Contents of the Tender Document

This Tender Document consists of the following two (2) Documents:

- A. Request for Proposal consisting of:
 - a) Disclaimer
 - b) Introduction
 - c) Executive Summary
 - d) Project Fact Sheet
 - e) Section 1 Instruction to Bidders
 - f) Section 2 Draft Contract
 - g) Section 3 Contents of Bid
 - h) Section 4 Scope of Work
 - i) Section 5 Service Level Agreement (SLA)
 - j) Abbreviations

- B. Request for Proposal consisting of:
 - a) Annexure I Technical Requirement Specifications
 - b) Annexure II Civil Specifications
 - c) Annexure III Furniture Specifications
 - d) Annexure IV Functional Requirement Specifications
 - e) Annexure V Minimum Qualification for the Staff Proposed
 - f) Annexure VI Non-Disclosure Agreement
 - g) Annexure VII Technology Architecture Requirements

Bidder is expected to examine all instructions, forms, terms & conditions and scope of work in the Tender Document and furnish all information as stipulated therein. This tender document describes indicative requirements of envisaged Integrated Land Administration System (I-LAS) in Punjab. This tender document may or may not cover all the processes and functions of the Department. Hence, the selected bidder will hire domain experts to understand the processes of the department and cover them in the scope of work.

1.6 Cost of Tender

- 1.6.1** Bidder shall bear all costs associated with the preparation and submission of its Bid, including cost of presentation for any clarification of the Bid, if so desired by the Purchaser.
- 1.6.2** The Purchaser, will in no case be responsible or liable for the above mentioned costs, regardless of the conduct or outcome of the Tendering process.

1.7 Procedure for Submission of Bids

- 1.7.1** Bidders shall submit their bids / proposals in 3 parts in 3 separate envelopes with all the 3 envelopes put in a bigger outer envelope:
- | | |
|---------------------------|------------|
| a) Pre- Qualification Bid | - 2 copies |
| b) Technical Bid | - 2 copies |
| c) Commercial Bid | - 1 copy |
- 1.7.2** Bidders are requested to submit the Pre-Qualification Bid Documents in a separate sealed envelope in accordance with Clause 1.27 of this section, describing the pre-qualifying criteria for the Bidders. Technical evaluation would be undertaken for the Bidders who meet all the pre-qualification criteria
- 1.7.3** Each copy of Pre-Qualification Bid, Technical Bid and Commercial Bid of the Tender should be covered in separate sealed covers super scribing "Pre-Qualification Bid", "Technical Bid" and "Commercial Bid" respectively. Each copy of Pre-qualification and Technical Bid should also be marked as "Original", "First copy" and "Second copy". All the copies of each Bid should be put in a single sealed cover super scribing "Pre-Qualification Bid", "Technical Bid" and "Commercial Bid" as the case may be. Any disclosure of Prices in Pre-Qualification Bid document or Technical Bid document shall lead to outright rejection of the bid
- 1.7.4** Each copy of the bid should be a complete document and should be bound as a volume. All pages of the Bid should be numbered, appropriately flagged and must contain the list of contents with page numbers. Different copies of Bid must be bound separately. Bids not bounded appropriately e.g. in the form of loose papers, shall be rejected. Each page of the bid should be signed and stamped by the authorised signatory of the Bidder.
- 1.7.5** As part of the Bid, the Bidder should also provide the Technical Bid and Commercial Bid in soft copy format also (word document and excel), in the form of a non-re-writable CD –R (Compact Disc) as follows:
- | |
|--|
| a) 3 (Three) CDs containing the Pre-Qualification Bid. These CDs should be sealed along with the 'Original' hard copy of the Pre-Qualification bid |
| b) 3 (Three) CDs containing the Technical Bid. These CDs should be sealed along with the 'Original' hard copy of the Technical Bid. |
| c) 1 (One) CD containing the commercial bid. This CD containing Commercial Bid should be sealed along with the Commercial Bid. |

- 1.7.6** All CDs submitted by the Bidder must be in a sealed cover. The sealed covers as well as the CDs must be duly signed by the Bidder using a “Permanent Pen/Marker” and should be super scribed with “Pre-Qualification Bid” / “Technical Bid” / “Commercial Bid” (as the case may be) with the name of the Bidder / Prime Bidder in case of Consortium.
- 1.7.7** Bidder must ensure that the information furnished by him in respective CDs is identical to that submitted by him in the original paper bid document. In case of any discrepancy observed by PLRS in the contents of the CDs and original paper bid documents, the information furnished in original paper bid document will prevail over the soft copy.
- 1.7.8** Bidder must ensure that Pre-Qualification Bid CD or Technical Bid CD do not contain any Commercial items / prices.
- 1.7.9** The three covers containing Pre-Qualification Bid, Technical Bid and the Commercial Bid should be put in another single sealed envelope clearly marked “Selection of Implementation Agency for Integrated Land Administration System (I-LAS) in Punjab”. This envelope is to be super scribed with Tender Number, Bid Due Date and the wordings “DO NOT OPEN BEFORE 03:30 PM on 11th July 2016”.
- 1.7.10** Cover thus prepared should also indicate clearly the name, address and telephone number of the Bidder/Prime Bidder and Consortium Partners in case of a Consortium.
- 1.7.11** Local Conditions
- 1.7.11.1 Bidders are encouraged to submit their respective Bids after visiting the office of PLRS at Jalandhar and various sites/locations where the current registration of documents and land record related work is going on and ascertaining for themselves the site conditions, work load, functioning of the current system, feasibility, applicable laws and regulations, and any other matter considered relevant by them. It shall be deemed that by submitting the Bid, the Bidder has:
- i. made a complete and careful examination of the Tender Document;
 - ii. received all relevant information requested from Purchaser;
 - iii. accepted the risk of inadequacy, error or mistake in the information provided in the Tender Document or furnished by or on behalf of Purchaser relating to any of the matters referred above;
 - iv. agreed to be bound by the undertakings provided by it under and in terms hereof;
 - v. satisfied itself about all matters, things and information including matters referred to hereinabove necessary and required for submitting an informed Bid, execution of the Project in accordance with the Bidding Documents and performance of all of its obligations there under; and
 - vi. Acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in the Bidding Documents or ignorance of any of the matters referred to in hereinabove shall not be a basis for any claim for compensation, damages, extension of time for performance of its obligations, loss of profits, etc. from Purchaser or a ground for termination of the Contract by the Implementation Agency.

- 1.7.11.2 It will be imperative on each Bidder to fully acquaint himself with the local conditions which would have any effect on the performance of the contract and / or the cost.
- 1.7.11.3 The Bidder is expected to obtain for himself, on his own responsibility all information that may be necessary for preparing the bid and entering into contract. Obtaining such information shall be at Bidder's own cost.
- 1.7.11.4 Failure to obtain the information necessary for preparing the bid and/or failure to perform activities that may be necessary for designing an optimal solution before entering into contract will in no way relieve the successful Bidder from performing any work in accordance with the Tender Document including the contract to be executed between the successful Bidder and PLRS/ the Purchaser.
- 1.7.11.5 It will be imperative for each Bidder to fully inform themselves of all legal conditions and factors which may have any effect on the execution of the contract as described in the Bidding Documents.
- 1.7.11.6 It is the responsibility of the Bidder that such factors have properly been investigated and considered while submitting the Bid and that no claim whatsoever including those for financial adjustment to the contract awarded under the Tender Document will be entertained by the Purchaser and that neither any change in the time schedule of the contract nor any financial adjustments arising thereof shall be permitted by the Purchaser on account of failure of the Bidder to appraise themselves of local laws and conditions.

Purchaser shall not be liable for any omission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the tender document or the Bidding Process, including any error or mistake therein or in any information or data given by Purchaser.

1.8 Clarification on Tender Document

- 1.8.1 Bidders requiring any clarification on the Tender Document may submit their queries, in writing, at the Purchaser's mailing address and as per schedule indicated in Clause 1.4.10 of this section. The queries must be submitted in hardcopy and softcopy (CD-R) format in the table format as follows:

Sr. No.	Clause No. & Section	Reference / Subject	Clarification Sought

- 1.8.2 Bidders shall bear in mind that any issues/ queries/ clarifications regarding Contract terms and conditions, Scope of Work, minimum requirements for Hardware infrastructure, essential features of the products/ components and minimum staffing

requirements etc., should be addressed in writing to PLRS and got clarified before bid submission from PLRS in writing as per the schedule indicated in Clause 1.4.10.

- 1.8.3** Purchaser will respond in writing to any request for clarification to queries on the Tender Document, received not later than the dates prescribed by the Purchaser in Clause 1.4.4 of this Tender Document. The Purchaser's response would be put up on the websites <http://punjabrevenue.nic.in> and <http://plrs.org.in>. Bidders are advised to keep browsing the information posted on the aforesaid websites. Bidders should note that any notice, clarification or information pertaining to the Tender Documents or the Tendering process displayed on the aforesaid PLRS website shall be deemed to have been conveyed to the Bidders and PLRS shall not be required to send the same individually to each Bidder. Lack of knowledge of such a notice, clarification or information on the part of the Bidder shall not be held prejudicial to the interest of PLRS/ the Purchaser.
- 1.8.4** Purchaser shall endeavour to respond to the questions raised or clarifications sought by the Bidders. However, Purchaser reserves the right not to respond to any question or provide any clarification, in its sole discretion and nothing in this Clause shall be taken or read as compelling or requiring Purchaser to respond to any question or to provide any clarification.
- 1.8.5** Purchaser may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Bidders. All clarifications and interpretations issued by Purchaser shall be deemed to be part of the Tender Document. Verbal clarifications and information given by Purchaser or its employees or representatives shall not in any way or manner be binding on the Purchaser.

1.9 Amendment of Tender Document

- 1.9.1** At any time prior to the Deadline for receipt of Bids i.e. the Bid Due Date, the Purchaser, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder (i.e., one who has purchased the Tender Document), modify the Tender Document by an amendment.
- 1.9.2** The amendment, if any, will be posted on the websites <http://punjabrevenue.nic.in> and <http://plrs.org.in>. Bidders are advised to keep browsing the information posted on these websites.
- 1.9.3** In order to provide prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser may, at its discretion, extend the Deadline for the receipt of Bids.

1.10 Language of Bids

- 1.10.1** The Bids prepared by the Bidder and all correspondence and documents relating to the Bids exchanged by the Bidder and the Purchaser, shall be written in English language, provided that any printed literature furnished by the Bidder may be written in another language so long the same is accompanied by an English translation in

which case, for purposes of interpretation of the bid, the English translation shall govern.

1.11 Documents Comprising the Bids

1.11.1 Bid prepared by the Bidder shall comprise of the following mandatory components, unless mentioned otherwise:

- A. **Pre-Qualification Bid** – A separate sealed cover shall comprising the following documents:
- a) Section 3 - Annexure 3.1.1: Pre-Qualification Bid Letter
 - b) Section 3 - Annexure 3.1.2 – Supporting Information for Pre-Qualification Conditions
 - c) Section 3 - Annexure 3.1.3 – Prime Bidder & Consortium Details
 - d) Section 3 – Annexure 3.1.4 – Details of Prime Bidder & co-members of Consortium
 - e) Section 3 – Annexure 3.1.5 – Format for Bank Guarantee for Bid Security
 - f) Demand Draft for Tender Fees
 - g) Board Resolution / Authorization Letter executed by the Bidder in favour of the Principal Officer or the duly Authorized Representative, certifying him as an authorized signatory for the purpose of this Tender
 - h) Section 3 - Annexure 3.2.2: Power of Attorney for Lead Member of Consortium
 - i) Section 3 - Annexure 3.2.3: Joint Bidding Agreement
 - j) Section 3 - Annexure 3.2.4: Bidder Details
 - k) Section 3 - Annexure 3.2.12: Declaration for not being under an ineligibility for corrupt or fraudulent practices / Blacklisted with any of the Government or Public Sector Units
- B. **Technical Bid** – A separate sealed cover comprising the following documents:
- a) Section 3 - Annexure 3.2.1: Technical Bid Letter
 - b) Section 3 - Annexure 3.2.5: Technical Solution along with detailed unpriced BOM
 - c) Section 3 - Annexure 3.2.6: Approach and Methodology for Implementation of the Technical Solution
 - d) Section 3 - Annexure 3.2.7: Approach & Methodology for Operations/ Maintenance of the installed Infrastructure
 - e) Section 3 - Annexure 3.2.8: Detailed Work plan and Staffing Plan
 - f) Section 3 - Annexure 3.2.9: Manpower Details
 - g) Section 3 - Annexure 3.2.10: Detailed CV of Personnel
 - h) Section 3 - Annexure 3.2.11: Details of Experience of the Responding Firm
 - i) Section 3 - Annexure 3.2.13: Statement of deviations from Schedule of Requirements / Tender Terms and Conditions, etc.
 - j) Section 3 - Annexure 3.2.14: Copy of Commercial Bid with the price column of the price bid format blanked out
A **blank copy** of the commercial bid should be enclosed with the Technical Bid with the price column of the price bid format blanked out. A tick mark shall be provided against each item in the format to indicate that there is a quote against this line item in the Commercial bid.
 - k) Annexure 3.2.15: Space requirements and manpower deployment plan at existing SROs for the document scanning and legacy Data Entry & Scanning
- C. **Commercial Bid** - The Commercial Bid shall comprise of the following:
- a) Section 3- Annexure 3.3.1: Commercial Bid Letter
 - b) Section 3- Annexure 3.3.2: Breakdown of Service Cost

- c) Section 3 - Annexure 3.3.3: Detailed Commercial Bid covering CAPEX and OPEX. Bidder is expected to provide detailed breakup of costs which should match with the service cost quoted and the overall contract value (in the commercial bid, only contract value shall be evaluated)

1.11.2 Bidders shall enclose with their Bids, full details of all Solutions, Products, etc. for providing Services being sought by PLRS, with relevant documentation, descriptive literature/brochures supplementing the description and highlighting the design principles followed in line with Tender Objective/Requirements and special features. All documentation is required to be in English.

Note: Please refer section 1.7 for the procedure for submission of bids.

1.12 Bid Price

1.12.1 The Bidder shall indicate in the Performa prescribed at Annexure 3.3.2 of Section 3, the value of 'n' and based thereon, the total amount of the Commercial Bid for the Services to be provided under the Contract, as listed out in the tabulated format in Annexure 3.3.2 of Section 3 – Content of Bid of the Tender Document.

1.12.2 Value of 'n' quoted for each Service in the abovementioned Performa shall be used as the basis for determining the charges for 'change orders', if any. The multiplication factor for the any additional/ new Services shall be determined through mutual agreement between the Parties taking into consideration the complexity of the particular additional/ new service vis-a-vis the Services already enumerated in the Annexure 3.3.2 of Section 3 – Content of Bid.

1.12.3 The prices quoted shall be inclusive of transportation charges and all other expenses including but not limited to those related with the visits of Bidder's personnel in connection with the Facilities Management and other Services.

1.12.4 Bidder shall provide all the goods and services in accordance with the requirement of the Tender Documents and within the quoted price. It shall be the responsibility of the Bidder to fully meet all the requirements of the Tender Document and to acquire all the required resources including but not limited to manpower, tools, hardware and software to render the services in an efficient and timely manner.

1.13 Firm Prices

1.13.1 The Commercial Bid should clearly indicate the contract value to be charged without any qualifications whatsoever and should include all taxes, duties (excise & customs, etc.), fees, levies, works contract tax and other charges as may be applicable in relation to the activities proposed to be carried out including Service Tax. Taxes would be paid to the IA on the actual.

1.14 Discount

1.14.1 Bidders are advised not to indicate any separate discount. Discount, if any, should be merged with the quoted prices. Discount of any type, indicated separately, will not be taken into account for evaluation purpose. However, in the event of such an offer,

without considering discount, is found to be the lowest, the Purchaser shall avail such discount at the time of award of contract.

1.15 Bidder Authorization

1.15.1 The authorization for the Authorized Representative of the Bidder shall be indicated by written Board Resolution / Authorization Letter accompanying the Bid. All certificates and documents (including any clarifications sought and any subsequent correspondences) received hereby, shall be furnished and signed by the Authorized Representative of the Bidder/ Prime Bidder. The members of the Consortium shall clearly indicate in writing that they have authorised the Prime Bidder to appoint any person as the Authorized Representative for the purposes of this Tender.

1.16 Particulars for Bid Security

1.16.1 Bidder shall furnish, as part of its bid, Bid security for the amount mentioned in Clause 1.2.

1.16.2 Bid security is required to protect the Purchaser against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to Clause 1.16.7.

1.16.3 Bid Security of Rs. 50,00,000/- (Rupees Fifty Lakh only) is to be submitted in the form of Bank Guarantee issued by a Nationalized / Scheduled Bank valid for 180 days from Bid Due Date. Bid security is to be issued in favour of "Punjab Land Records Society, Jalandhar" payable at Jalandhar. The format of Bank Guarantee is provided in Annexure 3.1.5

1.16.4 No Bidder shall be exempted from furnishing of Bid Security

1.16.5 Unsuccessful Bidder's Bid security will be discharged / returned after award of contract to the successful Bidder. No interest will be paid by the PLRS / Purchaser on the Bid Security amount

1.16.6 The successful Bidder's Bid Security will be discharged upon the Bidder executing the Contract and furnishing the Performance Bank Guarantee, pursuant to Clause 1.35 of this section. No interest will be paid by the Purchaser on the Bid Security amount.

1.16.7 Bid Security may be forfeited: If a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder in the Bid; or In the case of a successful/ Selected Bidder, if the Bidder:

- a) Fails to sign the Contract in accordance with Clause 1.34 of this section; or
- b) Fails to furnish Performance Bank Guarantee in accordance with Clause 1.35 of this section.

1.17 Period of Validity of Bids

1.17.1 Bids shall remain valid for 180 days from the Bid Due Date prescribed by the Purchaser.

- 1.17.2** Purchaser may request the Bidder(s) for an extension of the period of validity. The request and the responses thereto shall be made in writing. The validity of bid security provided under Clause 1.16.3 of this section shall also be suitably extended.

1.18 Format and Signing of Bid

- 1.18.1** Bidder shall prepare three copies of the Bid, clearly marking each "Original", "First Copy" and "Second Copy" as appropriate in accordance with Clause 1.7 of this section. In the event of any discrepancy between them, the original shall govern.
- 1.18.2** The original and all copies of the Bid shall be typed or written in indelible ink. The original and all copies shall be signed by the Authorized Representative of the Bidder duly authorised to bind the Bidder to the Contract in accordance with Clause 1.15. All pages of the 'Original' bid document shall be initialled and stamped by the Authorized Representative of the Bidder/ Prime Bidder
- 1.18.3** Bids shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initialled by the Authorized Representative
- 1.18.4** Bidder shall sign and seal the Bid indicating the legal name of the entity to which the contract is to be awarded by PLRS in the event of acceptance of the Bid
- 1.18.5** Bidder shall seal and mark the original and each copy of the Bid strictly in accordance with Clause 1.7 of this section
- 1.18.6** If the outer cover of the Bid is not sealed and marked as required by Clause 1.7 of this section, the Purchaser will assume no responsibility for the Bid's misplacement or premature opening

1.19 Revelation of Prices

- 1.19.1** Prices in any form or for any reason should not be revealed before opening of the Commercial Bids. If price change is envisaged due to any clarification, revised Bids in a separate sealed cover can be called from all the Bidders by the Purchaser

1.20 Deviations by the Bidders

- 1.20.1** No deviations in any form shall be allowed or acceptable to PLRS except in respect of Technical Specification Requirement and Functional Requirement Specification. The Bidder should clearly specify deviation/s if any, in respect of Annexure 3.2.13 of Section 3 as a part of its Technical Bid. Provided however, such deviations should not impact the Service Level Agreement or the Services proposed to be rendered herein, negatively.
- 1.20.2** Any deviations / assumptions mentioned elsewhere in the Bid, other than the formats (Annexure 3.2.13 of Section 3) will not be considered by the Purchaser.
- 1.20.3** The deviations so proposed by the Bidder in respect of Technical Specification Requirement and Functional Requirement Specification will be either taken back by the Bidder or accepted by PLRS prior to technical score declaration to the Bidders

1.21 Deadline for Receipt of Bids

1.21.1 Bids will be received by the Purchaser at the address specified under Clause 1.4 not later than the time and date specified in Clause 1.4.10. In the event of the specified date for the receipt of Bids being declared a holiday for the Purchaser, the Bids will be received up to the appointed time on the next working day.

1.21.2 The Purchaser may, at its discretion, extend the Bid Due Date by amending the Tender Document in accordance with Clause 1.9, in which case all rights and obligations of the Purchaser and Bidders previously subject to the earlier deadline will thereafter be subject to the deadlines as extended. Notice for extension of Bid Due Date for Bid submission, if any, will be published on the <http://punjabrevenue.nic.in> and <http://plrs.org.in> websites

1.22 Late Bids

1.22.1 Any Bid received by the Purchaser after Bid Due Date prescribed by the Purchaser, pursuant to Clause 1.4 above, will be rejected and/or returned unopened to the Bidder.

1.23 Modification and Withdrawal of Bids

1.23.1 Bidder may modify or withdraw its Bid after the bid's submission, provided that written notice of the modification or withdrawal is received by the Purchaser prior to the Bid Due Date. No bid shall be modified or withdrawn by the Bidder on or after the Bid Due Date

1.23.2 Bidder's modification or withdrawal notice shall be prepared, sealed, marked and delivered to PLRS, with the envelopes addressed to the addressee mentioned in Clause 1.4.2 and the envelopes being additionally marked "MODIFICATION" or "WITHDRAWAL", as appropriate. Bidder shall ensure that such notice for modification or withdrawal of a Bid is duly acknowledged by PLRS at the time of submission

1.23.3 Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid Due Date, unless the same has been expressly sought for by the Purchaser, shall be disregarded. Unsolicited correspondences from Bidders will not be considered.

1.23.4 No Bid shall be withdrawn or altered in the interval between the Bid Due Date and the expiry of the Bid Validity Period specified by the Bidder in the Bid. Withdrawal or alteration of a Bid during this interval shall result in the Bidder's forfeiture of Bid Security in terms of Clause 1.16.7.

1.24 Address for Correspondence

1.24.1 Bidder must provide details of the Officials (Authorized Representative) Name, Designation, Email ID, Office Address, Telephone Number, Mobile Number and Fax number to whom all correspondence from the Purchaser should be addressed.

1.25 Contacts during Bid Evaluation

1.25.1 Bids shall be deemed to be under consideration immediately after they are opened and till such time PLRS / Purchaser makes official intimation of award/ rejection to the Bidders. While the Bids are under consideration, Bidders and/ or their representatives or other interested parties are advised to refrain, save and except as required under the Tender Document, from contacting by any means, the Purchaser and/ or their employees/ representatives on matters related to the Bids under consideration

1.25.2 Any effort by the Bidder(s) to influence Purchaser's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidder's bid.

1.26 Opening of Bids by Purchaser

1.26.1 Purchaser will open the Pre-Qualification, Technical Bid and Commercial Bid in the presence of the representatives of the Bidders, who choose to attend, at the time, date and place, as mentioned in Clause 1.4 or as communicated later, to all the bidders

1.26.2 The Bidders' names, modifications (if any), bid withdrawals and the presence or absence of the requisite Bid Security and such other details, as the Purchaser may consider appropriate at its discretion, will be announced at the bid opening.

1.27 Conditions for Pre-Qualification of Bidders

1.27.1 Pursuant to Clause 1.7 & 1.11, the Bidder shall have to enclose along with the letter of pre-qualification, documentary evidence in support of following mentioned Pre-Qualification conditions in the absence of which the Bid will be summarily rejected. Technical Bids will be evaluated only for the Bidders qualifying the Pre-Qualification conditions. Bidder must fulfil the Pre-Qualification criteria and must individually provide the Pre-Qualification documents as documentary evidence as specified in Clauses 1.27.2, 1.27.3 & 1.27.4 below in addition to providing information/ particulars in the applicable formats/ Annexures specified under Section-III.

1.27.2 For project experience related Pre-Qualification Criteria, only those citations/credentials will be considered that are supported by relevant certificates, etc. from the agency for which it was executed, certifying satisfactory implementation

1.27.3 For financial figures, the copies of the audited balance sheet / annual reports and Profit & Loss account statement and a certificate issued by a Chartered Accountant/ Statutory Auditor certifying the net-worth and annual turnover of the Bidder/ Prime Bidder from IT Business or IT Service Operations during the last three financial years, shall be enclosed. Purchaser may independently get this information verified.

1.27.4 Bidder should fulfil the minimum pre-qualification criteria mentioned in the table below:

#	Pre-qualification Criteria
1	a) A Bidder may be a single entity or group of entities coming together to submit their Bid (the "Consortium").

#	Pre-qualification Criteria
	<p>b) Single Bidder or Prime Bidder including all members of the Consortium, should be legal entities registered either under the Indian Companies Act, 1956/ Partnership Act, 1932 / Limited Liability Act, 2008, since 1st April 2010. (Bidder including all members of the Consortium shall provide a copy of the certificate of incorporation / registration and / or Partnership Deed, as applicable, as a part of pre-qualification)</p> <p>c) Single Bidder / Prime Bidder and all members of the Consortium should be compulsorily registered with the Service Tax Authorities in India</p> <p>d) In case of Consortium, other than Prime Bidder maximum of 2 (two) consortium members are allowed.</p>
2	<p>Single Bidder / Prime Bidder (in case of consortium) should have an annual turnover of at least Rs. 150 Crores from IT Business OR Citizen Delivery Services during each of the last three financial years (i.e. 2013-14, 2014-15 and 2015-16)</p>
3	<p>Net worth of Single Bidder/ Prime Bidder (in case of Consortium) should be minimum of Rs. 35 Crores for each of the last three financial years (i.e. 2013-14, 2014-15 and 2015-16)</p>
4	<p>Single Bidder/ Prime Bidder or at least one Consortium Partner should have executed at least 1 (one) Citizen Service Delivery projects/IT projects involving multiple locations, connected through WAN for Central OR State Governments OR Government Organisations, PSU or Semi Government in India or abroad. The project must have minimum contract value of Rs.25 Crores involving Application Development & Maintenance Services and additionally at least one each from group 1 and 2 below:</p> <p>Group 1:</p> <ul style="list-style-type: none"> Hardware procurement and deployment • Data Centre setup and maintenance • Facilities Management Services <p>Group 2:</p> <ul style="list-style-type: none"> • IT Support and Maintenance Services • Data digitization a Scanning of legacy data <p>Completion certificate or a certificate from a client declaring that the project (whose experience is being claimed by the Bidder under the present Tender Document) is under Operation and maintenance phase pursuant to completion of development phase, is required to be submitted as a part of Pre-Qualification documents.</p>
5	<p>Single Bidder/ Prime bidder has to give an undertaking to open office in the State of Punjab or UT Chandigarh within 2 months of award of contract along with the requisite strength of relevant professionals that are required for proper implementation of this project.</p>

#	Pre-qualification Criteria
6	<p>Single Bidder/ Prime Bidder (in case of Consortium) should have CMMi Level 5 certification</p> <p>Note:</p> <ol style="list-style-type: none"> 1. In case the CMMi Level 5 certificate is due for renewal, the Bidder/ Prime Bidder should provide the last valid certificate along with a certificate from authorized signatory that the renewed certificate will be made available at least by the time of opening of commercial bids. 2. In case the certificate is not provided by the mentioned time, the Bidder/Consortium will be disqualified and its Commercial Bid will not be considered for evaluation and will be returned un-opened.
7	<p>The Single Bidder/Prime Bidder must demonstrate that it has at least 500 manpower on regular rolls and on project contracts, holding relevant experience in the areas of Citizen Service Delivery, Project operation & management, IT & ITES ,software development, networking, systems integration, IT infrastructure maintenance Facility Management Services and Quality Management Systems as on 31.03.2016 wherein at-least 60% must be IT professionals holding relevant degree (B. Tech / B.E / MCA / M. Tech / MBA/ Diploma in IT)</p>
8	<p>Each co-member of the Consortium (Other than Prime Bidder) should have an annual turnover of at least Rs. 25 Crores during each of the last three financial years (i.e. 2013-14, 2014-15 and 2015-16)</p>
9	<p>Each co-member of the Consortium should be ISO 9001:2008 Certified</p> <p>Certification Note:</p> <ol style="list-style-type: none"> 1. In case the certificate is due for renewal, the co-member of the Consortium should provide the last valid certificate along with a certificate from authorized signatory that the renewed certificate will be made available at least by the time of opening of commercial bids. 2. In case the certificate is not provided by the mentioned time, the bidder / Consortium will be disqualified and its Commercial Bids will not be considered for evaluation and will be returned un-opened.

1.27.5 Pursuant to evaluation, the Bidders (single entity or consortium) who meet the Pre-Qualification criteria tabulated above, shall be pre-qualified and become eligible for opening of their Technical Bid.

1.28 Evaluation of Technical Bids

1.28.1 Technical Bids will be reviewed for determining technical eligibility of pre-qualified Bidders (in terms of Clause 1.27 above) for the Project and to ascertain compliance

of their Technical Bids with the Tender terms and conditions, technical requirements and scope of work as defined in this Tender Document.

- 1.28.2** This shall be the second stage of the evaluation by the Purchaser. Only those Bidders who cross the threshold level of Technical Evaluation indicated below and adhere to the Purchaser's technical requirements shall be considered for Financial Evaluation.
- 1.28.3** In case there is no response by the Bidder to any of the requirements with regard to the contents of the Technical Bid, it shall not be assigned any marks for the same
- 1.28.4** Bidders must score minimum 30 marks (60%) in total out of 50 and minimum least score assigned to each Technical parameter / criteria to qualify for opening of their Commercial Bid.
- 1.28.5** Technical Bid of the Bidder shall be opened and evaluated for acceptability of Techno-functional requirements, deviations and technical suitability. Bidders shall respond to the requirements as explained below for their evaluation with regard to experience and qualification. Also, Bidder shall refer and respond to ALL technical requirements as mentioned in the Tender Document.
- 1.28.6** Technical Evaluation shall be on the basis of the following parameters and associated marks:
- Only those projects will be considered for marking that are supported by certificate of satisfactory completion / implementation from the client for whom the project/work was carried out
 - In case of financial figures, a certificate from the Chartered Accountant/ statutory auditor of the Bidder shall be required certifying the correctness of the financial figures mentioned therein
 - Purchaser may independently get all the information verified

#	Criteria	Requirement	Points
1.	Number of Software development projects implemented by the Single Bidder / Prime Bidder in India OR Aboard related to: <ul style="list-style-type: none"> • Land Registration OR • Land Records 	4 projects or More	4
		3 projects	3
		2 projects	2
		1 project*	1 **
2.	Number of Projects with minimum 25 online networked offices (at different locations) connected to central data Centre having minimum 100 computers	4 projects or More	4
		3 projects	3
		2 projects	2
		1 project*	1**
3.	Number of IT/Citizen services based projects executed/under implementation by Single Bidder/ Prime Bidder Or at least one Consortium Partner each having investment of minimum 25 cr.	3 projects or More	4
		2 projects	3
		1 projects	2**
4.	Experience related to Scanning and Indexing of Documents (Old Records)	4 Cr. Pages or More	4

#	Criteria	Requirement	Points
		3 Cr. Pages	3
		2 Cr. Pages	2
		1 Cr. Pages*	1**
5.	Experience related to site preparation to setup office space involving installation of furniture, LAN, furnishing, power backup, etc. (Number of distinct offices with minimum 500 Sq. ft. floor area)	100 or More	4
		50	3
		25	2
		10*	1**
6.	Experience related to Land Records Computerization (Number of Unique Land Parcels whose records have been computerized)	1 Cr. or More	5
		50 Lac	4
		25 Lac	3
		10 Lac*	2**
7.	Experience related to Digitization of Land Parcels Using mapping Software (Re-creating digitized Village OR Town Map. (Property Number / Land Identification Number/ Survey Number)	1 Cr. or More	5
		50 Lac	4
		25 Lac	3
		10 Lac*	2**
8.	Experience related to Number of offices implemented for Computerized registration of Deeds/ Land Records or any other across the counter Citizen Services Delivery Offices.	200 or More offices	5
		100 offices	4
		50 offices	3
		25 offices*	2**
9.	a. Program Director	1	0.5
	b. Program Manager	1	0.5
	c. Solution Architect	1	0.5
	d. Service Manager - Registration & Circle Rate Survey and due-diligence	1	1.0
	e. Service Manager - Land Records	1	0.5
	f. Manager – DC/DR	1	0.5
	g. System Analyst	1	0.5
	h. System Administrator	1	0.5
	i. Quality Assurance	1	0.5
10.	Technical Presentation Presentation will be evaluated on the basis of following parameters a) Technical Presentation and Product Demo highlighting understanding of Scope of Work (30%) b) Approach and Methodology (30%) c) Technical Solution and Other Project Components (30%) d) Implementation Plan to achieve the milestone (10%)		10
	TOTAL Marks		50
<p>Note: * Minimum Requirement to be mandatorily be met by the bidder ** Minimum points to be scored by the bidder on a particular criteria Note: The consortium partners' experience and certificate are accepted wherever applicable except criteria no. 1,6,7 &9.</p>			

1.28.7 Bidders would be technically evaluated on the basis of their responses submitted against the above criteria.

1.28.8 Bidder shall give a Technical presentation to the Department after opening of the Technical Bid (please refer section 1.4.10 for dates).

1.28.9 Technical presentation shall cover the following areas:

- a) Understanding of the Scope of Work
- b) Approach and Methodology
- c) Technical Solution and Other Project Components
 - i. Integrated Software for Registration and Land Record Management
 - ii. IT Infrastructure / computing
 - iii. Cloud infrastructure/system for Data Centre and Disaster Recovery
 - iv. Data Entry & Scanning and Enrichment
 - v. Civil Infrastructure set up / site preparation
 - vi. Service Operation at SRO's, Survey etc.
 - vii. GIS Solution
 - viii. Training
 - ix. Project Management
 - x. Bill of Material
 - xi. Annual Maintenance and Technology Refreshment
- d) Implementation Plan
- e) Proposed Staff

1.28.10 Bidder shall cover all the major components in the technical presentation

1.28.11 Based on the Technical presentation, if the Purchaser is of the opinion that certain points need to be clarified or changes / improvements need to be incorporated in the technical bid / proposed solution then those changes / improvements shall be incorporated within the quoted rate by the Bidder, once the project is awarded to the bidder

1.28.12 Bidder may be required to provide further clarifications on any of the above points / components / topics, if sought by the Purchaser

1.28.13 Purchaser at its discretion may request the Bidders to provide deficient documents related to Pre-qualification and Technical Bid submitted by them.

1.28.14 Pursuant to Technical evaluation, only those Bidders who score minimum 30 marks (60%) of the total 50 Marks and minimum points on each of the criteria mentioned in the table above shall be short-listed for opening of their Commercial Bid.

1.29 Evaluation of Commercial Bids

1.29.1 Commercial Bids of technically shortlisted Bidders (in terms of Clause 1.28 above) shall be evaluated by the Purchaser for completeness and accuracy. Arithmetical errors will be rectified on the following basis - If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity,

the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail.

- 1.29.2** Purchaser reserves the right to cancel Scope of Work related to any one or more services, if required, and evaluate the Bidders only on the basis of bids received as per section 3.3 of "Section 3 - Contents of Bid", by removing the unit cost quoted for the services cancelled from the Scope of work.
- 1.29.3** All expenses related to travel, boarding, lodging etc. would be inclusive and no separate claims on any account would be entertained
- 1.29.4** The list of Bidder will be ranked in ascending order (i.e.) Bidder quoted the lowest price (L1) will be ranked first and so on.
- 1.29.5** The total value of the price bid shall be arrived based on the total value quoted by the bidder for Capital expenditure and Operational expenditure
- 1.29.6** The Operational expenditure shall be calculated based on NPV determined using Discounted Cash Flow method on the Operations and Management cost proposed. The NPV will be calculated with annual discounting rate of 10%.(Rounded PLR)
- 1.29.7** The NPV will be calculated using the formula below:

Given the (period, cash flow) pairs (t, R_t) where N is the total number of periods, the net present value NPV is given by

$$NPV (i, N) = \frac{R_t}{(1+i)^t}$$

Where

- t – the time of the cash flow
- i- the discount rate (the rate of return that could be earned on an investment in the financial markets with similar risk); the opportunity cost of capital
- R_t the net cash flow

- 1.29.8** Arithmetical Errors in Commercial Proposals - **If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between the rates in words and figures, the rate in words will govern.** If the bidder does not accept the correction of errors, the bid will be rejected and EMD may be forfeited. Prime Bidder is advised to exercise adequate care in quoting the prices. No excuse for corrections in the quoted figures will be entertained after the commercial proposals are received by **the Purchaser**

1.29.9 Total Bid Evaluation: The lowest price (L1) is the sum of proposed pricing in Total Contract value of section 3.3.2. The bidder who has identified as the lowest bidder will be considered as the successful bidder.

1.30 Post Qualification and Award Criteria

1.30.1 Purchaser will determine to its satisfaction whether the Bidder as having the “Highest Total Score” is qualified to satisfactorily perform the Contract

1.30.2 This determination will take into account the Bidder's financial, technical, implementation and post-implementation strengths and capabilities. It will also include examination of the documentary evidence submitted by the Bidder as part of the bid and any other information as the Purchaser deems necessary and appropriate.

1.30.3 An affirmative determination will be a pre-requisite for award of the Contract to the Bidder. A negative determination will result in rejection of the Bidder's Bid, in which event; the Purchaser will proceed to the next best evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.

1.30.4 The Purchaser will award the Contract to the successful Bidder whose bid has been the best evaluated Bid defined under this Tender, provided further that such a Bidder is determined to be qualified to perform the Contract satisfactorily. Such a bidder would be declared as the selected / Successful Bidder (the “Selected Bidder”)

1.30.5 The Purchaser is not bound to accept any Bid, wholly or in part.

1.31 Purchaser's Right to Vary Scope of Contract

1.31.1 Purchaser may at any time / after award of contract, by a written order given to the Bidder, can make changes within the quantities, specifications, services or scope of the Contract as specified in this document. Such change shall be dealt with in accordance with the provisions of the Draft Contract pertaining to Change Order.

1.31.2 If any such change causes an increase or decrease in the cost of, or the time required for the Bidder's performance of any part of the work under the Contract, whether changed or not changed by the order, an equitable adjustment shall be made in the Contract Price or time schedule, or both and the Contract shall accordingly be amended as per the provision stipulated in Clause 2.20 (i.e. Contract Period and Terms for Contract Extension) of the Draft Contract

1.32 Purchaser's Right to Accept and Reject Bids

1.32.1 Purchaser reserves the right to accept any bid or to annul the Tender process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

1.32.2 Notwithstanding anything contained in this Tender Document, Purchaser reserves the right to accept or reject any Bid and to annul the Bidding Process and reject all Bids,

at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefore. In the event that Purchaser rejects or annuls all the Bids, it may, in its discretion, initiate re-bidding process by inviting fresh Bids for the Project.

1.32.3 Purchaser reserves the right to reject any Bid if:

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

If the Bidder is a Consortium, then the entire Consortium may be disqualified/ rejected. If such disqualification/ rejection occur after the Bids have been opened and the Bidder who has secured the Highest Total Score gets disqualified/ rejected, then PLRS reserves the right to:

- c) Invite the next best evaluated Bid; or
- d) Take any such measure as may be deemed fit is the sole discretion of Purchaser, including annulment of the Bidding Process

1.32.4 In case it is found during the evaluation or at any time before signing of the Contract or after its execution and during the period of subsistence thereof, including the concession thereby granted by the Purchaser, that one or more of the pre-qualification/ technical qualification 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 Purchaser either by issue of the Letter of Award (LoA) or entering into of the Contract, and if the Bidder has already been issued the LoA or has entered into the Contract, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this Tender Document, be liable to be terminated, by a communication in writing by the Purchaser to the Bidder, without the Purchaser or the Department of Revenue, Government of Punjab being liable in any manner whatsoever to the Bidder. In such an event, Purchaser shall be entitled to forfeit and appropriate the Bid Security or Performance Bank Guarantee and, as the case may be, as Damages, without prejudice to any other right or remedy which Purchaser may have under this tender document, the Contract or under applicable law.

1.32.5 Purchaser reserves the right to verify all statements, information and documents submitted by the Bidder in response to the tender document. Any such verification or lack of such verification by the Purchaser shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of Purchaser or the Purchaser thereunder

1.33 Notification of Award

1.33.1 After completing evaluation of the Bids and selection of the Selected Bidder in terms of this Section, which shall be prior to the expiration of the period of Bid Validity, (Clause 1.17), the Purchaser will notify the Selected Bidder in writing that its Bid has

been accepted and issue a Letter of Award (LoA) to the Selected Bidder and promptly notify all other Bidders who had submitted proposals about the decision taken.

1.34 Signing of Contract

- 1.34.1** Bidder will sign the Contract (Section 2 – Draft Contract) after fulfilling all the formalities/pre-conditions mentioned in the Letter of Award (LoA) within 15 business days of issuance of the Letter of Award (LoA) (may be extended to another 15 days for unforeseen reasons, if any at the sole discretion of Purchaser).
- 1.34.2** Failure of the Selected Bidder to comply with the pre-conditions shall constitute sufficient grounds for the annulment of the Letter of Award (LoA) and forfeiture of the Bid Security, in which event the Purchaser may award the Contract to the next best evaluated bidder or call for new bids at its discretion.
- 1.34.3** Upon the Selected Bidder's furnishing of Performance Bank Guarantee pursuant to Clause 1.35 of this section, the Purchaser may notify each unsuccessful Bidder and will discharge its Bid Security, pursuant to Clause 1.16 of this section.

1.35 Performance Bank Guarantee

- 1.35.1** Selected Bidder for due and faithful performance of its obligations as Implementation Agency under the Contract to be executed with PLRS, shall furnish Performance Security in the form of an unconditional, irrevocable and continuing Bank Guarantee of Rs. 10 Crore in favour of "Punjab Land Records Society" at the time of signing the Contract, as per the Contract Performance Bank Guarantee Bond prescribed at Annexure 3.3.3 of Section 3 – Contents of Bid (the "**Performance Bank Guarantee**"). The Performance Bank Guarantee shall be valid up to a period of three months after the completion of contract period.

1.36 Confidentiality of the Document

- 1.36.1** This Tender Document is confidential and the Bidder shall ensure that anything contained in this Tender Document shall not be disclosed in any manner, whatsoever to parties other than the proposed OEMs, Consortium Members and Authorized Service Providers.
- 1.36.2** Information relating to the examination, clarification, evaluation, and recommendation for the short-listed pre-qualified Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising Purchaser in relation to or matters arising out of, or concerning the Bidding Process. Purchaser will treat all information, submitted as part of Bid, in confidence and will require all those who have access to such material to treat the same in confidence. Purchaser 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 Purchaser or the Purchaser or as may be required by law or in connection with any legal process.

1.37 Bidder Related Conditions

- 1.37.1** Bidder shall prepare the bid based on details provided in the Tender document. It must be clearly understood that the quantities, specifications and diagrams that are included in the Tender document are intended to give the Bidder an idea about the scope and magnitude of the work and are not in any way exhaustive and guaranteed by Purchaser.
- 1.37.2** Bidder shall ensure that the solution proposed by it meets the functional requirements, conceptual design, performance requirements and other Tender requirements. Performing of any activity required to design and execute an optimal solution shall be at Bidder's own cost.
- 1.37.3** Bidder shall carry out the analysis, design & architecture of the solution based on internal assessment and resources, which may include the use of modelling & simulation techniques, wherever it necessary.
- 1.37.4** Bidder must propose a solution best suited to meet the requirements of the Purchaser. If, during the sizing of the solution, any upward revisions of the specifications and/or quantity as given in this Tender document, are required to be made to meet the conceptual design and/or requirements of Tender including service levels requirements as per Tender, all such changes shall be included in the technical proposal and the commercial impact, thereof, included in the commercial bid.
- 1.37.5** If, during the sizing of the solution, any additional product that is not listed in the Tender document is required to be included to meet the conceptual design, performance requirements and other requirements of Tender, all such product(s) should be included/ factored by the Bidder in its technical proposal and their commercial impact, thereof, included in the Commercial Bid.
- 1.37.6** Purchaser will in no case be responsible or liable for any costs associated with the design/sizing of the proposed solution, regardless of the conduct or outcome of the Tendering process.
- 1.37.7** If at any stage during the currency of the contract, the solution proposed does not meet the functional requirements, conceptual design, performance requirements/SLA, and other requirements of Tender, the Bidder shall revise the required specifications and/or quantities as proposed by the Bidder in its Bid in order to meet the said objectives/targets. All such provisions shall be made by the Bidder within the contract price determined pursuant to the multiplication factor applicable in respect of the specific services mentioned in the table provided in the Commercial Bid

format with the quoted contract value, at no extra cost to the Purchaser and without any impact to the Purchaser whatsoever, subject to the provisions of the Contract.

1.38 Consortium Related Conditions

- 1.38.1** Other than Prime Bidder only two more consortium partners are allowed. The members of the Consortium shall enter into a Joint Bidding Agreement as per the format provided under Section-3, Annexure 3.1.3: Prime Bidder & Consortium Details.
- 1.38.2** The consortium partners proposed by the Prime Bidder in its Bid/ proposal should be same (i.e., cannot be changed after the signing of the contract and initiation of the project) throughout the project duration. All the consortium partners will perform tasks as proposed in this Tender Document.
- 1.38.3** Prime Bidder cannot be consortium partner with any of the other bidders for this Tender.
- 1.38.4** A consortium partner can associate with more than one Prime Bidder for this Tender.
- 1.38.5** Sole responsibility for the completion of work under this contract will be that of the Prime Bidder
- 1.38.6** Prime bidder's business relationships with the consortium partners will be its responsibility solely.
- 1.38.7** Any conflict or disagreement within the consortium, at any point of time during the currency of the Project, shall be resolved by Prime bidder in such a way that the Project work is not affected in any manner with respect to any deliverable, milestone, operations and SLA as per the provisions of the Contract. Any such conflict or disagreement shall not be invoked by the Prime Bidder to justify non-fulfilment of any of the obligations under the Contract
- 1.38.8** Notwithstanding anything contained in the Contract, all the members of the Consortium, entrusted with the responsibilities of the Project, shall be jointly and severally responsible to the Purchaser in respect of meeting the financial liabilities of the Prime Bidder and rendering of Services arising out of the Contract.

1.39 Rejection Criteria

- 1.39.1** Besides other terms and conditions contained in the Tender Document, Bids may be rejected under the criteria mention in Clause 1.39.2
- 1.39.2** General Rejection Criteria
 - a) Bids submitted without or improper Bid Security and Tender fees
 - b) Bids received through non-prescribed modes such as Fax/E-Mail
 - c) Bids not bounded appropriately e.g. in the form of loose papers
 - d) Bids which do not confirm unconditional validity of the bid as prescribed in the Tender
 - e) If the information provided by the Bidder is found to be incorrect / misleading at any stage / time during the Tendering Process

- f) If bidder directly or indirectly or through an agent is engaged in corrupt practice, fraudulent practice, coercive practice, or undesirable practice in the bidding process
- g) Bids received by the Purchaser after the deadline & time for receipt of bids prescribed by the Purchaser, pursuant to Clause 1.4.
- h) Bids without Board Resolution / Letter of Authorization or other required documents consisting of adequate proof of the ability of the signatory (i.e. Bidder's Representative) to bind the Bidder.

1.39.3 Technical Rejection Criteria

- a) Bid not meeting Pre-Qualification Criteria
- b) Technical Bid or Pre-Qualification bid containing commercial details
- c) Revelation of Prices in any form or in bids other than Commercial Bid or by any reason before opening the Commercial Bid
- d) Failure to furnish all information required by the Tender Document or submission of a Bid not substantially responsive to the Tender Document in every respect
- e) Bidders not conforming to the complete Scope of Work, all Functional & Technical requirements as indicated in the Tender document including addendum (if any) and any subsequent information given to the Bidder
- f) Bids not conforming to the timelines indicated in the Tender Document

1.39.4 Commercial Rejection Criteria

- a) Commercial Bids that do not conform to the Tender's price bid format
- b) Total price quoted by the Bidder should include all statutory taxes and levies applicable
- c) For any arithmetic discrepancy in the commercial bid calculations, Bidder does not provide the correction of the errors within stipulated time
- d) Commercial Bids containing any deviations to terms and conditions of the Tender
- e) Blank or incomplete submission of Commercial Bids

1.40 Other Conditions

1.40.1 The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at Chandigarh shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the Bidding Process.

1.40.2 Purchaser, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to;

- a) suspend and/ or cancel the Bidding Process and/ or amend and/ or supplement the Bidding 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) pre-qualify or not to pre-qualify any Bidder and/ or to consult with any Bidder in order to receive clarification or further information;
- d) retain any information and/ or evidence submitted to Purchaser by, on behalf of, and/ or in relation to any Bidder; and/ or
- e) 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.

1.40.3 It shall be deemed that by submitting the Bid, the Bidder agrees and releases Purchaser or the Confirming Party, 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 and the Tender Document, pursuant hereto, and/ or in connection with the Bidding Process, to the fullest extent permitted by applicable law, and waives any and all rights and/ or claims it may have in this respect, whether actual or contingent, whether present or in future.

2 General Conditions of the Contract

2.1 DRAFT CONTRACT

This Contract is executed on theday of.....2015, at _____

BETWEEN

Punjab Land Records Society, a society established under the Registration of Societies Act, 1860 by the Government of Punjab having its head office at the office of the Director of Land Records, Punjab, Kapurthala Road, Jalandhar City, Punjab (hereinafter referred to as the "Purchaser" or "PLRS", which expression shall, unless repugnant to the subject or context thereof, mean and include its successors and permitted assigns) of the first part.

AND

_____ [insert name of the Selected Bidder], a company/ LLP registered under the relevant laws of India having its registered office at _____ through its _____ (hereinafter called the "Implementation Agency" which expression shall, unless repugnant to the subject or context thereof, mean and include its, representatives, successors-in-title and administrators) of the second part.

The "PLRS" or "Purchaser" and "Implementation Agency" are hereinafter referred to as "Party" individually and "Parties" collectively.

WHEREAS the Department of Revenue (hereinafter the "DoR") through the aegis of PLRS intended to initiate a project **Integrated Land Administration System (I-LAS) in Punjab** for making the system of Registration & Land Records administration transparent and further to provide citizen centric services through a computerised database, by selecting an Implementation Agency (IA), who would be responsible for executing all the project components in totality, through an open, competitive and transparent bidding process.

AND WHEREAS the DoR through PLRS invited bids/ proposals in a manner as specified in the Tender Document bearing No. _____ dated _____, from eligible bidders to submit their bid/ proposals for being selected as the "**Implementation Agency for Integrated Land Administration System (I-LAS) in Punjab**" (the "**Project**") on terms and conditions contained therein for the selection of the bidder (the "**Implementation Agency**").

AND WHEREAS after evaluation of the Bids/ proposals so received, the Purchaser has accepted the Bid of _____ {name of the Selected Bidder/ Consortium} for the quoted contract value of INR.....(Rupees in words) for the implementation of Project. PLRS has issued its Letter of Award bearing No. _____ dated _____ (hereinafter called the "**LOA**") to the _____ {name of the Selected Bidder/ Consortium} requiring, inter alia, the execution of this Contract with PLRS.

AND WHEREAS the Selected Bidder has accepted the award of the Project vide its reply letter no. _____ dated _____ and has hence agreed to render services as specified in the Tender

Document, enumerated or referred to in the Contract conditions, Functional Requirement Specifications, Scope of Work, Service Level Agreements, other sections of the Tender Document, covering letter and schedule of prices which, for the purpose of identification, have been signed by on behalf of the Selected Bidder and by(Purchaser/ PLRS) on behalf of the Purchaser and all of which are deemed to form part of the Contract as though separately set out herein and are included in the expression “Contract” whenever herein used.

AND WHEREAS the Selected Bidder, for the due and faithful performance of its obligations under the Contract, as a pre-condition for signing of this Contract, has furnished Performance Bank Guarantee for an amount of Rs.10 crores (Rupees Ten Crores Only) by way of an unconditional and irrevocable Bank Guarantee bearing No. _____ dated _____ from _____ Bank in favour of PLRS.

AND WHEREAS the following documents attached hereto shall be deemed to form an integral part of this Contract:

Complete Tender Document	Tender Document
Corrigendum	Corrigendum to be issued by Purchaser
Bid submitted by the Selected Bidder as per file No. <<>>	Prime Bidder's Proposal
Clarification submitted by the Bidders	Prime Bidder's Clarifications
Deviations proposed by the Selected Bidder and accepted by PLRS	Prior to award of Project
Break-up of Services cost	Prime Bidder's Commercial Proposal
Purchaser's Letter of Award dated <<>>	To be issued later by the Purchaser
Selected Bidder's Letter of acceptance dated <<>>	To be issued later by the Purchaser

NOW, THEREFORE, in consideration of the foregoing and the respective covenants and agreements set forth in this Contract, the receipt and sufficiency of which is hereby acknowledged and intending to be legally bound hereby, the Parties agree as follows:

2.2 Key terms and their definitions

2.2.1 In this Tender Document, unless repugnant to the context in which these words and expressions appear the words and expressions defined below shall have the meanings assigned to them: -

- a) **“Applicable Laws”** includes all applicable statutes, enactments, acts of legislature or parliament, laws, ordinances, rules, by-laws, regulations, notifications, guidelines, policies, directions, directives and orders of any Governmental authority, tribunal, board, court or other quasi-judicial authority. The term Applicable Laws used herein shall also include (not limited to) the following :
- i. Registration Act, 1908,
 - ii. Punjab Land Records Manual
 - iii. Punjab Land Revenue Act, 1887
 - iv. Punjab Registration Manual
 - v. Indian Stamp Act, 1899

- vi. Punjab Stamp Rules, 1934
 - vii. National Land Record Modernization Programme (NLRMP)/ National Land Titling Guidelines/ Digital India Land Record Modernization Programme
- b) **“Bespoke Development”** means the software designed, customized, developed, tested and deployed by the Implementation Agency for the purposes of rendering the Services to the stakeholders of the Project and includes the source code along with associated documentation, which is the work product of the development efforts involved in the Project and the improvements and enhancements effected during the term of the Project, but does not include the third party software products, proprietary software components and tools deployed by the Implementation Agency.
- c) **“Bid” or “Proposal”** means the documents in their entirety comprised in the proposal or bid submitted by the Selected Bidder (including the technical and commercial bid) in response to the Tender Document, and accepted by PLRS.
- d) **“Clearances”** means, any consents, licenses, approvals, permits, no objection certificates, rulings, exemptions or other authorisations of whatsoever nature which is required to be granted by, or any registration or filing with any competent authority as may be necessary in connection with the Project and implementation, thereof.
- e) **“Commercial Off-The-Shelf (COTS)”** refers to software products that are ready-made and available for sale, lease, or license to the general public.
- f) **“Confidential Information”** means any information disclosed to or by any Party to this Contract and includes any information in relation to the Parties, a third party or any information including any such information that may come to the knowledge of the Parties hereto / Bidder’s Team by virtue of this Contract that:
- i. is by its nature confidential or by the circumstances in which it is disclosed confidential; or
 - ii. is designated by the disclosing Party as confidential or identified in terms connoting its confidentiality;
- But does not include information, which is, or becomes public knowledge other than by a breach of this Contract.
- g) **“Contract”** means the agreement entered into between the Selected Bidder/ Implementation Agency with the Purchaser in respect of the Project pertaining to I-LAS, including the Tender Document comprising of various Sections and Annexures, Pre-Bid clarifications issued by PLRS, corrigendum’s (if any), Letter of Award, Service Level Agreement and the agreed terms as set out in the Bid of the Selected Bidder, all documents incorporated by reference therein and amendments and modifications to the above from time to time.
- h) **“Contract Period”** shall have the meaning ascribed to it under Clause 2.20.
- i) **“Contract Value”** means the amount payable to the Implementation Agency under this Contract by the Purchaser, for the full and proper performance of its contractual obligations. The Contract Value **comprises the total CAPEX and OPEX cost (inclusive of Taxes)** quoted by the Selected Bidder in its Commercial Bid and accepted by PLRS.
- j) **“Data Centre Sites”** means the Data Centre (DC) and Disaster Recovery (DR) on cloud
- k) **“Deliverables”** means the products, infrastructure and services agreed to be delivered by the System Integrator in pursuance of this Contract as listed in Scope of Work of the Tender Document and includes all documents related to the solution, user manual, business designs, training materials, technical manual, design, process and operating

- manuals, service mechanisms, policies and guidelines and source code (Where applicable) and all respective modifications;
- l) **“Disaster Data Dump Site”** or **“DDDS”** means the cloud system that will act as the repository for the data generated in the Data Centre and Near Data Centre;
 - m) **“Disaster Recovery”** All the records and application shall be replicated to DR site which will be on cloud based.
 - n) **“Document”** means any embodiment of any text or image however recorded and includes any data, text, images, sound, voice, codes or and databases or microfilm or computer generated micro fiche.
 - o) **“DoR”** or **“Department”** means Department of Revenue, Rehabilitation and Disaster Management, Government of Punjab
 - p) **“Effective Date”** means the date on which this Contract is executed.
 - q) **“Force Majeure”** means the occurrence of any act, event or cause (other than lack of funds), which is beyond the reasonable control of the affected Party including but not limited to:
 - i. act of God, war, sabotage, terrorism, riot, civil disorder, revolution, national or state emergency, martial law, fire, lightning, flood, cyclone, earthquake, landslide, storm or other adverse or exceptionally severe weather conditions, explosion, power shortage, strike or boycotts for a continuous period of 20 days (not involving employees of the affected Party), epidemic, quarantine, radiation or radioactive contamination; or
 - ii. Any act of government or other competent authority (including any Court of competent jurisdiction), such as expropriation, restraint, prohibition, intervention, requisition, requirement, direction or embargo by legislation, decree or other legally enforceable order.
 - r) **“External Agencies”** means other departments or agency Banks, UIDAI, CBDT, PUDA, Treasury, e-Stamping solution provider, etc.
 - s) **“Go-live”**: Go-live shall be achieved when the following 4 milestones are achieved by the IA within a period no longer than 12 months from the date of execution of this Contract :
 - a) Commissioning of at least 90% of the total SR/CRO offices,
 - b) User acceptance testing of the integration of land records and registration module
 - c) Replication of real-time data/record in DC, DR, NLDC, SR Offices and CR officers
 - d) Data Entry & Scanning and Migration as per the timeline mentioned in the section 4.20 - Timelines of the RFP till 12 months
 - e) Completion of all types of trainings except “Refresher training” to the targeted audiences
 - f) At least 500 transaction of Registration service with the integration of land record system across the State.
 - t) **“Goods”** means all of the equipment, sub-systems, hardware, software, products accessories and/or other material / items which the Bidder is required to supply, install and maintain under the contract.
 - u) **“Good Industry Practice”** means those practices, methods, techniques, standards, skill, diligence and prudence which are generally and reasonably expected and accepted from a reasonably skilled, prudent and experienced operator engaged in projects akin to the present Project, subject to the Contract, Applicable Laws, Clearances, reliability, safety, environment protection, economy and efficiency.
 - v) **“I-LAS”** means **Integrated Land Administration System**

- w) **“Implementation Phase”** means the period between the Effective Date and the Go-Live date of all the Services to be rolled out by the Implementation Agency. All the Services shall be rolled out by the end of a period of 12 months from the date of execution of this Contract.
- x) **“Implementation Agency (IA)”** means the Selected Bidder selected pursuant to transparent and competitive bidding process by the PLRS, Government of Punjab, who shall be fully accountable to PLRS on behalf of the Department of Revenue, Government of Punjab for providing turnkey solution to set up IT and other systems, set up sites for service delivery, Data Entry & Scanning and migration, Circle Rate survey, manpower, training, operations and provides registration and land record related services as per the requirements and terms and conditions specified in this Contract. The term Selected Bidder shall be deemed to include its successors, representatives (as approved by the Purchaser), administrators and permitted assigns, as the case may be, unless excluded by the terms of the Contract.
- y) **“IA’s Representative”** means the person or the persons appointed by the Implementation Agency from time to time to act on its behalf for overall co-ordination, supervision and project management.
- z) **“IA’s Team” or “Project Team”** means the Implementation Agency who has to provide goods & services to the Purchaser under the scope of this Contract/ Tender Document. This definition shall also include any and/or all of the employees of the Implementation Agency, authorized service providers/ partners/ agents and representatives or other personnel employed or engaged either directly or indirectly by the Implementation Agency for the purposes of this Tender/ Contract.
- aa) **“Intellectual Property Rights”** means any patent, copyright, trademark, trade name, service marks, brands, propriety information, Application Software whether arising before or after the execution of this Contract and the right to ownership and registration of these rights.
- bb) **“Material Adverse Effect”** means material adverse effect on (a) the ability of the Implementation Agency to perform/ discharge any of its duties/ obligations under and in accordance with the provisions of this Contract and/or SLA; and/or (b) the legal validity, binding nature or enforceability of this Contract and/or the SLA.
- cc) **“Mother UPIN”** means the unique property identification number generated for first time of the property.
- dd) **“Notice”** means:
- i. A notice; or
 - ii. Consent, approval or other communication required to be in writing under this Contract.
- ee) **“OEM”** means the **Original Equipment Manufacturer of any equipment / system/ software / product** which are providing such goods to the IA in the name of Purchaser under the scope of this Tender / Contract.
- ff) **“Operations and Maintenance” or “O&M”** means the services to be rendered, as per the SLA, during the period commencing from the “Go-Live date” of all the services (i.e. Priority 1, 2 & 3 - *Please refer section 4.21.2*) at all SR offices (Category A, B and C) till the expiry or early termination of the Contract in accordance with the provisions thereof.
- gg) **“Performance Guarantee” or “Performance Bank Guarantee”** shall mean an unconditional and irrevocable bank guarantee for an amount equal to Rs. 10 crores (Rupees Ten Crores) got issued by the IA from a Nationalized Bank in favour of “Punjab Land Records Society, Jalandhar” payable at Jalandhar”, which would remain valid up to a period of three months after the completion of contract period. The Performance

Bank Guarantee shall be furnished by the Selected Bidder prior to the signing of the Contract and provided in the format prescribed in Section 3, Annexure 3.5.

- hh) **“Data Centre (DC)”** means the primary centre where data, software, computer systems and associated components, such as telecommunication and storage systems, redundant or backup power supplies, redundant data communications, environment controls and security devices are housed and operated from. It would house the Information and Communication Technology (ICT) equipment required for Department of Revenue.
- ii) **“Prime Bidder”** means the lead member of the Consortium
- jj) **“Project”** means I-LAS involving the planned set of interrelated tasks (like system design, development, hardware deployment, infrastructure deployment, establishment of Network connectivity, training of Personnel, implementation, and maintenance of operations) of the overall solution including operation and maintenance thereof as per terms and conditions laid down in this Contract, the Tender document and in conformance to the SLA, Scope of Work, Service Specifications, etc., and transfer of the same to the Purchaser/ PLRS at zero cost and free of encumbrances at the expiry of the Contract.
- kk) **“Project Assets” or “Assets”** shall mean to include (i) Civil Infrastructure and non-IT Infrastructure; (ii) entire hardware, firmware and software, or any other information technology infrastructure components used for the Project and other facilities leased/ owned by the Implementation Agency to be used for the delivery of the Services pursuant to this Contract.
- ll) **“Project Steering Committee”** means the committee constituted by the Purchaser and as defined in Section 4 – Scope of Work.
- mm) **“Proposed Solution”** means the technical solution to be provided by the Implementation agency in response to the requirements and the objectives of the Project.
- nn) **“Purchaser” or “PLRS”** means the Punjab Land Records Society, Government of Punjab.
- oo) **“Services”** means services to be provided as per the requirements/ conditions specified in this Contract including the Scope of Work, Service Specifications, Service Levels, SLAs, and Applicable Law. In addition to this, the definition would also include other related/ancillary services that may be required to execute the scope of work under this contract.
- pp) **“Service Levels”** means the levels of service and other performance criteria which will apply to the Services provided by the Implementation Agency.
- qq) **“Service Level Agreement” or “SLA”** means the agreement on the service levels between PLRS and the Implementation Agency, in terms of the Service Level requirements as per the Section 5 of the Tender Document.
- rr) **“Service Rates”** means the applicable value of ‘n’ with respect to specific service as determined by multiplying ‘n’ by the multiplication factor applicable in respect of these specific services mentioned in the table provided in the Commercial Bid format.
- ss) **“Service Specifications”** means and includes detailed description, statements to technical data, performance characteristics, and standards (Indian as well as International) as applicable and as specified in the Contract, as well as those specifications relating to Industry standards and codes applicable to the performance of the work, work performance quality and specifications affecting the work or any additional specification required to be produced by the Bidder to meet the design criteria.

- tt) **“Setting up of SRO/s”** means the SR offices are ready to provide services to the citizen including completions of Civil work, Installation of IT and Non IT equipment at the SRO, connectivity with data centre, counters for citizen and installation of complete applications & software mentioned in the Scope of Work.
- uu) **“Site Readiness”** shall mean readiness of SR offices, DC, NLDC and DR site with installation of required IT and Non-IT hardware, civil works, electricity, public health, networking, required software installations etc.
- vv) **“Taxes”** means any Indian taxes including excise duties, customs duties, service tax, value added tax, sales tax, local taxes, cess and any impost or surcharge of like nature (whether Central, State or Local) on the goods, material, equipment and services incorporated in and forming part project charged, levied or imposed by any Government Instrumentality, but excluding any interest, penalties and other sums in relation thereto imposed on any account whatsoever. For the avoidance of doubt, Taxes shall not include taxes on corporate income.
- ww) **“Tender Document”** means the Request for Proposal (RFP) Document floated by the Purchaser for Selection of an Implementation Agency for I-LAS Project in Punjab. Tender Document is comprised of the RFP, all annexures and Sections to the RFP, any clarification and corrigendum issued by the Purchaser.
- xx) **“Work”** means the scope of work that the Implementation Agency needs to perform according to the SLAs.

2.3 Interpretation

2.3.1 In this Contract unless a contrary intention is evident:

- a) the clause headings are for convenient reference only and do not form part of this Contract;
- b) unless otherwise specified a reference to a clause number is a reference to all of its sub-clauses;
- c) unless otherwise specified a reference to a clause, sub-clause or section is a reference to a clause, sub-clause or section of this Contract including any amendments or modifications to the same from time to time;
- d) a word in the singular includes the plural and a word in the plural includes the singular;
- e) a word importing a gender includes any other gender;
- f) a reference to a person includes a partnership, a body corporate or any other legal person;
- g) a reference to legislation includes legislation repealing, replacing or amending that legislation;
- h) Where a word or phrase is given a particular meaning it includes the appropriate grammatical forms of that word or phrase which have corresponding meanings.
- i) In the event of an inconsistency between the terms of this Contract and the Tender document and the Bid, the terms hereof shall prevail.
- j) The damages payable by either Party to the other, as set forth in this Agreement, are mutually agreed genuine pre-estimated loss and damages likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalty (the "Liquidated Damages").

- 2.3.2** Words and expressions used in this Contract but not defined herein shall have the same meanings as respectively assigned to them under respective Sections comprising the Tender Document.

2.4 Scope of Work

- 2.4.1** Scope of the Contract is defined in Section 4 and annexure thereto to the Tender Document. The Scope of Work to be undertaken by the Implementation Agency in pursuance of this Contract shall also include any deviations proposed by the Selected Bidder in its Bid and duly accepted by PLRS.
- 2.4.2** The Purchaser has proposed to engage the Implementation Agency for the I-LAS project in Punjab. The Implementation Agency is required to provide such Goods, Services and support as the Purchaser may deem proper and necessary, during the term of this Contract, and includes all such processes and activities which are consistent with the proposals set forth in the Bid, the Tender Document and this Contract and are deemed necessary by the Purchaser, in order to meet its business requirements (hereinafter 'Scope of Work'). At the end of the term of the Contract **or early termination thereof**, the Implementation Agency shall be required to handover/ transfer all the assets, hardware, software, licenses, infrastructure, etc. created/ established by the Implementation Agency for the implementation of the I-LAS Project, at zero cost and free of encumbrances in terms hereof.

2.5 Key Performance Measurements

- 2.5.1** Unless specified by the Purchaser to the contrary, the Selected Bidder/ Implementation Agency shall deliver the Goods, perform the Services and carry out the Work in accordance with the terms of its Bid, this Contract, Scope of Work, Service Specifications, Service Levels and as per Section 5 - Service Level Agreements.
- 2.5.2** If the Contract/ Specification/ Service Levels include more than one document, then unless the Purchaser specifies to the contrary, the later in time shall prevail over a document of earlier date to the extent of any inconsistency.
- 2.5.3** The Purchaser reserves the right to amend any of the terms and conditions [Tender Document, Letter of Award, other correspondence exchanged prior to signing of the Contract] in relation to the Contract/ Service Specifications and may issue any such directions which are not necessarily stipulated therein if it deems necessary for the fulfilment of the Scope of Work.

2.6 Commencement and progress

- 2.6.1** The Implementation Agency shall commence the performance of its obligations in a manner as specified in the "Section 4 (Scope of Work)".
- 2.6.2** The Implementation Agency shall proceed to carry out the activities/ services with diligence and expedition in accordance with any stipulation as to the time, manner,

mode, and method of execution contained in this Contract particularly the Scope of Work.

- 2.6.3** The Implementation Agency shall be responsible for and shall ensure that all activities / Services are performed in accordance with the Contract, Scope of Work, Service Level Agreement, Service Specifications and that the Implementation Agency's Team complies with such specifications and all other standards, terms and other stipulations/conditions set out hereunder.
- 2.6.4** The Implementation Agency shall perform the activities/ Services and carry out its obligations under the Contract with due diligence, efficiency and economy, in accordance with generally accepted techniques and practices used in the industry and with professional engineering and consulting standards recognized by international professional bodies and shall observe sound management, engineering and security practices. It shall employ appropriate advanced technology & engineering practices, safe & effective equipment, machinery, material and methods. The Implementation Agency shall always act, in respect of any matter relating to this Contract, as faithful advisors to the Purchaser and shall, at all times, support and safeguard the Purchaser's legitimate interests in any dealings with Third Parties.
- 2.6.5** The Goods to be procured / supplied under this Contract shall conform to the standards mentioned in the Technical Specifications and when no applicable standard is mentioned, as per Good Industry Practices.

2.7 Sub – Contract

- 2.7.1** For the purpose of this tender a Sub Contract would mean “Any agreement, purchase order, or any such legal instrument issued by the Implementation Agency for this Tender / contract to a third party, the subcontractor, calling for the performance of a defined piece of work or production and/ or delivery of specified Goods or services as permitted herein.”
- 2.7.2** Sub-contracting will not be permitted. However, sub-contracting, with prior approval and consent of the Purchaser, for activities that are non-technical in nature, will be considered at the sole consideration of the Purchaser.
- 2.7.3** The Implementation Agency (i.e. the IA) may be permitted by the Purchaser to appoint any delegate/ sub-contractor for the performance of certain obligations of the Implementation Agency. However, no sub-contracting would be permitted for the following Services under the Contract (not limited to):
- i. Software Development
 - ii. Project Manpower
 - iii. Data Migration

2.8 Project Manager or Implementation Agency's Representative

- 2.8.1** The Implementation Agency shall ensure that at all time during the currency of the Contract, a Project Manager acceptable to the Purchaser shall take charge of the performance of the Contract. The Project Manager/ Implementation Agency's Representative shall be assisted by his/ her team members. Minimum manpower resource requirement has been provided in Section 4 – Scope of Work.

2.9 Implementation Agency's obligations

- 2.9.1** Implementation Agency's obligations shall include all the activities as specified by the Purchaser in the Scope of Work and other sections of the Tender Document including the Contract and changes thereof to meet the Purchaser's objectives and operational requirements. It will be the Implementation Agency's responsibility to ensure proper implementation, performance and continued operation of the Proposed Solution including time to time updation, in accordance with and in strict adherence to the terms of the Tender and this Contract. Implementation Agency is required to work closely in relation to these items to ensure Project's success.
- 2.9.2** Implementation Agency shall provide services to manage and maintain the requisite infrastructure along with facilities management services as may be required at all the DoR's office locations for the entire duration of the Contract Period.
- 2.9.3** Development of any new service to be incorporated shall be the responsibility of the Implementation Agency's maintenance team deployed for the Contract Period without impacting any additional cost to the Purchaser.
- 2.9.4** The Implementation Agency shall provide details of hardware/ network components/ physical/ civil/ furniture/ facilities or IT equipment deployed to meet the Service Level Agreements as per the terms and conditions of the Contract every quarter to the Purchaser throughout the Contract Period.
- 2.9.5** Security and safety of data will be the responsibility of the Implementation Agency and upon end of the Contract Period complete data for all the application software, including all other data will be handed over to the Purchaser. The Purchaser reserves the right to validate the data; the Implementation Agency will provide necessary assistance as well as IT/Non-IT infrastructure
- 2.9.6** In case, the Implementation Agency is a consortium then, the Prime Bidder shall be responsible to the Purchaser for meeting all obligations of the consortium partners for executing the 'Scope of Work' and meeting all obligations of this Contract. The Prime Bidder on behalf of the consortium shall also be the sole point of contact for all matters relating to this Tender and the Contract thereof. All notices &/ or reports shall be addressed to/ from the Prime Bidder only.
- 2.9.7** Implementation Agency shall provide the Purchaser with the resume of Key Personnel and provide such other information as the Purchaser may reasonably require. Purchaser reserves the right to interview the personnel proposed to be deployed in the Project Team. The Purchaser reserves the right to reject proposed resources, on account of experience / qualification unsuitability. The Purchaser reserves the right to

recommend changes in personnel, which shall be communicated to the Implementation Agency.

- 2.9.8** Addition of new resources, removals to/ from the Project Team by the Implementation Agency would be made with the prior approval of the Purchaser.
- 2.9.9** In case of change in its Project Team members, for any reason whatsoever, Implementation Agency shall also ensure that the exiting members are replaced with at least equally qualified and professionally competent resources. Refer Annexure-V of the Tender Document for minimum qualification for the staff proposed.
- 2.9.10** In case, changes are made/ proposed in the Project Team, the Implementation Agency shall ensure a reasonable amount of time overlap in activities to ensure complete knowledge transfer and handover of documents and other relevant materials between the outgoing resource and the new team member.
- 2.9.11** Implementation Agency shall ensure that the proposed Project Team is competent, professional and possesses the requisite qualifications and experience to deliver the tasks they are required to perform under this Contract. Refer Annexure V of the Tender Document for Minimum qualification for the staff proposed. The Implementation Agency shall ensure that the Services provided are in accordance with the terms hereof and to the satisfaction of the Purchaser.
- 2.9.12** Nothing in this Contract relieves the Implementation Agency from its liabilities or obligations under this Contract to provide the Services in accordance with the Purchaser's directions, requirements and as stated in this Contract and, the Tender Document to the extent accepted by the Purchaser. The Implementation Agency shall be liable for any non-performance, non-compliance, breach or other loss and damage resulting either directly or indirectly by or on account of its team.
- 2.9.13** The Implementation Agency shall ensure that all the personnel identified for this Project have high level of integrity. Implementation Agency shall undertake necessary due diligence to ensure that the personnel have high standard of trustworthiness. Implementation Agency shall obtain an undertaking to this effect from each of the personnel assigned and the same should be submitted to the Purchaser as and when demanded by the Purchaser. In addition, the Implementation Agency would also get the background verification checks carried out for the personnel deployed. Any information needed for this activity by the Purchaser should be provided immediately by the Implementation Agency.
- 2.9.14** Implementation Agency, shall maintain all the Data Centre (Cloud system) and DOR's office location/s, desktops, printers (including paper for printing on legal, A3 and A4 sized papers), stationary (in case of paper, minimum 80GSM paper to be used), tools, equipment, etc. at no extra cost to the Purchaser, that may be required by IA's team or purchaser itself during the Contract Period.
- 2.9.15** Implementation Agency shall be fully responsible for deployment / installation / development, upgradation and integration of all the software and hardware

components and resolve any problems/ issues that may arise due to integration of components.

- 2.9.16** Implementation Agency (IA) shall ensure that the OEMs supply equipment/ components including associated accessories and software required during the contract period. IA shall also ensure the installation, commissioning, integration and maintenance of these components during the entire period of contract. IA shall be the single point of contact for all the IT and non-IT infrastructure and its related components
- 2.9.17** All the software and hardware licenses that the Implementation Agency proposes should be perpetual software licenses. The software licenses shall not be restricted based on location and the Purchaser should have the flexibility to use the software licenses for other requirements, if required.
- 2.9.18** The Implementation Agency shall ensure that the Annual Maintenance support for the software and hardware components is provided for the period from the date of deployment of the software and hardware component till the end of the Contract. Annual Maintenance support shall include patches, updates and upgrades of the software and hardware components. Implementation Agency shall ensure that there is a comprehensive on-site warranty/ support arrangement for the aforementioned period with all the OEMs or transfer in favour of the Purchaser for the benefit of any warranties given by OEMs for the products to be transferred as per Exit management clause in this Contract.
- 2.9.19** Implementation Agency shall ensure that none of the components and sub-components are declared end-of-sale or end-of-support by the respective OEMs at the time of submission of bid by the Bidder. If, the OEM declares any of the products/solutions end-of-sales subsequently, the Implementation Agency shall ensure that the same is supported by the respective OEMs from its date of deployment till one year beyond the end of contract period
- 2.9.20** If a product is de-supported by the OEM for any reason whatsoever, from the Effective Date of the Contract till the end of the Contract Period, the Implementation Agency should replace the products/solutions with an alternate that is acceptable to the Purchaser at no additional cost to the Purchaser. The Implementation Agency would ensure that the replaced product/ solution does not result / cause any performance degradation and/or Project delays.
- 2.9.21** The Implementation Agency shall ensure that the OEMs provide the support and assistance to the Implementation Agency in case of any problems/ issues arising due to integration of components supplied by it with any other component(s)/product(s) under the purview of the overall solution. If the same is not resolved for any reason whatsoever, the Implementation Agency shall replace the required component(s) with an equivalent or better substitute that is acceptable to the Purchaser without any additional cost to the Purchaser and without impacting the performance of the solution in any manner whatsoever
- 2.9.22** Implementation Agency shall ensure that the OEMs for hardware servers/equipment supply and/or install all new releases, versions, any type of updates, upgrade patches

and/or bug fixes for the firmware or software from time to time at no additional cost to the Purchaser.

- 2.9.23** Implementation Agency shall ensure that he conducts regular preventive maintenance on a weekly/ monthly basis and break-fix maintenance in accordance with good Industry Practices.
- 2.9.24** Implementation Agency shall ensure that the documentation and training services associated with the components shall be provided by the OEMs without any additional cost to the Purchaser.
- 2.9.25** Implementation Agency's Representative(s)/ Project Manager shall have all the powers requisite for the execution of Scope of Work and performance of Services under this contract. The Implementation Agency's Representative(s) / Project Manager shall liaise with the Purchaser's Representative for the proper coordination and timely completion of the Works and on any other matters pertaining to the Works. He will extend full co-operation to Purchaser's representative in the manner required by them for supervision/ inspection/ observation of the equipment/ goods/ materials, procedures, performance, progress, reports and records pertaining to the works. He shall also have complete charge of the Implementation Agency's personnel engaged in the performance of the works and to ensure compliance of rules, regulations and safety practices as per Applicable Laws. He shall also cooperate with the other service providers/ vendors of the Purchaser working at the DOR's office locations and/ or Data Centre Sites on cloud.
- 2.9.26** Implementation Agency shall be responsible on an ongoing basis for coordination with other vendors and agencies of the Purchaser in order to resolve issues and oversee implementation of the same. The Implementation Agency shall also be responsible for resolving conflicts between vendors (all vendors of Purchaser, DoR and PLRS) in case of borderline integration issues, as well as System Integration, Database Interflow, GUI matching, Inter-Operability, etc.
- 2.9.27** Implementation Agency shall perform the Services in accordance with the Applicable Laws and shall take all practicable steps to ensure that all its Personnel and agents comply with the Applicable Laws.
- 2.9.28** Implementation Agency shall utilize the amount of milestone based payment being released to it by the Purchaser as per the stages envisaged in Clause 2.21 of this Contract strictly for procuring and installing of all Project Assets at the Data Centre Sites, DoRs and SROs, etc. and shall provide to the Purchaser original hard copies of the invoices, bills, etc. in respect of all Project Assets procured/ purchased for implementing the Project during the Implementation Phase. For the avoidance of doubt all software and licenses shall be purchased by the Implementation Agency in the name of PLRS.
- 2.9.29** Implementation Agency shall be responsible for the operation and maintenance of all Project Assets including replacement thereof, as may be required from time to time during the term of the Contract at its own cost so as to keep the Project Assets in good operating condition at all times and in case any up-gradation in Goods/

equipment/ hardware/ software, etc. is required the same shall be carried out by the Implementation Agency at its own cost.

2.9.30 Start of Installation

- a) Before commencement of installation at respective Data Centre Sites, Implementation Agency shall carry out proper planning and co-ordination with other vendors viz., Network/ Bandwidth (high bandwidth available - for example 3G, 4G etc.) Provider in order to prepare the installation plan and detailed design documents.
- b) The plan and design documents thus developed shall be submitted by the Implementation Agency for approval by the Purchaser.
- c) After obtaining the approval from the Purchaser, Implementation Agency shall commence the installation.
- d) Prior to taking up installation of any major component of work, the Implementation Agency shall submit to Purchaser the proposed procedures (consisting of the installation and operational plans) and obtain Purchaser's approval in writing.

2.9.31 Reporting Progress

- a) Implementation Agency shall monitor progress of all the activities related to the execution of this contract and shall submit to the Purchaser, at no extra cost, progress reports with reference to all related work, milestones and their progress during the Implementation Phase fortnightly and thereafter, monthly.
- b) Post completion of each milestone as specified in Scope of Work, the Implementation Agency shall submit to the Purchaser, MIS reports on an on-going basis.
- c) Implementation Agency should ensure MIS reporting as per defined Service Levels in "Section 5 - Service Level Agreements" of the Tender Document. The selected Implementation Agency shall establish and maintain a web-based project and SLA tracking system wherein all the project tasks / activities / service levels / service volumes/ service fulfilment status etc. are tracked against the baseline project plan in a prompt manner – so that any of the project stakeholders can monitor the project progress without having to request / wait for periodic project status reports from the Implementation Agency. In order to meet this requirement, the Implementation Agency must diligently update the project status in the aforesaid tool, at least on a daily basis. This shall be operated throughout the project duration to ensure coverage of the operational activities
- d) Formats for all reports and their dissemination mechanism shall be discussed and finalized at the Kick-Off meeting to be held on __<date>. The Purchaser on mutual agreement between both parties may change the formats, periodicity and dissemination mechanism for such reports.
- e) Periodic meetings shall be held between the representatives of the Purchaser and the Implementation Agency fortnightly during the Implementation Phase to discuss the progress of implementation. After the Implementation Phase is over, the meeting shall be held on an ongoing basis once every month to discuss the performance of the project.
- f) Implementation Agency shall ensure that the respective solution teams involved in the execution of Work are part of such meetings.
- g) High level Project Steering Committee involving representatives of the Purchaser, DoR and senior management of the Implementation Agency shall be formed for

- the purpose of this Contract. This Committee shall meet at intervals, as decided by the Purchaser, to oversee the progress of the Project.
- h) All the Goods, Services and manpower to be provided/ deployed by the Implementation Agency under the Contract and the manner and speed of execution and maintenance of the Work and Services are to be conducted in a manner to the satisfaction of the Purchaser in accordance with the Contract.
 - i) The Purchaser reserves the right to inspect and monitor/ assess the progress/ performance of the Work/ Services at any time during the course of the Contract. The Purchaser may demand and upon such demand being made, the Implementation Agency shall provide documents, data, material or any other information which the Purchaser may require, to enable it to assess the progress/performance of the Work/ Service.
 - j) At any time during the course of the Contract, the Purchaser shall also have the right to conduct, either itself or through another agency as it may deem fit, an audit to monitor the performance by the Implementation Agency of its obligations/ functions in accordance with the standards committed to or required by the Purchaser in terms hereof, the Contract and the SLA; the Implementation Agency undertakes to cooperate with and provide to the Purchaser/ any other agency appointed by the Purchaser, all Documents and other details as may be required by them for this purpose. Such audit shall not include Implementation Agency's books of accounts.
 - k) Should the rate of progress of the Works or any part thereof at any time fall behind the stipulated time for completion or is found to be too slow to ensure completion of the Works by the stipulated time, or is in deviation to Tender requirements/ standards, the Purchaser's representative shall so notify the Implementation Agency in writing.
 - l) The Implementation Agency shall reply to the written notice within 7 (seven) days giving details of the measures he proposes to take to expedite the progress so as to complete the Works by the prescribed time or to ensure compliance to Tender requirements. The Implementation Agency shall not be entitled to any additional payment for taking such steps. If at any time it should appear to the Purchaser that the actual progress of work does not conform to the approved program, the Implementation Agency shall produce at the request of the Purchaser's representative a revised program showing the modification to the approved program necessary to ensure completion of the works within the time for completion or steps initiated to ensure compliance to the stipulated requirements
 - m) The submission seeking approval by the Purchaser or Purchaser's representative of such program shall not relieve the Implementation Agency of any of his duties or responsibilities under the Contract.
 - n) In case during execution of works, the progress falls behind schedule or does not meet the Tender requirements, Implementation Agency shall deploy extra manpower/ resources to make up the progress or to meet the requirements of the Contract. Program for deployment of extra man power/ resources will be submitted to the Purchaser for its review and approval. All time and cost effect in this respect shall be borne by the Implementation Agency within the Contract Value.

2.9.32 Knowledge of Department of Revenue (DoR) Offices and Site conditions for Network Survey:

- a) Implementation Agency shall be granted access to the DOR's Offices, record rooms and sites for inspection by the Purchaser before commencement of installation. Implementation Agency needs to convey date & time of the visit to DoR offices and the Purchaser will help in co-ordination with the office in charge of the locations.
- b) Implementation Agency shall be deemed to have knowledge of the Site and its surroundings and information available in connection therewith and to have satisfied itself the form and nature thereof including, the data contained in the Tender Document, the physical and climatic conditions, the quantities and nature of the works and materials necessary for the completion of the Works, the means of access, etc. and in general to have obtained itself all necessary information of all risks, contingencies and circumstances affecting his obligations and responsibilities therewith under the Contract and his ability to perform it. However, if during pre-installation survey/ during delivery or installation, Implementation Agency detects physical conditions and/ or obstructions affecting the Work, the Implementation Agency shall take all measures to overcome them.

2.9.33 Project Charter

- a) Within 30 (thirty) calendar days of the Effective Date of the Contract, the Implementation Agency shall submit to the Purchaser for its approval a detailed Project Charter with details of the program showing the sequence, procedure and method in which it proposes to carry out the Works, whenever reasonably required by the Purchaser's Representative furnish in writing the arrangements and methods proposed to be made for carrying out the Works and Services in terms of this Contract and Tender Document including his Bid. The Charter so submitted by the Implementation Agency shall conform to the requirements and timelines specified in the Contract particularly under Section 4-Scope of Work. The Purchaser and the Implementation Agency shall discuss and agree upon the work procedures to be followed for effective execution of the works, which the Implementation Agency intends to deploy and shall be clearly specified. The Project Charter shall include but not limited to project organization, communication structure, proposed staffing, roles and responsibilities, processes and tool sets to be used for quality assurance, security and confidentiality practices in accordance with industry best practices, project plan and delivery schedule in accordance with the Contract.
- b) As a part of its Project Charter, the Implementation Agency shall submit to PLRS an exit management plan which will provide in detail how the operations of Services can be taken over by PLRS or its nominated agency in case of early termination or expiry of this Contract. The Implementation Agency shall keep updating the exit management plan on a yearly basis during the Contract Period. Any non-submission of exit management plan within the stipulated time shall be seen as a material breach of Contract and may lead to termination of this Contract.
- c) The Implementation Agency shall get the Project Charter approved from PLRS and in the event of any modifications and suggestions proposed by PLRS, the same shall be incorporated by the Implementation Agency in the Project Charter.
- d) If the Implementation Agency's work plans necessitate a disruption/ shutdown in Purchaser's operation, the plan shall be mutually discussed and developed so as

to keep such disruption/ shutdown to the barest unavoidable minimum. IA shall bring to the notice of the Purchaser about the work plans related to any additional time and cost arising on account of its failure.

2.9.34 Implementation Agency's Organization structure

- a) Implementation Agency shall deploy adequate manpower, required for execution of Work and provision of Services under this Contract.
- b) Implementation Agency should, to the best of their efforts, avoid any change in the organization structure proposed for execution of this Contract or replacement of any manpower resource appointed. If the same is however unavoidable, Implementation Agency shall promptly inform the Purchaser in writing and the same shall require subsequent approval by the Purchaser in terms of this Contract.
- c) In case of replacement of any manpower resource, the Implementation Agency should ensure efficient knowledge transfer from the outgoing resource to the incoming resource and adequate hand-holding period and training for the incoming resource in order to maintain the continued level of service.
- d) All manpower resources deployed by the Implementation Agency for execution of this Contract must strictly adhere to the attendance reporting procedures and make their services available as agreed upon for the entire reporting time period at the Data Centre Sites and DoR office locations.
- e) The Implementation Agency shall provide, at the respective Data Centre Sites necessary supervision during the execution of Work and as long thereafter as the Purchaser may consider necessary for the proper fulfilment of the Implementation Agency's obligations under the Contract. The Implementation Agency or its competent and authorized representative(s) shall be constantly present at the respective Data Centre Sites during agreed time for supervision. The Implementation Agency shall authorize his representative to receive directions and instructions from the Purchaser's Representative.
- f) The Implementation Agency shall be responsible for the deployment, transportation, accommodation and other requirements of all its employees required for the execution of the work and provision of services for all costs/charges in connection thereof.
- g) The Implementation Agency shall provide and deploy, at the Data Centre Sites and DOR office location for carrying out the work, only those manpower resources who are qualified/ skilled and experienced in their respective trades and who are competent to deliver in a proper and timely manner the work they are required to perform or to manage/supervise the work.
- h) The Purchaser's Representative may at any time object to and require the Implementation Agency to remove forthwith from the Data Centre Sites and DOR office location any authorized representative or employee of the Implementation Agency or any person(s) of the IA's Team, if, in the opinion of the Purchaser's Representative there has been any misconduct by the person in question or their deployment is otherwise considered undesirable by the Purchaser's Representative. The Implementation Agency shall forthwith remove and shall not again deploy the person without the written consent of the Purchaser's Representative.
- i) The Purchaser's Representative may at any time object to and request the Implementation Agency to remove from the Data Centre Sites and DOR's office location any of Implementation Agency's authorized representative including any

employee of the Implementation Agency or his team or any person(s) deployed by Implementation Agency or his team for professional incompetence or negligence or for being deployed for work for which he is not suited. The Purchaser's Representative shall state to the Implementation Agency in writing his reasons for any request or requirement pursuant to this Clause.

- j) Implementation Agency shall promptly replace every person removed, pursuant to this section, with a competent substitute, and at no extra cost to the Purchaser.

2.9.35 Adherence to safety procedures, rules regulations and restrictions

- a) Implementation Agency's Team shall comply with the provision of all Applicable Laws including labour laws, rules, regulations and notifications issued there under from time to time. All safety and labour laws enforced by statutory agencies and by Purchaser shall be applicable in the performance of this Contract and Implementation Agency's Team shall abide by these laws.
- b) Implementing Agency shall be responsible for employing any and all manpower, personnel, labour, etc, as may be required to be deployed by it for implementation of the Project and as such the Implementing Agency on an exclusive basis shall be responsible for exercising supervision and control over such manpower, personnel, labour, etc. For all intents and purposes under this Contract, the Implementing Agency alone shall be the principal employer in terms of the provisions of the Factories Act, 1948 and the Contract Labour (Regulation and Abolition) Act, 1970 in respect of such manpower, personnel, labour, etc; the Purchaser shall at no point of time be concerned in any manner whatsoever with any employee or labour related issues of such manpower, personnel, labour, etc. of the Implementing Agency and shall not have any liability or responsibility towards them. The Implementing Agency shall keep the Purchaser indemnified for all claims that may arise due to Implementing Agency's non-compliance with any provisions of the aforesaid Acts.
- c) Access to the Data Centre Sites shall be strictly restricted. No access to any person except the essential members of the Implementation Agency's Team who are genuinely required for execution of work or for carrying out management/maintenance and who have been explicitly authorized by the Purchaser shall be allowed entry to the Datacentre Sites. Even if allowed, access shall be restricted to the pertaining equipment of the purchaser only which has been deployed at the data Centre sites under this project. Implementation Agency shall maintain a log of all activities carried out by each of its team personnel.
- d) The Implementation Agency shall take all measures necessary or proper to protect the personnel, work and facilities and shall observe all reasonable safety rules and instructions. Implementation Agency's Team shall adhere to all security requirement/regulations of the Purchaser during the execution of the work. Purchaser's employee also shall comply with safety procedures/policy.
- e) Implementation Agency shall report as soon as possible any evidence, which may indicate or is likely to lead to an abnormal or dangerous situation and shall take all necessary emergency control steps to avoid such abnormal situations.
- f) Implementation Agency shall ensure fire safety measures at all the sites including SROs, JSROs, other Revenue Offices, and Data Centre etc.

2.9.36 Statutory Compliances: During the tenure of this Contract nothing shall be done by the Implementation Agency or his team in contravention of any law, act and/ or rules/ regulations, there under or any amendment thereof governing implementation of the Project including those governing inter-alia customs, stowaways, foreign exchange etc., and shall keep the Purchaser indemnified in this regard.

It may be noted that demand may also arise to increase (maximum up to 25 % of the existing number of DoR offices) the number of DoR offices due to increase in transactions for a particular location or due to any other administrative reasons. The Purchaser shall provide the space to the IA for setting up of additional SR office and IA shall commission that site as per the prices quoted in the Commercial Bid.

2.9.37 Purchaser shall provide building with required space for the establishment of SR offices for category A, B and C to the IA. IA shall do required modifications in the provided building for Sub-registrar offices. This modification may be in form of civil work, electrifications etc. IA shall modify the building by establishing required cabins, furniture, public health, sitting space for citizen and officials at the SR offices. IA shall also establish IT and Non-IT infrastructure at the SRO as indicated in the RFP and Annexures.

2.9.38 IA shall be responsible for physical safety and security of all locations.

2.9.39 The Implementation Agency shall ensure proper cleanliness and maintenance of all the sites during working hours.

2.9.40 Implementation Agency is free to provide equivalent of any brand specified in Civil Specifications in Annexure II of this Section.

2.9.41 The ownership of software and any system software proposed in solution (in the form of licenses) should be in favour of PLRS only.

Implementing Agency shall provide one handholding staff at each district level for providing support to the concerned SROs. Implementing Agency shall provide required manpower at each SR Offices, DC, NLDC and DR sites as per the scope of work for example operators, receptionists etc. at SR offices.

2.9.42 Implementation Agency at the end of the term of the Contract or early termination thereof shall handover / transfer all the assets, hardware, software, licenses, infrastructure, etc. created/ established by the Implementation Agency for the implementation of the I-LAS Project, to the Purchaser at zero cost and free of encumbrances in the manner stipulated in this contract

2.10 Contract administration

2.10.1 No variation or modification of the terms of the Contract shall be made except by written amendment signed by both the Implementation Agency and the Purchaser.

2.10.2 Either party may appoint any individual/ organisation as their authorized representative through a written notice to the other party. Each Representative shall have the authority to:

- i. Exercise all of the powers and functions of his/her appointing party under this Contract other than the power to amend this Contract and ensure the proper administration and performance of the terms hereof; and
- ii. Bind his or her appointing party in relation to any matter arising out of or in connection with this Contract.

2.10.3 The Prime Bidder along with the members of the consortium shall be bound by all undertakings and representations made by the authorized representative of the consortium/ Implementation Agency and any covenants stipulated hereunder, with respect to this Contract, for and on behalf of the consortium.

2.10.4 For the purpose of execution or performance of the obligations under this Contract, the Purchaser's Representative would act as an interface with the authorized representative of the Implementation Agency. The Implementation Agency shall comply with any instructions that are given by the Purchaser's Representative during the course of this Contract in relation to the performance of its obligations under the terms of this Contract and the Tender Document.

2.11 Purchaser's Obligations

2.11.1 Purchaser's Representative shall act as the nodal point for implementation of the Contract and for issuing necessary instructions, approvals, commissioning, acceptance certificates, payments etc. to the Implementation Agency, on behalf of the Purchaser.

2.11.2 Purchaser shall ensure that timely approval (to be mutually accepted in Project plan submitted by the Implementation Agency) is provided to the Implementation Agency as and when required, which may include approval of project plans, implementation methodology, design documents, specifications, or any other document necessary in fulfilment of this contract.

2.11.3 The Purchaser's Representative shall interface with the Implementation Agency, to provide the required information, clarifications, and to resolve any issues as may arise during the execution of the Contract. The Purchaser shall provide adequate cooperation in providing details, coordinating and obtaining of approvals from various governmental agencies, in cases, where the intervention of the Purchaser is proper and necessary.

2.11.4 Purchaser may provide on Implementation Agency's request, particulars/information or documentation that may be required by the Implementation Agency for proper planning and execution of work and for providing Services covered under this Contract and for which the Implementation Agency may have to coordinate with respective vendors.

2.12 Payments

2.12.1 Purchaser shall make payments to the Implementation Agency as per the time and manner set out in the Payment Schedule specified later in this Contract, subject to the fulfilment by the Implementation Agency of the obligations herein and meeting the SLAs.

- 2.12.2** Purchaser shall make all payments under this Contract, as set out in the Payment Schedule to the Implementation Agency only and shall not be liable to make any payments or for any other related obligation under this Contract to any other party including but not limited to the sub-contractors of Implementation Agency or to any other member of the IA's Team or any third party engaged by the Implementation Agency in any way connected with the discharge of the Implementation Agency's obligation under the Contract and in any manner whatsoever. The Implementation Agency shall be fully liable and responsible for meeting all such obligations and all payments to be made to the aforesaid entities/ parties.
- 2.12.3** All payments agreed to be made by the Purchaser to the Implementation Agency in accordance with the Bid shall be inclusive of all statutory levies, duties, taxes and other charges whenever levied/ applicable including costs of maintenance, if any and Purchaser shall be liable to pay any such levies, duties, and/ or other charges, as applicable from time to time, under or in relation to this Contract and/or the Services and any increase or decrease in the existing taxes or any newly introduced taxes shall be to the account of the Purchaser. IA shall submit the invoices for milestone payments, Monthly payment and quarterly payment inclusive of taxes on actual. The taxes should be clearly shown in the invoices.
- 2.12.4** No invoice on account of extra work/Change Order will be submitted by the Implementation Agency unless the said extra work /Change Order has been duly approved by the Purchaser in writing in accordance with Clause on Change Order in this Contract.
- 2.12.5** In the event of Purchaser noticing at any point of time that any amount has been disbursed wrongly to the Implementation Agency or any other amount is due from the Implementation Agency to the Purchaser, the Purchaser shall, after notifying the Implementation Agency Representative in writing and without prejudice to its rights, deduct such amount from any payment due to the Implementation Agency or recover such amounts by other means. The details of such recovery, if any, will be intimated to the Implementation Agency within a stipulated time frame as agreed to by both the parties, not exceeding 15 (fifteen) days from the date of recovery of the amount in question
- 2.12.6** In the event of the Implementation Agency noticing at any point of time that there has been short payment by the Purchaser on any invoice, the Implementation Agency shall bring it to the record of the Purchaser's Representative. The amount due to the Implementation Agency will be released through a fresh invoice or as mutually agreed to by both the parties.
- 2.12.7 Deductions**
All payments to the Implementation Agency shall be subject to the deductions of tax at source under Income Tax Act, and other taxes and deductions as provided for under any law, rule or regulation. All costs, damages, penalties as assessed in terms of SLA (Section 5) or any expenses which the Purchaser may have paid or incurred, for which under the provisions of the Contract, the Implementation Agency is liable, the same shall be deducted by the Purchaser from any payments due to the Implementation Agency. All payments to the Implementation Agency shall be made after making necessary deductions, as per terms of the Contract including any liquidated damages levied in accordance with the provisions of this Contract and recoveries towards facilities, if any, provided by the Purchaser to the Implementation Agency on chargeable basis.

2.12.8 Duties, Taxes and Statutory levies

- 2.12.8.1** The Implementation Agency shall bear all personnel taxes levied or imposed on its personnel, consultants, or any other member of IA's Team, etc. on account of payment received under this Contract. The Implementation Agency shall bear all corporate taxes, levied or imposed on the Implementation Agency on account of payments received by it from the Purchaser for the work done under this Contract.
- 2.12.8.2** All payments agreed to be made by the Purchaser to the Implementation Agency in accordance with the Bid shall be inclusive of all statutory levies, duties, taxes and other charges whenever levied applicable including costs of maintenance, if any and Purchaser shall be liable to pay any such levies/other charges under or in relation to this Contract and/or the Services and any increase or decrease in the existing taxes or any newly introduced taxes shall be to the account of the Purchaser
- 2.12.8.3** If there is any reduction in taxes/ duties due to any reason whatsoever, after Notification of Award, the same shall be passed on to the Purchaser.
- 2.12.8.4** The Implementation Agency shall be solely responsible for the payment/ fulfilment of its tax liabilities and obligations under the Income Tax Act and other such laws in force and the Purchaser shall not bear responsibility for the same. Implementation Agency shall indemnify Purchaser against any and all liabilities or claims arising out of this Contract for such taxes including interest and penalty any such Tax Authority may assess or levy against the Purchaser/Implementation Agency.
- 2.12.8.5** The Purchaser shall if so required by applicable laws in force, at the time of payment, deduct income tax payable by the Implementation Agency at the rates in force, from the amount due to the Implementation Agency and pay to the concerned tax authority directly.
- 2.12.8.6** The Implementation Agency shall bear all the statutory levies like customs, insurance, freight, etc. applicable on the Goods during their shipment from respective manufacturing/ shipment site of the OEM to the port of landing.
- 2.12.8.7** All charges like transportation charges, octroi, etc. that may be applicable till the Goods are delivered at the respective site of installation shall also be borne by the Implementation Agency.

2.13 Intellectual Property Rights

- 2.13.1 In case of Bespoke Development of the application:** The Implementation Agency undertakes to disclose all such Intellectual Property Rights arising in performance of the Services to the Purchaser and execute all such agreements/documents and file all relevant applications, effect transfers and obtain all permits and approvals as may be necessary as per the existing laws in India to effectively transfer such rights to the Purchaser. Once transferred, the Purchaser shall own and have a right to use all such Intellectual Property Rights which have been developed solely during execution of this Contract, including but not limited to all processes, products, specifications, reports, drawings and other documents which have been newly created and developed by the Implementation Agency solely during the performance of Services and for the purposes of inter-alia use or sub-license of such Services under this Contract.
- 2.13.2 In case of deployment of COTS products:** Purchaser shall own and have a right in perpetuity to use all newly created Intellectual Property Rights which have been developed solely during execution of this Contract, including but not limited to all processes, products, specifications, reports and other documents which have been newly created and developed by the Implementation Agency solely during the performance of the Services and for the purposes of inter-alia use or sub-license of such Services under this Contract. All documentation and configuration items such as scripts, code, queries etc. developed by the Implementation Agency shall be property of the Purchaser. The Implementation Agency should create a repository of such resources and provide access to Purchaser. The IA undertakes to disclose all such Intellectual Property Rights arising in performance of the Services to the Purchaser and execute all such agreements/documents and file all relevant applications, effect transfers and obtain all permits and approvals that may be necessary in this regard to effectively transfer and conserve the Intellectual Property Rights of the Purchaser. All pre – existing IPR with the Implementation Agency proposed in this Project will remain property of the Implementation Agency. Implementation Agency shall declare all such Products/ Items/ IPR in its Bid/ Proposal.
- 2.13.3** If Purchaser desires, the Implementation Agency shall be obliged to ensure that all approvals, registrations, licenses, permits and rights etc. which are inter-alia necessary for use of the Goods supplied/ installed by the Implementation Agency, and which may be assigned by the Purchaser to the Implementation Agency for the purpose of execution of any of its obligations under the terms of the Bid, Tender Document or this Contract, shall be acquired in the name of the Purchaser, Subsequent to the term of this Contract, such approvals, registrations, licenses, permits and rights etc. shall endure to the exclusive benefit of the Purchaser
- 2.13.4** The Implementation Agency / Implementation Agency's Team shall ensure that while it uses any software, hardware, processes, document or material in the course of performing the Services, it does not infringe the Intellectual Property Rights of any person or entity and the Implementation Agency shall keep the Purchaser indemnified against all costs, expenses and liabilities howsoever, arising out any illegal or unauthorized use (piracy) or in connection with any claim or proceedings relating to any breach or violation of any permission/license terms or infringement of any Intellectual Property Rights by the Implementation Agency or the IA's Team during the course of performance of the Services. In case of any infringement by the Implementation Agency/ IA's Team, Implementation Agency shall have sole liability

of the defense and all related settlement negotiations with such person or entity whose Intellectual Property Rights have been infringed

2.13.5 Information Security

2.13.5.1 DC/DR/ NLDC on cloud shall be based on the cloud technology and the services provide and cloud data centre should be based in India

2.13.5.2 The Implementation Agency / IA's Team shall not destroy any unwanted documents, defective tapes/media present at the Data Centre Sites and DOR's office locations on their own. All such documents, tapes/ media shall be handed over to the Purchaser.

2.13.5.3 All documentation and media at the Data Centre Sites shall be properly identified, labelled and numbered by the Implementation Agency. Implementation Agency shall keep track of all such items and provide a summary report of these items to the Purchaser on a monthly basis.

2.13.5.4 The Implementation Agency and IA's Team shall follow Purchaser's Information Security policy. Access to Purchaser's data and systems, Email and Internet facility by the Implementation Agency/ IA's Team at the Data Centre Sites and DOR's office locations shall be in accordance with the security and access policies set by the Purchaser.

2.13.5.5 Implementation Agency and IA's Team acknowledges that Purchaser's business data and other Purchaser proprietary information or materials, whether developed by Purchaser or being used by Purchaser pursuant to a license agreement with a third party (the foregoing collectively referred to herein as "proprietary information") are confidential and proprietary to Purchaser; and Implementation Agency along with its team agrees to use reasonable care to safeguard the proprietary information and to prevent the unauthorized use or disclosure thereof, which care shall not be less than that used by Implementation Agency to protect its own proprietary information. Implementation Agency recognizes that the goodwill of the Purchaser depends, among other things, upon Implementation Agency keeping such proprietary information confidential and that unauthorized disclosure of the same by Implementation Agency or its Team could damage the goodwill of the Purchaser, and that by reason of Implementation Agency's duties hereunder, the Implementation Agency may come into possession of such proprietary information, even though Implementation Agency does not take any direct part in or furnish the services performed for the creation of said proprietary information, the Implementation Agency shall limit access thereto to employees with a need to such access to perform the Services required by this Contract. Implementation Agency shall use such information only for the purpose of performing the said Services.

2.13.5.6 Implementation Agency shall, upon termination of this Contract for any reason, or upon demand by Purchaser, whichever is earlier, return any and all information provided to the Implementation Agency by the Purchaser, including any copies or reproductions, both hardcopy and electronic.

2.13.6 Records of Contract Documents:

2.13.6.1 The Implementation Agency shall at all-time make and keep sufficient copies of the Contract documents, manuals, reference material, drawings,

specifications and any other document required by it to fulfil its duties under the Contract.

- 2.13.6.2** The Implementation Agency shall keep at the Data Centre Sites and DOR's office locations, adequate number of copies of all **documents required to fulfil its duties under the Contract**, in excess of its own requirement and those copies shall be available at all times for use by the Purchaser and/ or Purchaser's Representative and/or by any other person authorized by the Purchaser's Representative.

2.14 Ownership and Retention of Documents

- 2.14.1** Forthwith upon expiry or earlier termination of this Contract and at any other time on demand by the Purchaser, the Implementation Agency shall deliver to the Purchaser all Documents provided by or originating from the Purchaser and all Documents produced by or from or for the Implementation Agency in the course of performing the Services, unless otherwise directed in writing by the Purchaser, at no additional cost. The Implementation Agency shall not, without the prior written consent of the Purchaser store, copy, distribute or retain any such Documents.

2.15 Data and Hardware

- 2.15.1** By virtue of this Contract, the Purchaser may have access to relevant information of the Implementation Agency / IA's Team and/or a third party. The Purchaser has the sole ownership of and the right to use, all such data in perpetuity including any data/hardware or other information pertaining to the subscriber that may be in the possession of the Implementation Agency or IA's Team in the course of performing the Services under this Contract.

2.16 Representations and Warranties of the Selected Bidder / Implementation Agency

- 2.16.1** In order to induce the Purchaser to enter into this Contract, the Implementation Agency hereby represents and warrants as of the date hereof, the following representations and warranties shall survive the term and termination hereof:
- a) That the Selected Bidder/ Prime Bidder along with its Consortium partners have the power and the authority that would be required to enter into this Contract and the requisite experience, the technical know-how and the financial wherewithal required to successfully execute the terms of this Contract and to provide Services sought by the Purchaser under this Contract.
 - b) That the Selected Bidder/ Prime Bidder and its Consortium partners are not involved in any major litigation or legal proceedings, pending, existing, and potential or threatened, that may have an impact of affecting or compromising the performance or delivery of Services under this Contract.
 - c) That the representations and warranties made by the Selected Bidder in its Bid, Tender and Contract are and shall continue to remain true and correct throughout the term of this Contract and Implementation Agency shall fulfil all the requirements as are necessary for executing the obligations and responsibilities as laid down in the Contract and the Tender and unless the Purchaser specifies to the contrary, the Selected Bidder/ Implementation Agency shall be bound by all the terms of the Bid.
 - d) That the Implementation Agency and its Team has the professional skills, personnel, infrastructure and resources/authorizations that are necessary for providing all such

services as are necessary to fulfil the scope of work stipulated in the Bid/Tender, Tender Document and this Contract.

- e) That the Implementation Agency shall ensure that all assets/ components including but not limited to equipment, furniture, consumables, furnishings, civil works, Software, licenses, processes, documents, etc. installed, developed, procured, deployed and created during the term of this Contract are duly maintained and suitably updated, upgraded, replaced and handed over/ transferred to the Purchaser at the end of the Contract Period or early termination thereof, at zero cost and free of encumbrances in the manner stipulated in this contract.
- f) That the Implementation Agency/IA's Team shall use such assets of the Purchaser as the Purchaser may permit for the sole purpose of execution of its obligations under the terms of the Bid, Tender Document or this Contract. The Implementation Agency shall however, have no claim to any right, title, lien or other interest in any such property, and any possession of property for any duration whatsoever shall not create any right in equity or otherwise, merely by fact of such use or possession during or after the term hereof.
- g) That the Implementation Agency shall procure all the necessary permissions and adequate approvals and licenses for use of various software and any copyrighted process/product free from all claims, titles, interests and liens thereon and shall keep the Purchaser indemnified in relation thereto.
- h) That the execution of the Scope of Work and the Services herein is and shall be in accordance and in compliance with all Applicable Laws, SLAs and Specifications.
- i) That the Implementation Agency has the corporate power to execute, deliver and perform the terms and provisions of this Contract and has taken all necessary corporate actions to authorize the execution, delivery and performance by it of the Contract.
- j) That neither the execution and delivery by the Implementation Agency/IA's Team of the Contract nor the Implementation Agency's /IA Team's compliance with or performance of the terms and provisions of the Contract (i) will contravene any provision of any Applicable Law or any order, writ, injunction or decree of any court or Governmental Authority binding on the Implementation Agency, (ii) will conflict or be inconsistent with or result in any breach of any of the terms, covenants, conditions or provisions of, or constitute a default under any agreement, contract or instrument to which the Implementation Agency is a party or by which it or any of its property or assets is bound or to which it may be subject or (iii) will violate any provision of the Memorandum and Articles of Association of the Implementation Agency.
- k) That the Implementation Agency certifies that all registrations, recordings, filings and notarizations of the Contract and all payments of any tax or duty, including but not limited to stamp duty, registration charges or similar amounts which are required to be effected or made by the Implementation Agency which is necessary to ensure the legality, validity, enforceability or admissibility in evidence of the Contract have been made.
- l) That the Implementation Agency confirms that there has not and shall not occur any execution, amendment or modification of any agreement/contract without the prior written consent of the Purchaser, which may directly or indirectly have a bearing on this Contract or the Project being implemented hereunder.
- m) That the Implementation Agency owns or has good, legal or beneficial title, or other interest in, to the property, assets and revenues of the Implementation Agency on which it grants or purports to grant or create any interest pursuant to the Contract, in

each case free and clear of any encumbrance and further confirms that such interests created or expressed to be created are valid and enforceable.

- n) That the Implementation Agency owns, has license to use or otherwise has the right to use, free of any pending or threatened liens or other security or other interests all Intellectual Property Rights, which are required or desirable for the performance of the Project under this Contract and regarding the same the Implementation Agency does not, so far as the Implementation Agency is aware, in carrying on its business and operations, infringe any Intellectual Property Rights of any person. So far as the Implementation Agency is aware, none of the Intellectual Property Rights owned or enjoyed by the Implementation Agency or which the Implementation Agency is licensed to use, which are material in the context of the Implementation Agency's business and operations for the performance of this Contract are being infringed nor, so far as the Implementation Agency is aware, is there any infringement or threatened infringement of those Intellectual Property Rights licensed or provided to the Implementation Agency by any person. All Intellectual Property Rights (owned by the Implementation Agency or which the Implementation Agency is licensed to use) required by the Implementation Agency for the performance of the contract are valid and subsisting. All actions (including registration, payment of all registration and renewal fees) required to maintain the same in full force and effect have been taken thereon and shall keep the Purchaser indemnified in relation thereto. The remedy for any breach of this Clause shall be the indemnity set forth in Clause 2.13 for Intellectual Property Rights.
- o) That the Implementation Agency agrees to incorporate, within the Contract Value, all hardware configuration, software changes, upgrades and patches to the system, announced by him from time to time keeping in view the advancement in technology, shortcomings of the system and any changes required for improving the overall efficiency of the system.
- p) That the Implementation Agency shall provide adequate and appropriate support and participation, on a continuing basis, in tuning all supplied hardware and software to meet the requirements of the applications.
- q) If and when the system and/ or components of the system are required to be relocated / shifted within the same Data Centre Site or to a new Data Centre Site, the Implementation Agency shall undertake required work related for de-commissioning / re-commissioning and other associated work, at no additional cost to the Purchaser. Associated cost for transportation, insurance and packing shall however be borne by the Purchaser. For any such relocation / shifting efforts beyond two such occurrences during the Contract Period, extra charges shall be mutually agreed upon.

2.17 Publicity

- 2.17.1** The Implementation Agency/ IA's Team shall not make or permit to be made a public announcement or media release about any aspect of this Contract unless the Purchaser first gives the Implementation Agency its written consent.

2.18 Time is of the essence

- 2.18.1** Time shall be of essence in respect of any date or period specified in this Contract or any notice, demand or other communication served under or pursuant to any provision of this Contract and in particular in respect of the completion of the activities by the Implementation Agency by the specified completion date. Any delay in the completion of the work described shall constitute a material breach of this Contract.

2.19 Stipulated Time Schedule

2.19.1 The key phases during the Project implementation along with the indicative milestones and timelines as anticipated by the Purchaser are provided in Timelines sub-section of Section 4 - Scope of Work.

2.19.2 The Implementation Agency shall perform the activities and comply in all respects with the critical dates and the Parties hereby agree that failure on part of the Implementation Agency to meet the critical dates without prejudice to any other rights that the Purchaser may have, may lead to the imposition/ levy of liquidated damages or penalties in terms of this Contract, and/ or withholding of the payments and/ or termination of the Contract at the discretion of the Purchaser.

2.20 Contract Period and Terms for Contract Extension

2.20.1 The term of this Contract would be 12 months of Implementation phase followed by 5 years of O&M Phase more particularly described in Section 4- Scope of Work

2.20.2 Well before the end of the term of the Contract i.e. at least 6 (Six) months to 1 (One) year in advance, PLRS will start the fresh tendering process. There will be no extension in the term of the Contract beyond the above period.

2.21 Payment Schedule

2.21.1 Implementation Agency would be eligible for Milestone based payments (during Implementation Phase) and Monthly payments (during O&M Phase) of the Project. IA shall submit the invoice (by applying the taxes on actual) for getting the Milestone Payment released. Milestone based payments would be made based on the milestones mentioned below:

CAPEX Payment:

CAPEX Payment					
Sr. No.	Milestone	Eligibility/ requisites	Pre-	Timeline (from the date of execution of contract)	Payment Calculations (please refer the commercial Bid)
1.	Mobilisation Advance	<ul style="list-style-type: none"> ○ Submission of PBG ○ Issuing of the award of the contract ○ Team mobilization for the project 		15 days	10% of the CAPEX
Component A: Application Development, Testing, deployment and commissioning cost including Buy-outs					
2.	<ul style="list-style-type: none"> ○ Roll out of following service: 1) Only Registration* with Online Appointment and E-Stamping <p>*Note: please refer section 4.22.3 for various type of registration of deeds</p>	<ul style="list-style-type: none"> ○ Commissioning of category A sites with the delivery of Registration Service to citizen as per the timelines mentioned in the Section 4.21.2 of the RFP 		4 Months	10 % Component A

CAPEX Payment				
Sr. No.	Milestone	Eligibility/ prerequisites	Pre-Timeline (from the date of execution of contract)	Payment Calculations (please refer the commercial Bid)
	o Setting up of "Category A" SR offices			
3.	Roll out of following services: 2) Registration with Circle Rate Due-Diligence 3) Marriage Registration 4) Rent Deed Registration	Commissioning of sites (Category A and Category B) with the delivery of Priority 1 & 2 services mentioned in the Section 4.21.2 of the RFP	9 Months	15 % Component A
4.	Roll out of following services: 5) Mutation Process 6) Nakal Registration 7) Nakal Jamabandi 8) Other Nakals (Khasra Girdawari, Shajra Nasb, Field Book, Rapat etc.) 9) Nakal Mutation 10) Nakal of Map 11) Non-Encumbrance Certificate *All nakal and certificate services will be rolled out for the data digitized till year 2010 and the rest will be rolled out as per Data Entry & Scanning timeline.	1. Commissioning of sites (Category A, B and Category C) with the delivery of Priority 1, 2 & 3 services mentioned in the Section 4.21.2 of the RFP 2. Integration of Registration and Land record system	12 Months	40 % Component A
Component B: IT Infrastructure at the Category A, B & C locations including site preparation				
5	Setting up of "Category A" SR offices	Setting up of SRO/s of category A Sites <i>Note: if Priority1 service (as per the section 4.21.2) is not live at the site then IA shall not be released the payment of Component B1 for that particular site till it is live.</i>	4 Months	90% of ((Component B1 / Total Number of category A sites) * Total number of category A sites competed (IT infrastructure including site preparation))

CAPEX Payment				
Sr. No.	Milestone	Eligibility/ prerequisites	Pre-Timeline (from the date of execution of contract)	Payment Calculations (please refer the commercial Bid)
6	Setting up of "Category B" SR offices	100% site completion including hardware, software and Site Preparation <i>Note: if Priority1 & 2 services (as per the section 4.21.2) are not live at the site then IA shall not be released the payment of Component B2 for that particular site till it is live.</i>	9 Months	90% of ((Component B2 / Total Number of category B sites) * Total number of Category B sites competed (IT infrastructure including site preparation))
7	Setting up of "Category C" SR offices	100% site completion including hardware, software and Site Preparation <i>Note: if Priority1, 2 & 3 services (as per the section 4.21.2) are not live at the site then IA shall not be released the payment of Component B2 for that particular site till it is live.</i>	11 Months	90% ((Component B3 / Total Number of category C sites) * Total number of Category C sites competed (IT infrastructure including site preparation))
Component C : Cloud infrastructure including DC, DR and NLDC				
8	Cloud infrastructure including DC, DR and NLDC	Connectivity and data replication of data between the sites including DC, DR and NLDC on cloud	3 Months	70% of Component C
9	Go-live (please refer the definition of Go-Live in the RFP)	User acceptance testing of the integration of land records and registration module	12 Months	25 % Component A
	Commissioning of at least at least 90% of the total SR/CRO offices	Connectivity and data replication of data between the sites including DC, DR NLDC and commissioned SR offices		20 % Component C

CAPEX Payment				
Sr. No.	Milestone	Eligibility/ prerequisites	Pre-Timeline (from the date of execution of contract)	Payment Calculations (please refer the commercial Bid)
		Data Migration including data entry of Master data & entry of data required for integration of Land records & Registration Software's Data entry and scanning for registration from year 2010 till present		90 % of Component D1
		Completion of all types of trainings except "Refresher training" to the target audiences		90% of Component E
		IT and Non IT Infrastructure at all 172 Fard Kendras		90 % of component F
		At least 500 transaction of Registration service with the integration of land record system across the State.		
10	Data entry for registration	Completion of data Entry & Scanning as per the section 4.20 -timelines	24 Months	45 % of Component D2
11	Data entry for registration	Completion of data Entry & Scanning as per the section 4.20 -timelines	36 Months	45 % of Component D2

OPEX Payment:

OPEX cost quoted by IA in its Commercial Bid shall be equally divided in 60 months which will be called as “Monthly OPEX”

$$\text{Monthly OPEX} = \text{Total OPEX Cost} / 60$$

$$\text{Monthly liability} = (\text{factor of site}) \times (\text{Monthly OPEX})$$

Total Monthly liability = Sum of Monthly liability of each SR office

Purchaser shall consider the quarterly cycle to release the fund during O&M phase to the IA. The Quarterly cycle will be started from the day of start of O&M phase. If O&M phase starts after 10th Day of the month then Quarterly Cycle shall be started from the 1st day of next month. The difference of days from the date of start of O&M phase and Start of Quarterly Cycle shall be considered in the last month of O&M phase. The Quarterly cycle of the payment release shall be provided in following two parts:

- Monthly Payment
- Quarterly payment
- **Monthly Payment:** Purchaser shall release 80% of the “Total Monthly liability” to the IA within the first 7 working days after completion of that month.
- **Quarterly Payment:** After completion of every quarter (from the start of O&M phase), Purchaser shall calculate the penalty applying the SLA and deduct the same from the remaining 20% of the monthly payments and release the remaining funds to IA.

The above payment method shall be applicable to all 20 Quarterly Cycles

Sr. No.	Milestone	Eligibility/ Pre-requisites	Timeline	Payment Details
1	Monthly Payment	O&M Phase must be started	from the date of starting of O&M Phase till the expiry of the contract	Monthly Payment is the 80% of the “Total Monthly Liability”
2	Quarterly Payment	O&M Phase must be started	from the date of starting of O&M Phase till the expiry of the contract	Sum of remaining 20% of “Total Monthly Liability” in the respective quarter considering/deducting the penalty as per the SLA

2.21.2 For Monthly and Quarterly payment, the Implementation Agency will be required to raise an invoice along with detailed report for payment based on actual monthly transactions (net of penalties, if any) computed with help of Invoicing and Payment module and SLA tool. Purchaser will make payment, after verification of the invoice amount and adjustment of penalties.

- 2.21.3** Purchaser shall calculate the penalty as per the SLA mentioned in the section 5 of the RFP which will be calculated quarterly in O&M phase
- 2.21.4** Payments against Services rendered by the Implementation Agency under this Contract will be released only on satisfactory acceptance of the deliverables in accordance with the Payment Schedule mentioned in the section 2.21.1.
- 2.21.5** Payment Schedule - Implementation Agency shall raise invoice for Service rendered, on monthly basis to the Purchaser as calculated by the "Invoicing and Payment module" automatically based on the respective transactions and the applicable SLA penalties (if any) which will be considered quarterly realising the monthly advance (mentioned in section 2.21.1) advance and penalty.
- 2.21.6** Monthly payment will only start after successful completion of Go-live. Please refer section 2.21.1 of the RFP for details.
- 2.21.7** IA is expected to deposit all the payments, collected from the citizen for the services delivered, into the account of PLRS on a daily basis.

2.22 Events of Default by the Implementation Agency

- 2.22.1** Failure on the part of the Implementation Agency to perform any of its obligations or comply with any of the terms of this Contract, its Bid or the Tender Document shall constitute an Event of Default on the part of the Implementation Agency. The events of default as mentioned above may include inter-alia the following:
 - a) the Implementation Agency/ IA's Team has failed to perform any instructions or directives issued by the Purchaser which it deems proper and necessary to execute the Scope of Work or provide Services under the Contract;
 - b) the Implementation Agency/ IA's Team has continuously failed to confirm/ adhere to any of the key performance indicators as laid down in the Key Performance Measures/ Service Level Agreements, or if the Implementation Agency has fallen short of matching such standards/ benchmarks/ targets designated by the Purchaser with respect to the system or any goods, task or service, necessary for the execution of the Scope of Work and performance of Services under this Contract. The abovementioned failure on the part of the Implementation Agency may be in terms of failure to adhere to performance, service levels, quality, timelines, specifications, requirements or any other criteria as defined by the Purchaser;
 - c) the Implementation Agency has failed to remedy a defect or failure to perform its obligations in accordance with the specifications issued by the Purchaser, despite being served with a default notice which laid down the specific deviance on the part of the Implementation Agency/ IA's Team to comply with any stipulations or standards as laid down by the Purchaser;
 - d) the Implementation Agency/IA's Team has failed to adhere to any amended direction, instruction, modification or clarification as issued by the Purchaser during the term of this Contract and which the Purchaser deems proper and necessary for the execution of the Scope of Work under this Contract
 - e) the Implementation Agency/ IA's Team has failed to demonstrate or sustain any representation or warranty made by it in this Contract, with respect to any of the terms of its Bid, the Tender Document and this Contract
 - f) There is a proceeding for bankruptcy, insolvency, winding up or there is an appointment of receiver, liquidator, assignee, or similar official against or in relation to the Implementation Agency.

- g) The Implementation Agency/IA's Team has failed to comply with or is in breach or contravention of any Applicable Laws or provisions of the Contract, the Tender Document and the Bid submitted by the Implementation Agency.
- h) the Implementing Party breaches any of its representation or warranties as specified in this Contract;
- i) the Implementation Agency fails to replenish the Performance Bank Guarantee in case of partial appropriation, to its original amount and in case of appropriation of entire amount of Performance Bank Guarantee to provide a fresh Performance Bank Guarantee within a Period of 30 (thirty) days from such partial or complete appropriation.

2.22.2 Where there has been an occurrence of such defaults inter alia as stated above, the Purchaser shall issue a notice of default to the Implementation Agency, setting out specific defaults/ deviances/ omissions/ non-compliances/ non-performances and providing a notice of thirty (30) days to enable the defaulting IA to remedy the default committed.

2.22.3 Where despite the issuance of a default notice to the Implementation Agency by the Purchaser, if the Implementation Agency fails to remedy the default within 30 days, the Purchaser shall impose the penalty as per the conditions available in SLA from the date of issuance of default notice by Purchaser.

2.23 Consequences in the Event of Default

Where an Event of Default subsists or remains uncured the Purchaser shall be entitled to:

2.23.1 Impose any such obligations and conditions and issue any clarifications as may be necessary to inter alia ensure smooth continuation of Project and the Services which the Implementation Agency shall be obliged to comply with which may include re-determination of the consideration payable to the Implementation Agency as agreed mutually by Purchaser and Implementation Agency or through a third party acceptable to both parties. The Implementation Agency shall in addition take all available steps to minimize loss resulting from such event of default.

2.23.2 Suspend all payments to the Implementation Agency under the Contract by a written notice of suspension to the Implementation Agency, provided that such notice of suspension:

- i. shall specify the nature of the failure; and
- ii. shall request the Implementation Agency to remedy such failure within a specified period from the date of receipt of such notice of suspension by the Implementation Agency

2.23.3 Require replacement of any of the Implementation Agency's Consortium partners(s) / Implementation Agency's Team member(s) with other suitable member(s) where the Purchaser deems necessary. The Implementation Agency shall in such case terminate forthwith all their agreements/contracts/ other arrangements with such partner(s)/ member(s) and find suitable replacement for such outgoing partner(s)/ member(s) with another partner/ member(s) to the satisfaction of the Purchaser, who shall execute such Contracts with the Implementation Agency as the Purchaser may require. Failure on the part of the Implementation Agency to find a suitable replacement and/ or terminate all agreements/contracts with such partner(s)/ member(s), shall amount to a breach of the terms hereof and the Purchaser in addition to all other rights, have the right to claim damages and recover from the Implementation Agency all losses/ or other damages that may have resulted from such failure.

- 2.23.4** Retain such amounts from the payment due and payable by the Purchaser to the Implementation Agency as may be required to offset any losses caused to the Purchaser as a result of such event of default and the Implementation Agency shall compensate the Purchaser for any such loss, damages or other costs, incurred by the Purchaser in this regard. Nothing herein shall effect the continued obligation of the Implementation Agency and IA's Team to perform all their obligations and responsibilities under this Contract in an identical manner as were being performed before the occurrence of the default.
- 2.23.5** The Purchaser may at its discretion invoke and appropriate relevant amounts from the Performance Bank Guarantee (as applicable) furnished hereunder, enforce the Indemnity provision as provided in this Contract, recover such other costs/ losses and other amounts from the Implementation Agency as may have resulted from such default and terminate the Contract with the Implementation Agency or pursue such other rights and/or remedies that may be available to the Purchaser hereunder or in law.

2.24 Termination

- 2.24.1** The Purchaser may, terminate this Contract in whole or in part by giving the Implementation Agency a prior and written notice indicating its intention to terminate the Contract under the following circumstances:
- a) Where the Implementation Agency has failed to cure/ remedy an event of default in terms of Clause 2.22 hereinabove, in respect of which the Purchaser had issued a default notice as per Clause 2.22.2 and which would make it proper and necessary to terminate this Contract.
 - b) Where it comes to the Purchaser's attention that the Implementation Agency (or the IA's Team) is in a position of actual Conflict of Interest with the interests of the Purchaser, in relation to any of terms of the Implementation Agency's Bid, the Tender Document or this Contract.
 - c) Where the Implementation Agency's/ any of IA's Consortium partners(s) ability to survive as an independent corporate entity is threatened or is lost owing to any reason whatsoever, including inter-alia the filing of any bankruptcy proceedings against the Implementation Agency or its Consortium partners(s), the institution of any winding up proceedings against the Implementation Agency/ Implementation Agency's Consortium partners(s) or the happening of any such events that are adverse to the commercial viability of the Implementation Agency/ Implementation Agency's Consortium partners(s).
In the event of the happening of any events of the above nature, the Purchaser shall reserve the right to take any steps as are necessary, to ensure the effective transition of the Project to a successor agency or PLRS, as the case may be, and to ensure business continuity. For the avoidance of doubt, the Implementation Agency shall ensure that at no point of time the public is to be put to any inconvenience or the Services being rendered to the public are affected or compromised.
 - d) Where there is material breach of the Contract in terms hereof or otherwise.
 - e) **Termination for Insolvency:** The Purchaser may at any time terminate the Contract by giving written notice to the Implementation Agency, without compensation to the Implementation Agency, if the Implementation Agency becomes bankrupt or otherwise insolvent, provided that such termination will not

prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.

- f) **Termination for convenience:** The Purchaser may at any time terminate the Contract in whole or in part for convenience by giving written notice of sixty (60) days to the Implementation Agency. In the event of termination under this para (f), the financial payments, if any, to be paid to the Implementation Agency shall be either mutually decided between the Parties or through third party determination/ arbitration at that point of time.

2.24.2 In the event of written notice of termination of this Contract either in whole or part, by the Purchaser in terms of Clause 2.23.1 above, a further cure period of 30 (thirty) days will be given to the Implementation Agency as remedy to any material breach or default. In pursuance to above, if the Implementation Agency still fails to remedy/ cure the default, the Contract shall stand terminated in accordance with the provisions of this Contract subject to the Exit Management Clause.

2.24.3 The Purchaser may levy such damages on the Implementation Agency as determined under the provisions of Clause 2.34.2 by it or as determined by third party.

2.25 Consequences of Termination

In the event of termination of this Contract pursuant to Clause 2.24 above, whether consequent to the stipulated Term of the Contract or prior to its stipulated term on account of a Default on the part of the Implementation Agency/IA's Team or due to the fact that the survival of the Implementation Agency as an independent corporate entity is threatened/ has ceased or even otherwise:

2.25.1 The Purchaser shall be entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective business continuity of the Project which the Implementation Agency shall be obliged to comply with and take all available steps to minimize loss resulting from that termination/ breach, and further allow and provide all such assistance to the Purchaser and/or the successor Implementing agency, as may be required, to take over the obligations of the erstwhile Implementation Agency in relation to the execution/continued execution of the Scope of Work of this Contract, for the remainder of the contract term. The Implementation Agency shall ensure that at no point of time during the transition period which shall be for a duration not less than 90 (ninety) days, the public is to be put to any inconvenience or services to the public are affected or compromised in any manner.

2.25.2 As agreed mutually by the Purchaser and Implementation Agency or determination through a third party acceptable to both parties, the Purchaser may pay the Implementation Agency for that part of the Services which have been authorized by the Purchaser and satisfactorily performed by the Implementation Agency up to the date of termination. Without prejudice any other rights, the Purchaser may retain such amounts from the payment due and payable by the Purchaser to the Implementation Agency as may be required to offset any losses caused to the Purchaser as a result of the Termination or due to any act/omissions of the Implementation Agency. In case of any loss or damage due to default on the part of the Implementation Agency in performing any of its obligations with regard to executing the Scope of Work under this Contract, the Implementation Agency shall compensate the Purchaser for any such loss, damages or other costs, incurred by the Purchaser. Additionally, the Implementation Agency's Team and/or all third parties appointed by the

Implementation Agency shall continue to perform all their obligations and responsibilities as stipulated under this Contract, and as may be proper and necessary to execute the Scope of Work under the Contract in terms of the Implementation Agency's Bid, the Tender Document and this Contract, in an identical manner as were being performed before the collapse of the Implementation Agency as described above in order to execute an effective transition and to maintain business continuity.

- 2.25.3** In case of termination due to default of the Implementation Agency, nothing herein shall restrict the right of the Purchaser to invoke the Performance Bank Guarantee furnished hereunder, enforce the Indemnity clause and pursue such other rights and/or remedies that may be available to the Purchaser under law.
- 2.25.4** The termination hereof shall not affect any accrued right or liability of either Party nor affect the operation of the provisions of this Contract that are expressly or by implication intended to come into or continue in force on or after such termination.
- 2.25.5** All Project Assets comprising of all hardware, equipment, software, etc. shall be handed over by the Implementation Agency to the Purchaser.
- 2.25.6** If any amount/s is due to be recovered by the Purchaser from the Implementation Agency, the Purchaser shall be entitled to encash and appropriate the relevant amounts from the Performance Bank Guarantee of the Implementation Agency.
- 2.25.7** Upon termination under this Clause, the provisions of Clause 2.35 shall be invoked to have a smooth transition of Services from the Implementation Agency to the Purchaser or its nominated agency or any new implementing agency selected by the Purchaser.

2.26 Force Majeure

- 2.26.1** On the occurrence of a Force Majeure Event and to the extent such occurrence interferes with affected Party's performance of the Contract:
 - a) The Affected Party shall notify the other party as soon as practicable. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure. The notification shall include details of the Force Majeure Event, including evidence of its effect on the obligations of the Affected Party and any action proposed to mitigate its effect.
 - b) As soon as practicable following such notification, the parties shall consult with each other in good faith and use all reasonable endeavors to agree appropriate terms to mitigate the effects of the Force Majeure Event and facilitate the continued performance of the Contract.
 - c) If no such terms are agreed on or before the date falling [120] days after the date of the commencement of the Force Majeure Event and such Force Majeure Event is continuing or its consequence remains such that the Affected Party is unable to comply with its obligations under this Contract for a period of more than [180] days, then, subject to paragraph (e) below, either party may terminate the Contract in part or whole by giving 60 (Sixty) days' written notice to the other party and upon such terms and conditions as may be mutually determined between the Parties at that point of time.
 - d) The Parties shall at all times following the occurrence of a Force Majeure Event use all reasonable endeavors to prevent and mitigate the effects of any delay and the Implementation Agency shall at all times during which a Force Majeure Event is subsisting take all steps in accordance with Good Industry Practices to

overcome or minimize the consequences of the Force Majeure Event. If required, the Implementation Agency shall immediately adopt the Disaster Recovery Plan pending non-performance during any Force Majeure Event.

- e) In the event, the Contract is not terminated, the Affected Party shall notify the other party as soon as practicable after the Force Majeure Event ceases or no longer causes the Affected Party to be unable to comply with its obligations under this Contract. Following such notification the Contract shall continue to be performed on the terms existing immediately prior to the occurrence of the Force Majeure Event.

2.27 Performance Bank Guarantee

- 2.27.1** Performance Bank Guarantee : Implementation Agency (the Prime Bidder in case of Consortium) shall furnish Performance Bank Guarantee to the Purchaser prior to signing the Contract which shall be of INR 10 Crore and shall be in the form of an unconditional and irrecoverable Bank Guarantee from a Nationalized/ Scheduled Bank (Other than Co-operative Banks) in the Performa given in Section 3 of the Tender Document, and which would be valid up to a period of 3 (three) months beyond the Contract Period or any extensions thereof in terms of this Contract
- 2.27.2** The Implementation Agency shall keep and maintain the Performance Bank Guarantee valid and in full force and effect at all times during the term of this Contract (through periodic renewals, if any required, at least one month prior to the expiry of the subsisting Performance Bank Guarantee). In the event the Implementation Agency fails to provide the renewed/ extended Performance Bank Guarantee at least 1 (one) month prior to the expiry of the subsisting bank guarantee, so as to maintain the Performance Bank Guarantee valid for the applicable periods as specified in Clause 2.27.1 and 2.27.2, the Purchaser shall have the right to forfeit and appropriate the subsisting Performance Bank Guarantee. Failure of the Implementation Agency to maintain the Performance Bank Guarantee in full force and effect throughout the term, in accordance with the provisions hereof, shall constitute Implementation Agency Event of default in terms hereof.
- 2.27.3** In the event of the Implementation Agency being in default of the due, faithful and punctual performance of its obligations under the Contract, in the event of there being any claims or demands whatsoever whether liquidated or which may at any time be made or have been made on behalf of the Purchaser for or against the Implementation Agency under this Contract or against the Purchaser in respect of this Contract which remain unpaid by the Implementation Agency, the Purchaser shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to call in, encash and appropriate the relevant amounts from the Performance Bank Guarantee as damages for such default, or loss suffered on account of failure to perform its obligations or non-payment of dues, any demands or claims.
- 2.27.4** The decision of Purchaser as to any breach/ delay having been committed, liability accrued or loss or damage caused or suffered shall be conclusive, absolute and binding on the Implementation Agency and the Implementation Agency specifically confirms and agrees that no proof of any amount of liability accrued or loss or damages caused or suffered by the Purchaser under this Contract is required to be provided in connection with any demand made by the Purchaser to recover such compensation through invoking and encashment of the Performance Bank Guarantee under this Contract.

- 2.27.5** In the event of encashment of the Performance Bank Guarantee by the Purchaser, in full or part, the Implementation Agency shall within 30 (thirty) days of receipt of the encashment notice from the Purchaser provide a fresh Performance Bank Guarantee or replenish (in case of partial appropriation) the existing Performance Bank Guarantee, as the case may be. The provisions of this Article shall apply mutatis mutandis to such fresh Performance Bank Guarantee. The Implementation Agency's failure to comply with this provision shall constitute Implementation Agency's Event of Default which shall entitle the Purchaser to terminate this Contract in accordance with the provisions of Clauses 2.23 and 2.24 of this Contract.

2.28 Change Orders / Alterations / Variations

- 2.28.1** Implementation Agency agrees that the Scope of Work and Service requirements given in the Tender Document are minimum requirements and are in no way exhaustive and guaranteed by the Purchaser.
- 2.28.1.1** Any upward revision and/ or additions consequent to errors, omissions, ambiguities, discrepancies in the quantities, specifications, drawings etc. of the Tender Document which the Implementation Agency had not accounted for in his Bid shall not constitute a change order and such upward revisions and/or addition shall be carried out by the Implementation Agency without any additional time and cost effect to the Purchaser.
- 2.28.1.2** It shall be the responsibility of the Implementation Agency to meet all performance and other requirements of the Purchaser as stipulated in the Tender Document and the Contract. Any upward revisions/ additions of specifications, technical manpower, service requirements over and above those specified by the Implementation Agency in its Bid, that may be required to be made at any time during the currency of the Contract in order to meet the conceptual design, objective and performance/ service levels or other requirements as defined in the Tender Document shall not constitute a change order and shall be carried out by the Implementation Agency without any change order and without any time and cost effect to the Purchaser whatsoever.
- 2.28.2** In addition to the aforementioned, the Purchaser may at any time, by a written change order given to the Implementation Agency, make changes within the general scope of the Contract.
- 2.28.3** The written advice for any change shall be issued by the Purchaser to the Implementation Agency not less than 4 (four) weeks prior to the due date of provisioning/ supply of such Goods/equipment or commencement of such Service requirement.
- 2.28.4** In case of increase in quantities/ Licenses / Specifications or Service requirements or in case of additional requirement, the Implementation Agency agrees to carry out/ make provision for such additional requirement at the rate and terms and conditions as provided in the Contract or as mutually agreed to by both the Parties including appropriate extension of time to be allowed for delivery/installation of such extra Goods/equipment or for commencement of such Services.
- 2.28.5 Conditions for Change Order**
- 2.28.5.1** The Change Order will be initiated only in case either (i) the Purchaser directs in writing the Implementation Agency to incorporate changes to the Goods or

design requirements already covered in the Contract; Or (ii) the Purchaser directs in writing to the Implementation Agency to include any addition to the Scope of Work or Services covered under this Contract or delete any part thereof; Or (iii) Implementation Agency requests to delete any part of the work which will not adversely affect the operational capabilities and functioning of the system and if the deletions proposed are agreed to by the Purchaser, the cost and time benefits for such deletions shall be passed on to the Purchaser.

2.28.5.2 Any change order comprising an alteration which involves change in the cost of the Goods and/or Services (which sort of alteration is hereinafter called a "Variation") shall be the subject of an amendment to the Contract by way of an increase or decrease in the Contract Value and adjustment of the implementation schedule if any.

2.28.5.3 If the Contract provides applicable rates for the valuation of the variation in question the Contract Value shall subject to Clause 2.28.6.4 be increased or decreased in accordance with such rates.

2.28.5.4 If parties agree that the Contract does not contain applicable rates or that the said rates are inappropriate or the said rates are not precisely applicable to the variation in question, then the parties shall negotiate a revision of the Contract Value which shall represent the change in cost of the goods and/or Services caused by Variations. Any Variation shall be duly approved by the Purchaser in writing.

2.28.5.5 If there is a difference of opinion between the Implementation Agency and Purchaser's Representative on whether a particular item, work or part of the work constitutes a change order or not, the matter shall be settled in accordance with the Dispute Resolution procedure set forth in Clause 2.39 of this Contract.

2.28.6 Procedures for Change Order

2.28.6.1 Upon receiving any revised requirement/advice, in writing, from the Purchaser, the Implementation Agency would verbally discuss the matter with Purchaser's Representative.

2.28.6.2 In case such requirement arises from the side of the Implementation Agency, he would also verbally discuss the matter with Purchaser's Representative giving reasons thereof.

2.28.6.3 In either of the two cases as explained in Clause 2.28.7.1 and Clause 2.28.7.2, the representatives of both the parties will discuss the revised requirement for better understanding and to mutually decide whether such requirement constitutes a change order or not.

2.28.6.4 If it is mutually agreed that such Requirement constitutes a "Change Order" then a joint memorandum will be prepared and signed by the Implementation Agency and the Purchaser to confirm a "Change Order" and basic ideas of necessary agreed arrangement.

2.28.6.5 Implementation Agency will study the revised requirement in accordance with the joint memorandum under Clause 2.28.7.4 and assess subsequent schedule and cost effect, if any.

2.28.6.6 Upon completion of the study referred to above under Clause 2.28.7.5, the results of this study along with all relevant details including the estimated time and cost effect thereof with supporting documents would be submitted to the Purchaser to enable the Purchaser to give a final decision whether

Implementation Agency should proceed with the change order or not in the best interest of the works.

- 2.28.6.7** The estimated cost and time impact indicated by Implementation Agency shall be considered as a ceiling limit and shall be provisionally considered for taking a decision to implement change order.
- 2.28.6.8** The time impact applicable to the Contract shall be mutually agreed, subsequently, on the basis of the detailed calculations supported with all relevant back up documents.
- 2.28.6.9** In case Implementation Agency fails to submit all necessary substantiation/calculations and back up documents, the decision of the Purchaser regarding time and cost impact shall be final and binding on the Implementation Agency.
- 2.28.6.10** If Purchaser accepts the change order under Clause 2.28.7.6 in writing, then Implementation Agency shall commence to proceed with the enforcement of the change order pending final agreement between the parties with regard to adjustment of the Contract Value and the time schedule.
- 2.28.6.11** In case, mutual agreement under Clause 2.28.7.4, i.e. whether new requirement constitutes the change order or not, is not reached, then Implementation Agency in the interest of the works, shall take up the enforcement of the change order, if advised in writing to do so by Purchaser's Representative pending settlement between the two parties to the effect whether such requirement constitutes a change order or not as per the terms and conditions of Contract documents. The time and cost effects in such a case shall be mutually verified and recorded. Should it establish that the said work constitutes a change order, the same shall be compensated taking into account the records kept in accordance with the Contract.
- 2.28.6.12** The Implementation Agency shall submit necessary back up documents for the change order showing the break-up of the various elements constituting the change order for the Purchaser's review. If no agreement is reached between the Purchaser and Implementation Agency after Implementation Agency submits such documents Purchaser's instruction in writing to carry out the change concerning the increase or decrease in the Contract Value and all other matters described above, either party may refer to the Dispute Resolution in this Contract.
- 2.28.6.13** Whenever, the change is required in hardware or software, IA has to submit an effort estimation requirement to the Purchaser for their approval. The IA has to make the changes or provide enhanced requirement as per the effort estimates and timelines after approval from Purchaser.

2.28.7 Conditions for revised work/change order

The provisions of the Contract shall apply to revised work/ change order as if the revised work / change order has been included in the original Scope of work. However, in case the Contract Value increases / decreases, the schedule shall be adjusted on account of the revised work/ Change orders as may be mutually agreed in terms of the provisions set forth in this Clause 2.28. Unless otherwise specified by the Purchaser, the Implementation Agency's obligations with respect to such revised work/ change order shall remain in accordance with the Contract.

2.29 Warranty

- 2.29.1** A comprehensive warranty applicable on goods supplied under this Contract shall be provided by the respective OEM for the period of this Contract from the date of acceptance of respective system by the Purchaser.
- 2.29.2** The single point of contact regarding Technical Support for Software applications & system software shall be IA for the period of contract. The Technical Support should include all upgrades, updates and patches to the respective Software applications.
- 2.29.3** IA shall maintain escalation matrix of OEMs for any issues regarding warranty of products. It shall also maintain call logs and metrics for the same.
- 2.29.4** The Implementation Agency warrants that the Goods/equipment supplied under the Contract are new, non-refurbished, unused and recently manufactured; shall not be nearing End of sale/ End of support; and shall be supported by the Implementation Agency and respective OEM along with service and spares support to ensure its efficient and effective operation for the entire duration of the contract.
- 2.29.5** The Implementation Agency warrants that the Goods supplied under this Contract shall be of the highest grade and quality and consisted with the established and generally accepted standards for materials of this type. The Goods shall be in full conformity with the specifications and shall operate properly and safely. All recent design improvements in goods, unless provided otherwise in the Contract, shall also be made available.
- 2.29.6** The Implementation Agency further warrants that the Goods supplied under this Contract shall be free from all encumbrances and defects/ faults arising from design, material, manufacture or workmanship (except insofar as the design or material is required by the Purchaser's Specifications) or from any act or omission of the Implementation Agency, that may develop under normal use of the supplied Goods in the conditions prevailing at the respective Data Centre Sites and DOR office locations.
- 2.29.7** The Purchaser shall promptly notify the Implementation Agency in writing of any claims arising under this warranty.
- 2.29.8** Upon receipt of such notice, the Implementation Agency shall, with all reasonable speed, repair or replace the defective Goods or parts thereof, without prejudice to any other rights which the Purchaser may have against the Implementation Agency under the Contract.
- 2.29.9** If the Implementation Agency, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Implementation Agency's risk and expense and without prejudice to any other rights which the Purchaser may have against the Implementation Agency under the Contract including replacement/ updation of goods, software and licenses.

2.30 Passing of Property

- 2.30.1** Any of the deployed core software (including coding and related documentation), covered under this Contract and any additional software deployed during the Contract Period to meet SLAs, would be transferred to the Purchaser in fully functional condition after the Contract Period or upon early termination of the Contract in terms hereof, at no financial cost to the Purchaser. IA shall submit the code of the deployed core software and applications along with all related documents. Further, the core software developed for this project, shall not be used by IA, for any other projects/client.

2.31 Conflict of interest

- 2.31.1** The Implementation Agency shall disclose to the Purchaser in writing, all actual and potential conflicts of interest that exist, arise or may arise (either for the Implementation Agency or the Implementation Agency's Team) in the course of performing the Services as soon as practical after it becomes aware of that conflict. If in any case, it comes to knowledge of Purchaser that IA or its team has landed in conflict of interest, then a notice shall be issued to the IA by the Purchaser.
- 2.31.2** Neither the Implementation Agency (Selected Bidder) nor its Consortium partners(s) nor the Team members of either of them shall engage, either directly or indirectly, in any of the following activities:
- a) During the term of this Agreement, any business or professional activities which would conflict with the activities assigned to them under this Agreement;
 - b) After the termination of this Agreement, such other activities as may be specified in the Agreement; or
 - c) At any time, such other activities as have been specified in the Tender Documents constituting conflict of interest.

2.32 Insurance

- 2.32.1 The Implementation Agency during the term of this Contract:**
- a) Shall take and maintain, at his own cost but on terms and conditions approved by the Purchaser, insurance with financially sound and reputable insurers against the risks, and for the coverage, as specified below in Clause 2.31.2;
 - b) Shall pay all premiums in relation thereto and shall ensure that nothing is done to make such insurance policies void or voidable during the term of the Contract;
 - c) At the Purchaser's request, shall provide evidence to the Purchaser showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.
- 2.32.2** The Goods supplied under this Contract shall be fully insured by the Implementation Agency, against any loss or damage, till the end of the Contract Period. The Implementation Agency shall submit to the Purchaser, documentary evidence issued by the insurance company, indicating that such insurance has been taken.
- 2.32.3** All the goods which are purchased by the IA for Purchaser/Project during contract period shall be fully insured with the third party liabilities and PLRS as the sole beneficiary.
- 2.32.4** Purchaser's non-liability and workers' compensation insurance in respect of the Personnel of the Implementation Agency/ Implementation Agency's Team, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate shall be obtained by the Implementation Agency at its own cost; and
- 2.32.5** The Implementation Agency shall take out Insurance against loss of or damage to (i) equipment or assets procured or developed in whole or in part for fulfilment of obligations under this Contract (ii) the Implementation Agency's assets and property used in the performance of the Services, and (iii) any documents prepared by the Implementation Agency in the performance of the Services.

2.33 Limitation of Implementation Agency's Liability towards the Purchaser

2.33.1 Neither Party shall be liable to the other Party for any indirect, incidental special or exemplary or consequential loss or damage (including loss of revenue and profits or loss of data, goodwill or business or for any reliance or cover damages) arising out of or relating to the Contract.

2.33.2 Except in the case of Gross Negligence or Wilful Misconduct on the part of the Implementation Agency/Implementation Agency's Team or on the part of any person or firm acting on behalf of the Implementation Agency executing the work or in carrying out the Services, the Implementation Agency shall with respect to damage caused by the Implementation Agency including to property and/or assets of the Purchaser or of any of Purchaser's vendors shall regardless of anything contained herein, not be liable for any direct loss or damage that exceeds the Contract Value.

For the purposes of this Clause 2.32.2:

"Gross Negligence" means any act or failure to act by a Party which was in reckless disregard of or gross indifference to the obligations of the Party under the Contract and which causes harmful consequences to life, personal safety or real property of the other Party which such Party knew, or would have known if it was acting as a reasonable person, would result from such act or failure to act. Notwithstanding the foregoing, that Gross Negligence shall not include any action taken in good faith for the safeguard of life or property.

"Wilful Misconduct" means an intentional disregard of any provision of this Contract which a Party knew or should have known if it was acting as a reasonable person, which would result in harmful consequences to life, personal safety or real property of the other Party but shall not include any error of judgment or mistake made in good faith.

2.33.3 This limitation of liability stated in this Clause 2.33, shall not affect the Implementation Agency liability, if any, for direct damage by Implementation Agency/ Implementation Agency's Team to a Third Party's real property, tangible personal property or bodily injury or death caused by the Implementation Agency/ Implementation Agency's Team or any person or firm/ company acting on behalf of the Implementation Agency in executing the work or in carrying out the Services."

2.34 Liquidated Damages and Penalty

2.34.1 If the Implementation Agency fails to complete the entire works during the Implementation Phase as per the milestones mentioned in the Scope of Work (please refer section 4 – Scope of work), unless the same has been due to any default attributable to the Purchaser or due to Force Majeure, the Purchaser may without prejudice to any other right or remedy available to the Purchaser as under the Contract:

Recover from the Implementation Agency, as liquidated damages and not by way of penalty a sum equivalent to 0.5% of the Annual Contract Value for each week (Seven calendar days) limited to 4 weeks delay beyond the scheduled completion date or extended completion date and after 4 weeks' delay damages for a sum equivalent to 1% of Annual Contract Value for each week shall be levied. For the purpose of liquidated damages, the scheduled completion date will be taken as date of completion and acceptance of all the activities till Certifications of successful operations of the integrated solution completion is given to the Implementation Agency by the Purchaser.

Annual Contract Value = Contract Value / 6.

- 2.34.2** The Implementation Agency shall have to pay the amount of such liquidated damages within 7 (seven) days of the demand being made by the Purchaser in writing, from its own financial sources otherwise Purchaser shall deduct an equal amount from the money belonging to the Implementation Agency. Provided any such recovery or liquidated damages shall not in any way relieve the Implementation Agency from any of its obligations to complete the Works or from any other obligations and liabilities under the Contract. For the purposes of this provision, the money belonging to the Implementation Agency would mean to include any payment to be made to the Implementation Agency by the Purchaser and/ or appropriated from the Performance Bank Guarantee of the Implementation Agency.
- 2.34.3** If the Contract is terminated pursuant to Clause 2.24, the Purchaser may levy liquidated damages of an amount limited to the Contract Value or as may be determined by the Arbitrators at the time of termination.
- 2.34.4** Delay not attributable to the Implementation Agency will be considered for exclusion for the purpose of computing liquidated damages.
- 2.34.5** In the event the activities required to be performed by the Implementation Agency in order to execute the Scope of Work of this Contract and the on-going maintenance service along with Service Levels are not in line with the requirement of the Purchaser and/ or not in accordance with the timelines and performance / Service Levels as stipulated in the Tender Document including the Contract and SLAs, then the Implementation Agency shall be liable for payment of penalties (as defined under Section 5 - Service Level Agreement). The amount of penalty payable by the Implementing Agency shall be deducted from the monthly payments to be made to the Implementing Agency by the Purchaser.

2.35 Suspension of Work

- 2.35.1** The Implementation Agency shall, if ordered in writing by the Purchaser's Representative, temporarily suspend the works or any part thereof for such a period and such a time as ordered. The Implementation Agency shall not be entitled to claim compensation for any loss or damage sustained by him by reason of temporary suspension of the Works as aforesaid. The Purchaser may consider suitable compensation to the Implementation Agency on case to case basis, to the extent of work completed, subject to fulfilment of other conditions of this contract. An extension of time for completion, corresponding with the delay caused by any such suspension of the works as aforesaid shall be granted to the Implementation Agency, if request for same is made and that the suspension was not consequent to any default or failure on the part of the Implementation Agency. In case the suspension of works, is not consequent to any default or failure on the part of the Implementation Agency, and lasts for a period of more than 2 months, the Implementation Agency shall have the option to request the Purchaser to terminate the Contract with mutual consent.
- 2.35.2** In the event that the Purchaser suspends the progress of work for any reason not attributable to the Implementation Agency for a period in excess of 30 days in aggregate, rendering the Implementation Agency to extend his Performance Bank Guarantee then the Purchaser shall bear the cost of extension only of such bank guarantee(s) for such extended period restricted to the normal bank rates as applicable in the banking procedures subject to the Implementation Agency producing the requisite evidence from the bank concerned.

2.36 Exit Management

2.36.1 Exit Management Purpose

- 2.36.1.1 This clause sets out the provisions, which will apply on expiry and termination of the Contract, the Project implementation and operations so as to ensure continuity of operations and no disruption of services to the public.
- 2.36.1.2 Upon termination of the Contract due to default or otherwise, the Parties shall agree at that time whether, and if so during what period, the provisions of this clause shall apply.
- 2.36.1.3 The Parties shall ensure that they continue to co-operate with each other and carry out their respective obligations during the exit management period as set out in the Exit Management Plan formulated and updated from time to time by the Parties in consultation with each other, to facilitate and implement the seamless transition of Services from the Implementation Agency to either Purchaser or its nominated agency or new implementing agency selected and appointed by Purchaser.

2.36.2 Transfer of Assets

- 2.36.2.1 The Purchaser shall be entitled to serve notice in writing to the Implementation Agency at any time during the exit management period, requiring the Implementation Agency and/ or its Consortium partners to provide the Purchaser with a complete and up to date list of the Project Assets within 30 (Thirty) days of such notice which are to be transferred/ handed over to the Purchaser.
- 2.36.2.2 In the event, if the Project Assets to be transferred are mortgaged to any financial institutions by the Implementation Agency, the Implementation Agency shall ensure that all such liens and liabilities have been cleared beyond doubt, prior to such transfer. All documents regarding the discharge of such lien and liabilities shall be furnished to the Purchaser
- 2.36.2.3 IA shall transfer all the Project Assets to the Purchaser on the zero cost claims pursuant to this article on the last day of the exit management period in good working condition to the satisfaction of Purchaser.
- 2.36.2.4 The outgoing Implementation Agency will also pass on to the Purchaser and/or to the nominated agency, the subsisting rights in any leased properties for setting up of Sub-Registrar Offices/ licensed products on terms not less favourable to the Purchaser/ nominee agency, than that enjoyed by it.
- 2.36.2.5 IA shall transfer the application/software, software code, databases, hardware, business data, architecture schematics, designs, storage media and other information/ documents within 30 (Thirty) days of notice period.

2.36.3 Cooperation and provision of information

- 2.36.3.1 The Implementation Agency will allow the Purchaser or its nominated agency to access the information reasonably required to define the current mode of operation associated with the provision of the Services to enable the Purchaser to assess the existing Services being delivered.
- 2.36.3.2 Promptly on reasonable request by the Purchaser, the Implementation Agency shall provide access to and copies of all information held or controlled by them which they have prepared or maintained in accordance with this agreement relating to any material aspect of the services (whether provided by the Implementation Agency or Consortium Partners of the Implementation Agency). The Purchaser shall be entitled to copy of all such information. Such

information shall also include details pertaining to the services rendered and other performance data.

2.36.4 Confidential Information and Data Security

2.36.4.1 The Implementation Agency will promptly on the commencement of the exit management period supply to the Purchaser or its nominated agency or any replacement implementing agency selected by it, the following:

- i. Information relating to the current services rendered and customer and performance data relating to the performance of Consortium partners in relation to the services;
- ii. Documentation relating to Project's Intellectual Property Rights;
- iii. Documentation relating to vendors & original equipment manufacturer (OEM's);
- iv. All current and updated data as is reasonably required for purposes of the Purchaser or its nominated agencies transitioning the services to its Replacement Implementation Agency in a readily available format nominated by the Purchaser, its nominated agency or replacement implementing agency;
- v. All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable the Purchaser or its nominated agency, or its replacement implementing agency to carry out due diligence in order to transition the provision of the Services to Purchaser or its nominated agency, or its replacement implementing agency (as the case may be).

2.36.4.2 Before the expiry of the exit management period, the Implementation Agency shall deliver to the Purchaser or its nominated agency or replacement implementing agency, as the case may be, all new or up-dated materials from the categories set out in the above point and shall not retain any copies thereof, except that the Implementation Agency shall be permitted to retain one copy of such materials for archival purposes only.

2.36.4.3 Before the expiry of the exit management period, unless otherwise provided under the contract, the Purchaser or its nominated agency or replacement implementing agency shall deliver to the Implementation Agency all forms of Implementation Agency's confidential information, which is in the possession or control of Purchaser or its users.

2.36.5 Employees

2.36.5.1 Promptly on reasonable request at any time during the exit management period, the Implementation Agency shall, subject to applicable laws, restraints and regulations (including in particular those relating to privacy) provide to the Purchaser or its nominated agency or replacement implementing agency, a list of all employees (with job titles) of the outgoing Implementation Agency dedicated to providing the services at the commencement of the exit management period.

2.36.5.2 The Implementation Agency shall ensure that its employees and personnel continue to render Services during the exit management period. The Purchaser or its nominated agency in consultation with the Implementation Agency may retain those employees or may direct the Implementation Agency to remove their employees after either the Purchaser or its nominated agency or replacement implementing agency has arranged for its replacement and the new replacing employee/ personnel has successfully

taken over the operations/ functions being carried out by the out-going employee of the Implementation Agency.

2.36.6 Transfer of Certain Agreements

2.36.6.1 On request by the Purchaser or its nominated agency, the Implementation Agency shall effect such assignments, transfers, licences and sub-licences as the Purchaser may require in favour of the Purchaser or its nominated agency or replacement implementing agency, in relation to any equipment lease, maintenance or service provision agreement between Implementation Agency and third party lessors, vendors, and which are related to the services and reasonably necessary for the carrying out of replacement services by the Purchaser or its nominated agency or replacement implementing agency.

2.37 Confidentiality

2.37.1 Implementation Agency/ Implementation Agency's Team shall not use Confidential Information, the name or the logo of the Purchaser except for the purposes of the execution of the present Contract.

Confidential information does not include information which:

- a) Implementation Agency/ IA's Team knew or had in its possession, prior to disclosure, without limitation on its confidentiality;
- b) Is independently developed by the Implementation Agency/ IA's Team without breach of conditions under this Contract;
- c) Information in the public domain as a matter of law;
- d) Is received from a third party not subject to the obligation of confidentiality with respect to such information;
- e) Is released from confidentiality with the written consent of DOR/ PLRS.
- f) Is required to be disclosed by Applicable Laws or judicial or administrative or arbitral process or by any governmental instrumentalities, provided that for any such disclosure, the Implementation Agency shall give the Purchaser prompt written notice, and use reasonable efforts to ensure that such disclosure is accorded confidential treatment;
- g) Any other information unless it is specified as confidential for the purposes of the execution this Contract.
- h) Implementation Agency/ IA's Team shall have the responsibility of proving hereinabove are applicable to the information in the possession of the Implementation Agency/ IA's Team.

2.37.2 Implementation Agency/ IA's Team shall not, either during the term or after expiration of this Contract, disclose any proprietary or confidential information relating to the Services/ Contract and/ or Purchaser's business/ operations, information, application/software, hardware, business data, architecture schematics, designs, storage media and other information/ documents without the prior written consent of the Purchaser.

2.37.3 Implementation Agency may only disclose Confidential Information in the following circumstances:

- a) with the prior written consent of the Purchaser;
- b) to a member of the IA's Team if:
 - i. the member of the IA's Team needs the Confidential Information for the performance of obligations under this contract;

- ii. the member of the IA's Team is aware of the confidentiality of the Confidential Information and is obliged to use it only for the performance of obligations under this contract
- 2.37.4** Implementation Agency shall do everything reasonably possible to preserve the confidentiality of the Confidential Information including execution of a confidentiality agreement with the Consortium partners and other members of IA's Team to the satisfaction of the Purchaser.
- 2.37.5** Implementation Agency shall notify the Purchaser promptly if it is aware of any disclosure of the Confidential Information otherwise than as permitted by this Contract or with the authority of the Purchaser.
- 2.37.6** Implementation Agency shall be liable to fully compensate the Purchaser for any loss of revenue on account of breach of confidentiality by the Implementation Agency. The Purchaser reserves the right to adopt legal proceedings, civil or criminal, against the Implementation Agency/ IA's Team in relation to a breach of obligation by the Implementation Agency under this Clause. The Implementation Agency shall not in any way be responsible for any breach of confidentiality arising out of any other cause/reason.
- 2.37.7** In case where the Selected Bidder is a Consortium, then the Prime Bidder and its Consortium partners shall be required to execute the Non-Disclosure Agreement in favour of the Purchaser at the time of contract signing. Please refer Annexure VI - Non-Disclosure Agreement.

2.38 Indemnity

- 2.38.1** Implementation Agency shall indemnify the Purchaser from and against any costs, loss, damages, expense, claims including those from third parties or liabilities of any kind howsoever suffered, arising or incurred inter alia during and after the Contract Period out of:
- a) any negligence or wrongful act or omission by the Implementation Agency or the IA's Team or any third party associated with Implementation Agency in connection with or incidental to this Contract;
 - b) Any breach of any of the terms of the Implementation Agency's Bid as agreed, the Tender, Tender Document and the Contract by the Implementation Agency, IA's Team or any third party.
 - c) Any infringement of patent, trademark/ copyright or industrial design rights arising from the use of the supplied Goods and related services or any part thereof.
- 2.38.2** Implementation Agency shall also indemnify the Purchaser against any privilege, claim or assertion made by a third party with respect to right or interest in, ownership, mortgage or disposal of any asset, property, and movable or immovable as mentioned in any Intellectual Property Rights, licenses and permits.

2.39 Dispute Resolution

- 2.39.1** If during the subsistence of this Contract or thereafter, any dispute between the Parties hereto arising out of or in connection with the validity, interpretation, implementation, material breach or any alleged material breach of any provision of this Contract or regarding any question, including as to whether the termination of this Contract by one Party hereto has been legitimate, the Parties hereto shall endeavour to settle such dispute amicably under the chairmanship of Financial Commissioner, Department of Revenue or person nominated by him and/or by Conciliation to be governed by the Arbitration and Conciliation Act, 1996 or as may be agreed to

between the Parties. The attempt to bring about an amicable settlement is considered to have failed as soon as one of the Parties hereto, after reasonable attempts; which attempt shall continue for not less than thirty (30) days, gives thirty (30) days' notice to refer the dispute to arbitration to the other Party in writing.

- 2.39.2** The Arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996.
- 2.39.3** The Arbitration proceedings shall be held in Chandigarh, India.
- 2.39.4** Each party shall appoint its nominee arbitrator and both such nominated arbitrators shall appoint the third arbitrator who shall act as the Presiding Arbitrator.
- 2.39.5** The proceedings of Arbitration shall be in English language.
- 2.39.6** The party invoking arbitration shall specify all disputes to be referred to arbitration at the time of invocation of arbitration and not thereafter.
- 2.39.7** The Arbitral Tribunal shall give reasoned award and the same shall be final, conclusive and binding on the parties.
- 2.39.8** The fees of the arbitrator shall be borne by the parties nominating them and the fee of the Presiding Arbitrator, costs and other expenses incidental to the arbitration proceedings shall be borne equally by the parties.
- 2.39.9** Subject to as aforesaid the provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment in lieu thereof shall apply to the arbitration proceedings under this Clause.
- 2.39.10** Continuation of the Contract: Notwithstanding the fact that settlement of dispute(s) (if any) under arbitration may be pending, the parties hereto shall continue to be governed by and perform the work in accordance with the provisions under this Contract.

2.40 “No Claim” Certificate

- 2.40.1** Implementation Agency shall not be entitled to make any claim, whatsoever against the Purchaser, under or by virtue of or arising out of, this contract, nor shall the Purchaser entertain or consider any such claim, if made by the Implementation Agency after he shall have signed a “No claim” certificate in favour of the Purchaser in such form as shall be required by the Purchaser after the works are finally accepted.

2.41 No Assignment

- 2.41.1** Implementation Agency shall not transfer any interest, right, benefit or obligation under this Contract without the prior written consent of the Purchaser which the Purchaser may at its discretion refuse without assigning any reason.

2.42 General

2.42.1 Currency of Payment

Payment shall be made in Indian Rupees only.

2.42.2 Relationship between the Parties

- a.** Nothing in this Contract constitutes any fiduciary relationship between the Purchaser and Implementation Agency/IA's Team or any relationship of employer, employee, principal and agent, or partnership, between the Purchaser and the Implementation Agency.
- b.** No Party has any authority to bind the other Party in any manner whatsoever except as agreed under the terms of this Contract.

- c. The Purchaser has no obligations to the Implementation Agency's Team except as agreed under the terms of this Contract.

2.42.3 Survival

The provisions of the clauses of this Contract in relation to documents, data, processes, property, Intellectual Property Rights, indemnity, publicity and confidentiality and ownership survive the expiry or termination of this Contract and in relation to confidentiality, the obligations continue to apply unless the Purchaser notifies the Implementation Agency of its release from those obligations.

2.42.4 Entire Contract

The terms and conditions laid down in the Tender Document and all annexures, addendum thereto as also the Bid and any annexes thereto shall be read in consonance with and form an integral part of this Contract. This Contract supersedes any prior contract, understanding or representation of the Parties on the subject matter.

2.42.5 Severance

If any provision of this contract is held unenforceable, then such provision will be modified to reflect the parties' intention. All the remaining provisions of this Contract shall remain in full force and effect.

2.42.6 Modification

Any modification of this Contract shall be in writing and signed by an authorized representative of each Party.

2.42.7 Governing Language

The Agreement shall be written in English only. All correspondence and other documents pertaining to the Contract that are exchanged by parties shall be written in English only.

2.42.8 Governing Law

This Contract shall be governed in accordance with the laws of India.

2.42.9 Jurisdiction of Courts

The courts at Chandigarh, India have exclusive jurisdiction to determine any proceeding in relation to this Contract.

2.42.10 Compliance with Laws

The Implementation Agency/ Implementation Agency's Team shall comply with the laws in force in India in the course of performing this Contract.

2.42.11 Notices

- a) All notices, requests or consents provided for or permitted to be given under this Contract shall be in writing and shall be deemed effectively given when personally delivered or mailed by pre-paid certified/registered mail, return receipt requested, addressed as follows and shall be deemed received two days after mailing or on the date of delivery if personally delivered:

To Purchaser at:

<<Attn:

[Phone:]

[Fax:]>>

To Implementation Agency at:

Attn:

[Phone:]

[Fax:]

- b) Any Party may change the address to which notices are to be directed to it by notice to the other parties in the manner specified above.

- c) A notice served on a Representative is taken to be notice to that Representative's Party.

2.42.12 Waiver

- a) Any waiver of any provision of this Contract is ineffective unless it is in writing and signed by the Party waiving its rights.
- b) A waiver by either Party in respect of a breach of a provision of this Contract by the other Party is not a waiver in respect of any other breach of that or any other provision.

The failure of either Party to enforce at any time any of the provisions of this Contract shall not be interpreted as a waiver of such provision.

IN WITNESS WHEREOF the parties hereto have signed this deed hereunder on the dates respectively mentioned against the signature of each.

Signed:
Name: _____
Designation: _____
Date:
Place:
(Purchaser)

Signed
Name: _____
Designation: _____
Date:
Place:
(Implementation Agency)

In the Presence of
Signed:
Name: _____
Designation: _____
Date:
Place:
(Purchaser)

In the Presence of
Signed
Name: _____
Designation: _____
Date:
Place:
(Implementation Agency)

3 Contents of the Bid

3.1 PRE-QUALIFICATION BID

Annexure 3.1.1: Pre-Qualification Bid Letter

(To be submitted on the Letterhead of the responding firm)

To

Member Secretary, PLRS,
Room No. 4, 3rd Floor, Punjab Civil Secretariat, Sector – 1,
Chandigarh

Subject: Selection of Implementation Agency ('IA') for Integrated Land Administration System in Punjab.

Reference: Tender Dated <DD/MM/YYYY>

Dear Sir/Madam,

We, the undersigned Bidders, having read and examined in detail all the Tender Document in respect **Selection of Implementation Agency ('IA') for Integrated Land Administration System in Punjab**, do hereby propose to provide the services as specified in the Tender document Dated <DD/MM/YYYY> along with the following Consortium Members, if any:

We are hereby submitting our Pre-Qualification Bid (one original and two copies), which includes the following:

- a) Pre-Qualification Bid Letter
- b) Supporting Information for Pre-Qualification Conditions
- c) Prime Bidder & Consortium Details
- d) Details of Prime Bidder & co-members of Consortium
- e) Bank Guarantee for Bid Security
- f) Demand Draft for Tender Fees
- g) Board Resolution / Authorization Letter executed by the Bidder in favour of the Principal Officer or the duly Authorized Representative, certifying him as an authorized signatory for the purpose of this Tender.
- h) Declaration for not being under an ineligibility for corrupt or fraudulent practices / Blacklisted with any of the Government or Public Sector Units

We hereby declare that all the information and statements made in the Pre-Qualification related documents are true and accept that any misinterpretation contained in it may lead to our disqualification. Our Prequalification Bid, Technical Bid and Commercial Bid are valid for a period of 180 calendar days from the last date of Bid Submission date.

We also agree to hold in trust any Confidential Information received by us as part of the tendering process, We shall maintain strict confidentiality in respect of such Confidential Information and in no event a degree of confidentiality less than we use to protect our own confidential and proprietary information.

Yours sincerely,

Bidder:

Signature:

Name:

Designation:

Company:

Date:

Witness:

Signature:

Name:

Address:

Date

Annexure 3.1.2: Supporting Information for Pre-Qualification Conditions

Bidder is required to fill in the relevant information in the format given below. The Pre-Qualification Bid must contain the documentary evidences and supporting information to enable the Purchaser to evaluate the eligibility of the Bidder without any ambiguity.

Sr. No.	Pre-qualification Criteria	Documentary Evidence provided	Reference in bid
1.	Bidder.PQ. 1		
2.	Bidder.PQ. 2		
3.	Bidder.PQ. 3		
4.	Bidder.PQ. 4		
5.	Bidder.PQ. 5		
6.	Bidder.PQ. 6		
7.	Bidder.PQ. 7		
Consortium Criteria			
8.	Bidder.PQ. 8		
9.	Bidder.PQ. 9		

Witness:
Signature:
Name:
Address:
Date:

Bidder:
Signature:
Name:
Designation:
Company:
Date

Annexure 3.1.3: Prime Bidder and Consortium Details

Bidder is to provide details of the Consortium Partners, if any. Details of any Sub-Contractors, if any should also be shared along with summary of services to be sub-contracted (if applicable), in the format mentioned below:

Sr. No.		Name of the Firm	Component wise Scope of Work (in case of Consortium partner)	Memorandum of Understanding (MoU) Details (please attach supporting documents also)
1.	Prime Bidder			
2.	Consortium Partner 1			
3.	Consortium Partner 2			

Annexure 3.1.4: Details of Prime Bidder & co-members of Consortium (Prime bidder and Consortium partner details should be provided in the format given below):

Prime Bidder					
Sr. No.	Particular	Details to be furnished			
1	Name and Address of the corporate headquarters and its branch office(s), if any, in India				
2	Country of incorporation				
3	Telephone		5	Fax	
4	Email		6	Website	
7	Designation of the Authorized Person				
8	Name				
9	Address				
10	Telephone		11	Email	
Consortium Partner 1					
Sr. No.	Particulars	Details to be furnished			
1	Name and Address of the corporate headquarters and its branch office(s), if any, in India				
2	Country of incorporation				
3	Telephone		5	Fax	
4	E-Mail		6	Website	
7	Designation of the Authorized Person				
8	Name				
9	Address				
10	Telephone		11	Email	

Consortium Partner 2					
Sr. No.	Particulars	Details to be furnished			
1	Name and Address of the corporate headquarters and its branch office(s), if any, in India				
2	Country of incorporation				
3	Telephone		5	Fax	
4	E-Mail		6	Website	
7	Designation of the Authorized Person				
8	Name				
9	Address				
10	Telephone		11	Email	

Annexure 3.1.5: Format for Bank Guarantee for Bid Security

Bank Guarantee for Bid Security

(Refer Clauses 1.2 and 1.16)

B.G. No.

Dated:

1. In consideration of you, **Punjab Land Records Society (PLRS)**, having its office at Room No. 4, 3rd Floor, Punjab Civil Secretariat, Sector – 1, Chandigarh - 160001, (hereinafter referred to as the "**Purchaser**", which expression shall unless it be repugnant to the subject or context thereof include its, successors and assigns) having agreed to receive the Bid of M/s (a company/ LLP/Partnership registered under the relevant laws of India) and having its registered office at(and acting on behalf of its consortium¹) (hereinafter referred to as the "**Bidder**" which expression shall unless it be repugnant to the subject or context thereof its/their executors, administrators, successors and assigns), for the "**Selection of Implementation Agency for I-LAS in Punjab**" (hereinafter referred to as "the **Project**") pursuant to the RFP Document dated.....issued in respect of the Project and other related documents including without limitation the draft Contract (hereinafter collectively referred to as "Tender Documents"). We (Name of the Bank) having our registered office at and one of its branches at(hereinafter referred to as the "Bank"), at the request of the Bidder, do hereby in terms of the Tender Document, irrevocably, unconditionally and without reservation guarantee the due and faithful fulfilment and compliance of the terms and conditions of the Tender Documents (including the RFP Document) by the said Bidder and unconditionally and irrevocably undertake to pay forthwith to the Purchaser an amount of Rs.***** (Rupees ***** only) (hereinafter referred to as the "**Guarantee**") as our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the Bidder if the Bidder shall fail to fulfil or comply with all or any of the terms and conditions contained in the said Tender Documents.
2. Any such written demand made by the Purchaser stating that the Bidder is in default of the due and faithful fulfilment and compliance with the terms and conditions contained in the Tender Documents shall be final, conclusive and binding on the Bank.
3. We, the Bank, do hereby unconditionally undertake to pay the amounts due and payable under this Guarantee without any demur, reservation, recourse, contest or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the Purchaser is disputed by the Bidder or not, merely on the first demand from the Purchaser stating that the amount claimed is due to the Purchaser by reason of failure of the Bidder to fulfil and comply with the terms and conditions contained in the Tender Documents including failure of the said Bidder to keep its Bid open during the Bid validity period as set forth in the said Tender Documents for any reason whatsoever. Any such demand made on the Bank shall be conclusive as regards amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs. ***** (Rupees ***** only).
4. This Guarantee shall be irrevocable and remain in full force for a period of 180 (one hundred and eighty) days from the Bid Due Date or for such extended period as may be mutually agreed

¹Retain as applicable

- between the Purchaser and the Bidder, and agreed to by the bank, and shall continue to be enforceable till all amounts under this Guarantee have been paid.
5. We, the Bank, further agree that the Purchaser shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfilment and compliance with the terms and conditions contained in the Tender Documents including, inter alia, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said Tender Documents, and the decision of the Purchaser that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Purchaser and the Bidder or any dispute pending before any Court, Tribunal, Arbitrator or any other authority.
 6. The Guarantee shall not be affected by any change in the constitution or winding up of the Bidder or the Bank or any absorption, merger or amalgamation of the Bidder or the Bank with any other person.
 7. In order to give full effect to this Guarantee, the Purchaser shall be entitled to treat the Bank as the principal debtor. The Purchaser shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee from time to time to vary any of the terms and conditions contained in the said Tender Documents or to extend time for submission of the Bids or the Bid validity period or the period for fulfilment and compliance with all or any of the terms and conditions contained in the said Tender Documents by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Tender Documents or the securities available to the Purchaser, and the Bank shall not be released from its liability under these presents by any exercise by the Purchaser of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of the Purchaser or any indulgence by the Purchaser to the said Bidder or by any change in the constitution of the Purchaser or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Bank from its such liability.
 8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given or made if addressed to the Bank and sent by courier or by registered mail to the Bank at the address set forth herein.
 9. We undertake to make the payment on receipt of your notice of claim on us addressed to [name of Bank along with branch address] and delivered at our above branch which shall be deemed to have been duly authorised to receive the said notice of claim.
 10. It shall not be necessary for the Purchaser to proceed against the said Bidder before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank, notwithstanding any other security which the Purchaser may have obtained from the said Bidder or any other person and which shall, at the time when obtained from the said Bidder or any other person and which shall, at the time when proceedings are taken against the Bank hereunder, be outstanding or unrealized.
 11. We, the Bank, further undertake not to revoke this Guarantee during its currency except with the previous express consent of the Purchaser in writing.
 12. The Bank declares that it has power to issue this Guarantee and discharge the obligations contemplated herein, the undersigned is duly authorised and has full power to execute this Guarantee for and on behalf of the Bank.
 13. For the avoidance of doubt, the Bank's liability under this Guarantee shall be restricted to Rs. ***** lacs (Rupees ***** lacs only). The Bank shall be liable to pay the said amount or any part thereof only if the Purchaser serves a written claim on the Bank in accordance with paragraph 9 hereof, on or before [***** (indicate date falling 180 days after the Bid Due Date)].

Signed and Delivered by.....Bank

By the hand of Mr./Ms....., its and authorized official.

(Signature of the Authorised signatory)

(Official Seal)

3.2 TECHNICAL BID

Annexure 3.2.1: Technical Bid Letter

(To be submitted on the Letterhead of the responding firm)

To

Member Secretary, PLRS,
Room No. 4, 3rd Floor, Punjab Civil Secretariat, Sector – 1,
Chandigarh

Subject: Selection of Implementation Agency ('IA') for Integrated Land Administration System in Punjab.

Reference: Tender Dated<DD/MM/YYYY>

Dear Sir/Madam,

We, the undersigned Bidders, having read and examined in detail all the Tender Document in respect of **Selection of Implementation Agency ('IA') for Integrated Land Administration System in Punjab**, do hereby propose to provide the services as specified in the Tender document Dated <DD/MM/YYYY> **along with the following:**

1. **Bid Security:** We have enclosed a Bid Security in the form of a Bank Guarantee for the sum of **Rs. _____ - (Rupees _____ only)**. This Bid Security is liable to be forfeited in accordance with the provisions of the **Section 2 - General Conditions of the Contract**.
2. **Deviations:** We declare that all the services shall be performed strictly in accordance with the Tender Document except for the variations and deviations, all of which have been detailed out exhaustively in the following statements, irrespective of whatever has been stated to the contrary anywhere else in our Tender:
 - (a) Statement of Deviations from Schedule of Requirements (**Annexure 3.2.13**)
 - (b) Statement of Deviations from Tender Terms and Conditions (**Annexure 3.2.13**)
 - (c) Statement of Commercial Deviations (**Annexure 3.2.13**)

Further we agree that additional conditions, if any, found in the Tender Document, other than those stated in deviation schedule, shall not be given effect to.

3. **Contract Performance Guarantee Bond (Performance Bank Guarantee):** We hereby declare that in case the contract is awarded to us, we shall submit the contract performance guarantee bond in the form prescribed in **Annexure 3.3.3 of Section 3** and as specified under **Clause 27 of Section 2 - General Conditions of Contract**.

We are hereby submitting our Technical Bid, which includes the following:

- a) Power of Attorney for Lead Member of Consortium
- b) Joint Bidding Agreement
- c) Bidder Details
- d) Technical Solution
- e) Approach and Methodology for Implementation of the Technical Solution
- f) Approach & Methodology for Operations/ Maintenance of the installed Infrastructure
- g) Detailed Work plan and Staffing Plan
- h) Manpower Details
- i) Detailed CV of Personnel
- j) Details of Experience of the Responding Firm

- k) Statement of deviations from Schedule of Requirements / Tender Terms and Conditions, etc.
- l) Copy of Commercial Bid with the price column of the price bid format blanked out
- m) Space requirement at existing SROs for the document scanning and legacy Data Entry & Scanning

Place:

Business Address:

Witness:

Signature -----

Name -----

Address -----

Date -----

Bidder:

Signature -----

Name -----

Designation -----

Company -----

Date -----

Annexure 3.2.2: Power of Attorney for Lead Member of Consortium

(To be submitted on the Letterhead of the responding firm)

To

Member Secretary, PLRS,
Room No. 4, 3rd Floor, Punjab Civil Secretariat, Sector – 1,
Chandigarh

Subject: Selection of Implementation Agency ('IA') for Integrated Land Administration System in Punjab.

Reference: Tender Dated <DD/MM/YYYY>

Whereas the **Punjab Land Records Society (PLRS)** has invited Bids from interested parties for the **"Selection of Implementation Agency ('IA') for Integrated Land Administration System in Punjab"**.

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 Tender Document 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 having our registered office at,
(hereinafter collectively referred to as the "Principals") do hereby irrevocably designate, nominate, constitute, appoint and authorise 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 authorise 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 Agreement/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 , 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 Purchaser, 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 Contract / Agreement is entered into with Purchaser.

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

For

(Signature)

.....

(Name & Title)

For

(Signature)

.....

(Name & Title)

For

(Signature)

.....

(Name & Title)

Witnesses:

1.

2.

.....

(Executants)

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

Notes:

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

Annexure 3.2.3: Joint Bidding Agreement

(To be executed on Stamp paper of appropriate value)

THIS JOINT BIDDING AGREEMENT is entered into on this the day of 20...

AMONGST

1. {..... Limited, a company incorporated under the Companies Act, 1956} and having its registered office at (hereinafter referred to as the "**First Part**" which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

2. {..... Limited, a company incorporated under the Companies Act, 1956} and having its registered office at (hereinafter referred to as the "**Second Part**" which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

3. {..... Limited, a company incorporated under the Companies Act, 1956 and having its registered office at (hereinafter referred to as the "**Third Part**" which expression shall, unless repugnant to the context include its successors and permitted assigns)}

The above mentioned parties of the FIRST, SECOND and THIRD PART are collectively referred to as the "**Parties**" and each is individually referred to as a "**Party**"

WHEREAS,

- (A) The Purchaser and, represented by its </> and having its principal office at </>, Chandigarh, India (hereinafter referred to as the "**Purchaser**" which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has been appointed as Nodal Agency by Government of Punjab for undertaking Project activities on behalf of the State Government of Punjab for "/" (the "**Project**"). Purchaser has invited Bids (the "**Bids**") by its Tender Document No. dated (the "**RFP**") for "**Selection of Implementation Agency ('IA') for Integrated Land Administration System in Punjab**".
- (B) The Parties are interested in jointly bidding for the Project as members of a Consortium and in accordance with the terms and conditions of the Tender Document and other bid documents in respect of the Project, and
- (C) It is a necessary condition under the Tender Document that the members of the Consortium shall enter into a Joint Bidding Agreement and furnish a copy thereof with the Bid.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

In this Agreement, the capitalised terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the RFP.

2. Consortium

2.1 The Parties do hereby irrevocably constitute a consortium (the "**Consortium**") for the purposes of jointly participating in the Bidding Process for the Project.

2.2 The Parties hereby undertake to participate in the Bidding Process only through this Consortium and not individually and/ or through any other consortium constituted for this Project, either directly or indirectly or through any of their Associates.

3. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

- a) Party of the First Part shall be the Lead member of the Consortium and shall have the power of attorney from all Parties for conducting all business for and on behalf of the

Consortium during the Bidding process and until the Agreement Date under the Agreement;

- b) Party of the Second Part shall be _____ of the Consortium ;}
- c) {Party of the Third Part shall be the _____ of the Consortium; and}

5. Joint and Several Liability

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the Tender Document and the Agreement, till such time as the Financial Close for the Project is achieved under and in accordance with the Agreement.

6. Representation of the Parties

Each Party represents to the other Parties as of the date of this Agreement that:

- a) Such Party is duly organised, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this Agreement;
- b) The execution, delivery and performance by such Party of this Agreement has been authorised by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/ power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Consortium Member is annexed to this Agreement, and will not, to the best of its knowledge:
 - (i) require any consent or approval not already obtained;
 - (ii) violate any Applicable Law presently in effect and having applicability to it;
 - (iii) violate the memorandum and articles of association, by-laws or other applicable organisational documents thereof;
 - (iv) violate any clearance, permit, Agreement, grant, license or other governmental authorisation, approval, judgement, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or
 - (v) create or impose any liens, mortgages, pledges, claims, security interests, charges or Encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;
- c) this Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and
- d) there is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its Affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfilment of its obligations under this Agreement.

8. Termination

This Agreement shall be effective from the date hereof and shall continue in full force for the entire duration of the contract, in case the Project is awarded to the Consortium. However, in case the Consortium is either not pre-qualified for the Project or does not get Selected for award

of the Project, the Agreement will stand terminated in case the Bidder is not pre-qualified or upon return of the Bid Security by Purchaser to the Bidder, as the case may be.

9. Miscellaneous

9.1 This Joint Bidding Agreement shall be governed by laws of India.

9.2 The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of Purchaser.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED

SIGNED, SEALED AND DELIVERED

For and on behalf of

LEAD MEMBER by:

SECOND PART

(Signature)

(Name)

(Designation)

(Address)

(Signature)

(Name)

(Designation)

(Address)

SIGNED, SEALED AND DELIVERED

For and on behalf of

THIRD PART

For and on behalf of

(Signature)

(Name)

(Designation)

(Address)

In the presence of:

1.

2.

Notes:

1. *The mode of the execution of the Joint Bidding Agreement should be in accordance with the procedure, if any, lay 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.*
2. *Each Joint Bidding Agreement should attach a copy of the extract of the charter documents and documents such as resolution / power of attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Consortium Member.*

3. *For a Joint Bidding Agreement executed and issued overseas, the document shall be legalised by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney has been executed.*

Annexure 3.2.4: Bidder Details

S. No.	Area of the details to be provided		Responding Firm's / Company Details to be provided		
1	Name of the Bidder				
2	Address of the Bidder				
3	Telephone number of the Bidder				
4	Bidder's Tender number and date				
5	Name of the contact person to whom all references shall be made regarding this Tender				
6	Designation of the person to whom all references shall be made regarding this Tender				
7	Address of the person to whom all references shall be made regarding this Tender				
8	e-mail address of the Bidder				
9	Fax number of the Bidder				
10	Telephone number of the Bidder				
11	Details of Registration	1. Registration Number of the Bidder.			
		2. Name of the place where the Bidder was registered.			
		3. Date when the company was registered.			
		4. Product /Service for which registered			
		5. Validity Period, if applicable.			
12	Central Service Tax No.				
13	VAT/Service Tax No.				
14	PAN No.				
15	Annual Turnover during last three financial Years 2013-14 , 2014-15 and 2015-16		FY 2013-14	FY 2014-15	FY 2015-16
16			FY 2013-14	FY 2014-15	FY 2015-16

S. No.	Area of the details to be provided	Responding Firm's / Company Details to be provided		
	Income Tax Paid during the last three financial Years 2013-14 , 2014-15 and 2015-16			
17	Details of ownership of the Bidder (Name and Address of the Board of Directors, Partners, etc.)			
18	Name of the authorized signatory who is authorized to quote in the Tender and enter into the rate contract (Power of Attorney to be submitted)			
19	Name of the Bankers along with the branch (as appearing in MICR cheque) & Account No.			
20	Status of Bidder like Pvt. Ltd. etc.			
21	Locations and addresses of the offices.	1. The corporate address		
		2. The official address of the service delivery Centre.		
22	Name and contact details of the Project Manager	1. Name of the Project Manager assigned		
		2. Contact details viz; telephone number, official address of the Project Manager assigned.		

Witness:

Signature -----

Name -----

Address -----

Date -----

Bidder:

Signature -----

Name -----

Designation -----

Company -----

Date -----

Annexure 3.2.5: Technical Solution

1. The Bidder is required to describe the proposed Technical Solution in this section. The Technical Solution would be evaluated on the following broad parameters. The Purchaser reserves the rights to add, delete, or modify these parameters at any time during the Tender process, without assigning any reasons whatsoever and without being required to intimate the Bidders of any such change.
 - a. Clear articulation and description of the design and technical solution and various components,
 - b. Extent of compliance to functional and technical requirements specified in the scope of work and in accordance with leading practices,
 - c. Technical design and clear articulation of benefits to the Department of Revenue, Government of Punjab through various components of the solution vis-à-vis other options available.
2. Bidder should provide detailed design for the following listing all assumptions that have been considered:
 - a. Proposed Solution, in detail (including various tools to be used)
 - b. Proposed Civil Solution including site preparation details
 - c. Proposed Technology Solution
 - d. Hardware & Bandwidth requirements – These should state the memory, storage, etc. Processing power required should be stated in generic terms such as QPH along with numbers of CPU.
 - e. Capabilities of the proposed solution to address the functional requirements
 - f. Database design considerations including Data Centre specifications on cloud
 - g. Application Security Architecture
 - h. Disaster Recovery site details and approach
 - i. Data Digitisation and Migration approach
 - j. Testing Approach
 - k. Risk Management Plan
 - l. Change Management Plan including Capacity Building, Communication Strategy, and Resistance Management, etc.

3. The Bidder should provide detailed proposed Bill of Material (BOM) as per below format:

a. DC/ DR/ NLDC (IT & Non-IT Hardware)

Item	OEM - Make/Version	Operating System	Software Make / Version	Configuration Proposed	No. of units				No. of Licenses	Unit Cost	Total Cost
					DC	DR	Office	Any other location			
Total Cost											

b. Setting up of SR offices, CR Offices and Other offices (IT & Non-IT Hardware etc.)

i. IT hardware at SR Office

Item	OEM - Make/Version	Operating System	Software Make / Version	Configuration Proposed	No. of units				No. of Licenses	Unit Cost	Total Cost
					Cat A SRO	Cat B SRO	Cat C SRO	Any other location			

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Item	OEM - Make/Version	Operating System	Software Make / Version	Configuration Proposed	No. of units				No. of Licenses	Unit Cost	Total Cost
					Cat A SRO	Cat B SRO	Cat C SRO	Any other location			
Total Cost											

ii. Non-IT hardware at SR Office

Item	OEM - Make/Version	Certification/ Standards	Dimensions	Other Details	No. of units				No. of units	Unit Cost	Total Cost
					Cat A SRO	Cat B SRO	Cat C SRO	Any other location			
Total Cost											

Witness:

Bidder:

Signature -----

Signature -----

Name -----

Name -----

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Address -----

Designation -----

Company -----

Date -----

Date -----

Annexure 3.2.6: Approach and Methodology for Implementation of the Technical Solution

1. The Bidder should cover details of the methodology proposed to be adopted for planning and implementation of solutions and infrastructure relating to establishment of the proposed solution.
2. The Bidder may give suggestions on improvement of the Scope of Work given in **Section 4 - Scope of Work** and may mention the details of any add-on services related to this project over and above what is laid down in the Tender Document. List of deliverables should also be identified and explained.
3. The Bidder shall describe the knowledgebase, best practices and tools that will be used by its project team for the execution of scope of work activities.

Witness:

Signature -----

Name -----

Address -----

Date -----

Bidder:

Signature -----

Name -----

Designation -----

Company -----

Date -----

Annexure 3.2.7: Approach & Methodology for Operations/ Maintenance of the installed Infrastructure

1. Bidder should cover details of the methodology proposed to be adopted for operations and maintenance of equipment and facilities related the proposed solution.
2. Bidder should provide details about of the Service Helpdesk and Handholding Staff available for the purpose of resolution of issues pertaining to the conditions relevant to the proposed solution.

Note: Bidder must provide a note of proposed escalation procedure for the unresolved service requests and the procedures for handling the same.

3. Bidder may give suggestions on improvement of the scope of work given in **Section 4 - Scope of Work** and may mention the details of any add on services related to this project over and above what is laid down in the tender document. List of deliverables, including reports, should also be identified and explained.
4. Bidder shall describe the knowledgebase, best practices and tools that will be used by the project team for the execution of scope of work activities.

Annexure 3.2.8: Detailed Work plan and Staffing Plan

1. The Bidder shall provide a detailed project plan with timelines, resource allocation, milestones etc. as Gantt chart format for carrying out the scope of work activities.
2. The project plan should clearly indicate the deliverables at each milestone in the project and staffing deployment of all resources.
3. The Approach and Methodology should capture, in detail, all the activities enlisted in the project plan

Annexure 3.2.9: Manpower details

1. Bidder should provide a detailed Resource Deployment Plan to ensure that technically qualified staff is available to deliver the project. This should match with the Manpower Cost being factored in the Commercial Bid
2. Bidder should provide the summary table of details of the manpower that will be deployed on this project along with detailed CVs of key personnel (For personnel profile, please refer to section IV - Component M - Constitution of the Team).

Sr. No.	Components	Details of the component	No. of units			Total No. of unit	Qualification Details
			Cat A SRO	Cat B SRO	DC/ NLDC/ DR site (If applicable)		
	Operator						
	Receptionist						
	Server Administration						
	...						

3. Bidder should provide the man-month rate of the software/module development in the table below. The provided man-month rate shall be applicable during the contract period. For any additional module or application development, after finalization of SRS document, IA may be asked by the purchaser at the provided rates below: The request may come in the form of change request from the IA which will be further approved/reject in the steering committee meeting.

Sr. No.	Manpower	No. of manpower	Qualification details	Experience in years	Man-month rate (in INR)
1	Programmer				
2	Web Designer				
3	BPR Expert				
	Quality Assurance				

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Sr. No.	Manpower	No. of manpower	Qualification details	Experience in years	Man-month rate (in INR)
	Database Admin				
	Graphics Designer				
				

Witness:

Signature -----

Name -----

Address -----

Date -----

Bidder:

Signature -----

Name -----

Designation -----

Company -----

Date -----

Annexure 3.2.10: Detailed CV of Personnel

1.	Name of the employee				
2	Proposed position				
3	Designation				
4	Date of Birth				
5	Nationality				
6	Education	Qualification	Name of School/ College/ University	Degree Obtained	Date Attended
7	Language	Language	Read	Write	Speak
8	Employment Record	Employer	Position	From	To
<i>(Starting with present position list in reverse order)</i>					
9	Relevant Experience	<i>(Give an outline on the experience most pertinent to tasks mentioned in the project. Describe degree of responsibility held on these relevant assignments).</i>			
10	Certification	<p>I, the undersigned, certify that to the best of my knowledge and belief, this bio-data correctly describes me, my qualifications, and my experience.</p> <p>Date: _____</p> <p>Place _____ Signature of the Authorized Signatory</p>			

Annexure 3.2.11: Details of Experience of the Responding Firm

Bidders should provide information for each project, required for pre-qualification and technical evaluation criteria, as per the format below

Sr. No.	Items	Details	
General Information			
1.	Customer Name		
2.	Name of the contact person and contact details for the client of the assignment		
3.	Whether client visit can be organized	(YES / NO)	
Project Details			
4.	Project Title		
5.	Start Date and End Date		
6.	Date of Go-Live		
7.	Total Cost of the project		
8.	Current Status (Live / completed / on-going / terminated / suspended)		
9.	No of staff provided by your company		
10.	Please indicate the current or the latest AMC period with the client (<i>From Month –Year to Month-Year</i>)		
11.	Please indicate whether the client is currently using the implemented solution		
Size of the project			
12.	Number of total users and concurrent users of the solution at the client location(s):	Total users	
		Concurrent users	
13.	Hardware (give brief details covering Server, Processor configuration (SMP or Cluster), storage technology (SAN or internal disks with RAID) etc.		
14.	Security features implemented - Password-based / Role-based / Digital certificates / signature, encryption, public key system, LDAP server, single sign-on etc.		
15.	Training responsibilities of Bidder		

16.	Any other information to be shared with Purchaser	
Enclosures Required		
Enclosure A: <i>Narrative Description of the Project</i>		
Enclosure B: <i>Detailed Description of actual services provided by your company:</i>		
Enclosure C: <i>Documentary Proof</i>		

Note: Revenue Department's team may like to visit some of the reference sites to understand the project details. Details of about 2-3 reference sites should be provided. The Bidder should confirm from the client that a visit can be arranged.

Bidder:

Signature -----

Name -----

Address -----

Date -----

Witness:

Signature -----

Name -----

Designation -----

Company Seal -----

Date -----

Annexure 3.2.12: Declaration for not being under an ineligibility for corrupt or fraudulent practices / Blacklisted with any of the Government or Public Sector Units

(To be submitted on the Letterhead of the responding firm)

To
Member Secretary, PLRS,
Room No. 4, 3rd Floor, Punjab Civil Secretariat, Sector – 1,
Chandigarh

Subject: Declaration for not being under an ineligibility for corrupt or fraudulent practices or blacklisted with any of the Government or Public Sector Units in India

Dear Sir/Madam,

We, the undersigned, hereby declare that we are not under a declaration of ineligibility / banned / blacklisted by any State or Central Government / any other Government institutions in India for any reason as on last date of submission of the Bid or convicted of economic offence in India for any reason as on last date of submission of the Bid.

Yours faithfully,

(Signature of the Bidder)

Printed Name

Designation

Seal

Date:

Place:

Business Address:

Witness:

Signature -----

Name -----

Address -----

Date -----

Bidder:

Signature -----

Name -----

Designation -----

Company -----

Date -----

Annexure 3.2.13: Statement of deviations from Schedule of Requirements / Tender Terms and Conditions, etc.

To
 Member Secretary,
 Punjab Land Records Society (PLRS),
 Room No. 4, Third Floor, Punjab Civil Secretariat, Sector – 1,
 Chandigarh

Deviations and variations from the requirements and tender documents for “**Selection of Implementation Agency (‘IA’) for Integrated Land Administration System in Punjab.**” against Tender Dated <DATE> are listed below. These deviations and variations are exhaustive. Except these deviations and variations, the entire work shall be performed as per the requirements of the Purchaser.

S. No.	Section No.	Clause No.	Page No.	Statement of deviations and variations.	Remarks

We agree that additional conditions, if any, found in the Tender Document, other than those stated in deviation schedule, shall not be given effect to.

Note: Bidders may please note that compliance to a clause and a sub-clause would mean complete compliance to all the other sections within those clauses and sub-clauses.

Witness:

Bidder:

Signature -----

Signature -----

Name -----

Name -----

Address -----

Designation -----

Company -----

Date -----

Date -----

Annexure 3.2.14: Copy of Commercial Bid with the price column of the price bid format blanked out

1. The Bidders would need to submit a blank copy of its Commercial Tender (**Annexure 3.3.1 of Section 3 – Contents of the Bid**) with the Technical Bid in compliance to the terms specified providing all the details, however, entire price related details should be omitted from this copy. **The Bidder should provide a tick (✓) mark against each item of the price bid format to indicate that there is a quote against this item in the Commercial bid.**

Annexure 3.2.15: Space requirement and Manpower Deployment Plan at existing SROs for the document scanning and legacy Data Entry

IA shall provide the details of requirement for space at existing SROs for the document scanning and Data Entry in below format.

1. Category A offices:
 - A. Space requirement at SRO (in sq. ft.):
 - B. No. of operator to be deployed by IA at existing SRO:

2. Category B offices:
 - A. Space requirement at SRO (in sq. ft.):
 - B. No. of operator to be deployed by IA at existing SRO:

3. Category C offices:
 - A. Space requirement at SRO (in sq. ft.):
 - B. No. of operator to be deployed by IA at existing SRO:

3.3 COMMERCIAL BID

Annexure 3.3.1: Commercial Bid Letter

(To be submitted on the Letterhead of the responding firm)

To

Member Secretary,
Punjab Land Records Society (PLRS),
Room No. 4, Third Floor, Punjab Civil Secretariat, Sector – 1,
Chandigarh

Subject: Selection of Implementation Agency ('IA') for Integrated Land Administration System in Punjab.

Reference: Tender Dated <DD/MM/YYYY>

Dear Sir/Madam,

We, the undersigned Bidder, having read and examined in detail all the Tender Documents in respect of **Selection of Implementation Agency ('IA') for Integrated Land Administration System in Punjab**, do hereby propose to provide services as specified in the Tender Dated <DD/MM/YYYY>

1. PRICE AND VALIDITY

1.1 All the prices mentioned in our Commercial Bid are in accordance with the terms as specified in the Tendered Documents. All the prices and other terms and conditions of this Tender are valid for a period of 180 calendar days from the date of submission of the Tenders.

1.2 We hereby confirm that our Tender prices include all taxes. However, all the taxes have also been quoted separately..

2. We have studied the clause relating to Indian Tax and hereby declare that if any income tax, surcharge on Income Tax, Professional and any other Corporate Tax is altered under the law, we shall pay the same.

3. UNIT RATES

We have indicated in the relevant schedules enclosed, the unit rates for the purpose of on account of payment as well as for price adjustment in case of any increase to / decrease from the Scope of Work under the contract.

5. BID SECURITY

We have enclosed bid security in the form of a Bank Guarantee for a sum of **Rs. 50,00,000/- (Rupees Fifty lakh only)**. This bid security is liable to be forfeited in accordance with the provisions of the **Section 1 – Instructions to Bidders**

6. DEVIATIONS

We declare that all the services shall be performed strictly in accordance with the Tender Documents except for the variations and deviations, all of which have been detailed out exhaustively in the following statement, irrespective of whatever has been stated to the contrary anywhere else in our bid:

- a) Statement of Commercial Deviations (**Annexure 3.2.13**)
- b) Statement of Deviations from Schedule of Requirements (**Annexure 3.2.13**)
- c) Statement of Deviations from Tender Terms & Conditions (**Annexure 3.2.13**)

Further we agree that additional conditions, if any, found in the Tender documents, other than those stated in deviation schedule, shall not be given effect to.

7. TENDER PRICING

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

8. QUALIFYING DATA

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

9. BID PRICE

We declare that our Bid Price comprising of Capital Expenditure (CAPEX) and Operational Expenditure (OPEX) is for the entire Scope of Work as specified in the Schedule of Requirements and Tender Documents. These prices are indicated in this **Annexure 3.3 of Section 3 – Contents of Bid** attached with our Tender as part of the Tender.

10. CONTRACT PERFORMANCE GUARANTEE BOND

We hereby declare that in case the contract is awarded to us, we shall submit the Contract Performance Guarantee Bond in the form prescribed in **Annexure 3.3.3 of Section 3** and as specified under **Clause 2.27 of Section 2 - General Conditions of Contract**.

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

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

We confirm that no Technical deviations are attached here with this commercial offer.

Thanking you,

Yours faithfully,

(Signature of the Bidder)

Printed Name

Designation

Seal:

Date:

Place:

Business Address:

Witness:

Signature _____

Name _____

Address _____

Date _____

Bidder:

Signature _____

Name _____

Designation _____

Company _____

Date _____

Annexure 3.3.2: Breakdown of Service Cost

The Invoicing and Payment module shall generate the invoices on monthly basis and the applicable SLA penalties shall be automatically applied. The IA shall submit the detailed Capital Expenditure (CAPEX) and Operational Expenditure (OPEX) of the Project along with Commercial Bid. The Purchaser shall release the monthly payment during the Contract Period as per the invoices submitted and considering the SLA's. IA shall submit the invoice for claiming the Monthly payment to the purchaser. The CAPEX should include the following components:

1. Core Software development and installation at DC/NLDC/DR & SR offices, CROs and other offices
2. Other Software
3. Hardware cost – IT and Non-IT infrastructure at DC/NLDC/DR & SR offices, CROs and other offices
4. Setting up of sites
5. Components during delivery of services at Category A and B sites from the 4th Month to the 12th Month from the date of award of contract till Go-live **The CAPEX cost proposed by the IA should not be exceed 30% of the contract value.**
6. Training & Change Management Cost
7. Data Entry & Scanning Cost

The OPEX should include the following components:

1. Data Entry & Scanning Cost
2. Annual Maintenance Cost for Core Software Module
3. Annual Maintenance Cost for Other Software Modules
4. Annual Maintenance Cost for Hardware
5. Handholding staff cost (2 years)
6. Helpdesk and Facility Management Services Cost
7. Training & Change Management (Refresher training) cost
8. Recurring cost at Disaster Recovery/ NLDC site
9. Bandwidth/ Networking Cost
10. Manpower for Category A, B, C and Manpower at DC/DR/NLDC
11. SMS & Payment gateway
12. Notices
13. Survey Resource Cost
14. Dedicated Cell market Value Assessment
15. Call Center for External Users
16. Consumables including stationary
17. Others (including contingency, Travelling etc)

Details of service cost and payment schedule can be referred in Clause 2.21 of Section 2 – General Conditions of the Contract. In the following table, contract value is the value of the Bid, which the bidder has to quote in the commercial bid in the given two formats:

1. Commercial Components – CAPEX

Component	Description	Total Price (INR)
Component A	Application Development, Testing, deployment and commissioning cost including Buy-outs	
Component B1	IT Infrastructure at the Category A locations including site preparation	

Component B2	IT Infrastructure at the Category B locations including site preparation	
Component B3	IT Infrastructure at the Category C locations including site preparation	
Component C	Cloud Infrastructure for DC/DR/NLDC – Till go-live	
Component D1	<ul style="list-style-type: none"> o Data Migration including data entry of Master data & entry of data required for integration of Land records & Registration Software's o Data entry and scanning for registration from year 2010 till present o Scanning & Drafting/Digitization of Musavis Maps 	
Component D2	Data entry & scanning of registration data from 2000 to 2010	
Component E	Capacity Building and Training	
Component F	IT and Non IT infrastructure at 172 Fard Kendra	
Taxes as applicable		
Total CAPEX (Inclusive of all taxes)		

2. Commercial Components OPEX

Sr. No.	Description	Total Price (INR) considering NPV
Component 1	NPV of Handholding and Manpower Support at Implementation Locations	
Component 2	NPV of Application Maintenance & Operational Expense including up gradation, deployment of patches, fixes etc. after go-Live	
Component 3	NPV of AMC for Hardware (IT & Non-IT hardware)	
Component 4	NPV of Cloud Infrastructure for DC/DR/NLDC – Post Go-live	
Taxes as applicable		
Total OPEX (inclusive of all taxes)		

3. Total Contract Value

Total Contract Value is the sum of Total CAPEX (Inclusive of all taxes) and Total OPEX (inclusive of all taxes) OR

Total Contract Value = Total CAPEX (Inclusive of all taxes) + Total OPEX (inclusive of all taxes)

Total Contract Value (in Words) = _____

Note: All unit rates indicated in the schedules shall be inclusive of (not limited to supply), installation, duties, transport, packing and transit insurance charges etc. Taxes should be indicated under the relevant cell in the schedules.

Witness:

Signature -----

Name -----

Address -----

Date -----

Bidder:

Signature -----

Name -----

Designation -----

Company -----

Date -----

Annexure 3.3.3: Detailed Commercial Bid covering CAPEX and OPEX

Bidder is expected to provide detailed breakup of costs which should match with the service cost quoted and the overall contract value. Purchaser reserves the right to seek clarifications on the Commercial Bid to understand the break-up of costs better.

3.3.3.1 CAPEX Details

c. Software Cost (Core and Others)

Sr. No.	Software/ Modules/ Components	Technology used (in case of COTS)/ to be used (New development)	Cost (In lakhs)	Remarks
Core Software				
1.	Registration Module			
2.	Circle Rate due diligence			
3.	Online Appointment Module			
4.	Rent registration			
5.	Marriage registration			
6.	Rent registration			
7.	Land record module			
8.	Mutation module			
9.	Integration of registration and land records			
10.	Nakal Jamabandi			

11.	Other Nakals (Khasra Girdawari, Shajra Nasb, Field Book, Rapat etc.)			
12.	Nakal Mutation Module			
13.	Nakal of Map Module			
14.	Non-encumbrance certificate Module			
Total Core Software Cost				
Other Software (Mentioned in the Scope of Work)				
1.	Portal Development			
2.	Integration with third party application/software			
3.	GIS module			
4.	Enterprise workflow management			
5.	Document management system			
6.	e-Office module			
7.	Antivirus solution			
8.	SLA monitoring tool			
9.	Common Software Requirements			

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

10.	Security requirements			
11.	MIS reporting tool			
12.	Ad-reporting tool			
13.	Enterprise management solution			
14.	Mobile app for Department users			
15.	Mobile app for citizen			
16.	Invoice and Payment module			
17.	Knowledge management system			
18.	Revenue/court modules			
19.	Database security			
20.	Identity access management tool			
21.	Web access management tool			
22.	Error detection and error correction			
23.	Admin Module			
24.	Managed Services			
25.	Others1			

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

26.	Others2			
27.	Others3			
28.	Others4			
29.	Others5			
Total Core Software Cost				

d. DC/ DR/ NLDC (IT & Non-IT Hardware) Till Go-live

Item	Total Quantity Required in VMs (A)	Cost per Unit (In Rupees) (B)	Taxes (C)	Total Cost (In Rupees) (A * B)+C
Application Servers (Quantity in VMs)				
Data Base Servers (Quantity in VMs)				
Testing Servers (Quantity in VMs)				
Antivirus Servers (Quantity in VMs)				
Backup Servers (Quantity in VMs)				
Security equipment (Quantity in Number)				
Load balancers (Quantity in Number)				
Storage (Quantity in TB)				
Any other equipment				
Software				
RDBMS (No. of Cores)				
Development tool kits (Quantity in Number)				
Security tool kits (Quantity in Number)				
EMS (Quantity in Number of Licenses)				
SSL (Quantity in Number of Licenses)				

Item	Total Quantity Required in VMs (A)	Cost per Unit (In Rupees) (B)	Taxes (C)	Total Cost (In Rupees) (A * B)+C
Any other				
Bandwidth				
Bandwidth for 100 MBPS				
Total				

e. Setting up of SR offices, CR Offices and Other offices (IT & Non-IT Hardware etc.)

iii. IT hardware at SR Office

Item	OEM - Make/Version	Operating System	Software Make / Version	Configuration Proposed	No. of units				No. of Licenses	Unit Cost	Total Cost
					Cat A SRO	Cat B SRO	Cat C SRO	Any other location			
Total Cost											

iv. Non-IT hardware at SR Office

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Item	OEM - Make/Version	Certification/ Standards	Dimensions	Other Details	No. of units				No. of units	Unit Cost	Total Cost
					Cat A SRO	Cat B SRO	Cat C SRO	Any other location			
Total Cost											

f. ICT Infrastructure Installation & Configuration Cost

Sr. No.	Sites/ Locations	Total Cost	Remarks
1	SR offices/ CR Offices		
2	DC		
3	DR		
4	NLDC		
5	Others offices/Locations		
Total			

g. Components during delivery of services at Category A and B sites from 4th Month to 12th Month from the date of award of contract till Go-live

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Sr. No.	Components	Details of the component	No. of units			Total No. of unit	Unit Cost	Total Cost
			Cat A SRO	Cat B SRO	DC/ NLDC/ DR site (If applicable)			
Manpower								
	Operator							
	Receptionist							
	Server Administration							
	...							
Bandwidth Charges/ Networking								
Consumable – Stationary etc.								
SMS gateway/ Payment Gateway								
Others (including contingency, Travelling etc)								

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Sr. No.	Components	Details of the component	No. of units			Total No. of unit	Unit Cost	Total Cost
			Cat A SRO	Cat B SRO	DC/ NLDC/ DR site (If applicable)			
Total								

h. Training & Change Management Cost

Sr. No.	Training Type	Target no. of audience	Duration of training	Unit Cost	Total Cost
	Role Based Training				
	...				
	...				
	...				
	...				
Total					

i. Data Digitization Cost

Sr. No.	Record Type	No. of records	Unit Cost	Total Cost

Sr. No.	Record Type	No. of records	Unit Cost	Total Cost
Total				

j. IT and Non IT infrastructure at 172 Fard Kendra

v. IT hardware at Fard Kendra

Item	OEM - Make/Version	Operating System	Software Make / Version	Configuration Proposed	No. of units				No. of Licenses	Unit Cost	Total Cost
					Cat A SRO	Cat B SRO	Cat C SRO	Any other location			
Total Cost											

vi. Non-IT hardware at Fard Kendra

Item	OEM - Make/Version	Certification/ Standards	Dimensions	Other Details	No. of units				No. of units	Unit Cost	Total Cost
					Cat A SRO	Cat B SRO	Cat C SRO	Any other location			

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Item	OEM - Make/Version	Certification/ Standards	Dimensions	Other Details	No. of units				No. of units	Unit Cost	Total Cost
					Cat A SRO	Cat B SRO	Cat C SRO	Any other location			
Total Cost											

3.3.3.2 OPEX Details

a) Handholding and Manpower Support at Implementation Locations

Sr. no.	Year	No. of resources (A)	No. of man Months (B)	Unit Cost (C)	Total Cost (D=BXC)	Taxes in INR (E)	Grand Total in INR (F = D+E)	NPV (G)
1	Year 1							
2	Year 2							
3	Year 3							
4	Year 4							
5	Year 5							
Total NPV								

b) Application Maintenance & Operational Expense including up gradation, deployment of patches, fixes etc. Post Go-Live

Sr. no.	Year	Cost per year (A)	Taxes in INR (B)	Grand Total in INR (C=A+B)	NPV (G)
1	Year 1				
2	Year 2				
3	Year 3				
4	Year 4				
5	Year 5				
Total NPV					

c) AMC for Hardware (IT & Non-IT hardware)

Sr. no.	Year	Cost per year (A)	Taxes in INR (B)	Grand Total in INR (C=A+B)	NPV (G)
1	Year 1				
2	Year 2				
3	Year 3				
4	Year 4				
5	Year 5				
Total NPV					

d) AMC for Cloud infrastructure for DC/DR/NLDC – Post Go-live

Sr. no.	Year	Cost per year (A)	Taxes in INR (B)	Grand Total in INR (C=A+B)	NPV (G)
1	Year 1				
2	Year 2				
3	Year 3				
4	Year 4				
5	Year 5				
Total NPV					

Witness:

Signature -----

Name -----

Address -----

Date -----

Bidder:

Signature -----

Name -----

Designation -----

Company -----

Date -----

e) Details of cloud infrastructure (public cloud) - Post Go-live

Item	Total Quantity Required in VMs (A)	Cost per Unit (In Rupees) (B)	Taxes (C)	Total Cost (In Rupees) (A * B)+C
Application Servers (Quantity in VMs)				
Data Base Servers (Quantity in VMs)				
Testing Servers (Quantity in VMs)				
Antivirus Servers (Quantity in VMs)				
Backup Servers (Quantity in VMs)				
Security equipment (Quantity in Number)				
Load balancers (Quantity in Number)				
Storage (Quantity in TB)				
Any other equipment				

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Item	Total Quantity Required in VMs (A)	Cost per Unit (In Rupees) (B)	Taxes (C)	Total Cost (In Rupees) (A * B)+C
Software				
RDBMS (No. of Cores)				
Development tool kits (Quantity in Number)				
Security tool kits (Quantity in Number)				
EMS (Quantity in Number of Licenses)				
SSL (Quantity in Number of Licenses)				
Any other				
Bandwidth				
Bandwidth for 100 MBPS				
Total				

Witness:

Bidder:

Signature -----

Signature -----

Name -----

Name -----

Address -----

Designation -----

Company -----

Date -----

Date -----

Annexure 3.3.4: Performa for Performance Bank Guarantee/ Additional Bank Guarantee for Contract Performance

Ref: _____

Date _____

Bank Guarantee No. _____

To

Member Secretary,

Punjab Land Records (PLRS),

Room No. 4, Third Floor, Punjab Civil Secretariat, Sector – 1,

Chandigarh

1. Against contract vide Advance Acceptance of the Tender No. _____ dated _____ covering _____ (hereinafter called the said "Contract") entered into between the Punjab Land Records Society, on behalf of Government of Punjab hereinafter called "the Purchaser" and _____ hereinafter called the "Implementation Agency" this is to certify that at the request of the Implementation Agency we ----- Bank Ltd., are holding in trust in favour of the Purchaser, the amount of _____ (write the sum here in words) to indemnify and keep indemnified the Purchaser against any loss or damage that may be caused to or suffered by the Purchaser by reason of any breach by the Implementation Agency of any of the terms and conditions of the said contract and/or in the performance thereof. We agree that the decision of the Purchaser, whether any breach of any of the terms and conditions of the said contract and/or in the performance thereof has been committed by the Implementation Agency and the amount of loss or damage that has been caused or suffered by the Purchaser shall be final and binding on us and the amount of the said loss or damage shall be paid by us forthwith on demand and without demur to the Purchaser.
2. We _____ Bank Ltd, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for satisfactory performance and fulfilment in all respects of the said contract by the Implementation Agency i.e. till _____ hereinafter called the said date and that if any claim accrues or arises against us _____ Bank Ltd, by virtue of this guarantee before the said date, the same shall be enforceable against us _____ Bank Ltd, notwithstanding the fact that the same is enforced within six months after the said date, provided that notice of any such claim has been given to us _____ Bank Ltd, by the Purchaser before the said date. Payment under this letter of guarantee shall be made promptly upon our receipt of notice to that effect from the Purchaser.
3. It is fully understood that this guarantee is effective from the date of the said contract and that we _____ Bank Ltd, undertake not to revoke this guarantee during its currency without the consent in writing of the Purchaser.
4. We undertake to pay to the Purchaser any money so demanded notwithstanding any dispute or disputes raised by the Implementation Agency in any suit or proceeding pending before any court or Tribunal relating thereto our liability under this present bond being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Implementation Agency shall have no claim against us for making such payment.

5. We _____ Bank Ltd, further agree that the Purchaser shall have the fullest liberty, without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend time of performance by the Tendered from time to time or to postpone for any time of from time to time any of the powers exercisable by the Purchaser against the said Implementation Agency and to forebear or enforce any of the terms and conditions relating to the said contract and we, _____ Bank Ltd., shall not be released from our liability under this guarantee by reason of any such variation or extension being granted to the said Implementation Agency or for any forbearance by the Purchaser to the said Implementation Agency or for any forbearance and or omission on the part of the Purchaser or any other matter or thing whatsoever, which under the law relating to sureties, would, but for this provision have the effect of so releasing us from our liability under this guarantee.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Implementation Agency.

Date _____

Place _____

Signature _____

Witness _____

Printed name _____

(Bank's common seal)

Annexure 3.3.4: Performa for Performance Bank Guarantee for Contract Performance

Ref: _____

Date _____

Bank Guarantee No. _____

To

Member Secretary,

Punjab Land Records (PLRS),

Room No. 4, Third Floor, Punjab Civil Secretariat, Sector – 1,

Chandigarh

7. Against contract vide Advance Acceptance of the Tender No. _____ dated _____ covering _____ (hereinafter called the said "Contract") entered into between the Punjab Land Records Society, on behalf of Government of Punjab hereinafter called "the Purchaser" and _____ hereinafter called the "Implementation Agency" this is to certify that at the request of the Implementation Agency we ----- Bank Ltd., are holding in trust in favour of the Purchaser, the amount of _____ (write the sum here in words) to indemnify and keep indemnified the Purchaser against any loss or damage that may be caused to or suffered by the Purchaser by reason of any breach by the Implementation Agency of any of the terms and conditions of the said contract and/or in the performance thereof. We agree that the decision of the Purchaser, whether any breach of any of the terms and conditions of the said contract and/or in the performance thereof has been committed by the Implementation Agency and the amount of loss or damage that has been caused or suffered by the Purchaser shall be final and binding on us and the amount of the said loss or damage shall be paid by us forthwith on demand and without demur to the Purchaser.
8. We _____ Bank Ltd, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for satisfactory performance and fulfilment in all respects of the said contract by the Implementation Agency i.e. till _____ hereinafter called the said date and that if any claim accrues or arises against us _____ Bank Ltd, by virtue of this guarantee before the said date, the same shall be enforceable against us _____ Bank Ltd, notwithstanding the fact that the same is enforced within six months after the said date, provided that notice of any such claim has been given to us _____ Bank Ltd, by the Purchaser before the said date. Payment under this letter of guarantee shall be made promptly upon our receipt of notice to that effect from the Purchaser.
9. It is fully understood that this guarantee is effective from the date of the said contract and that we _____ Bank Ltd, undertake not to revoke this guarantee during its currency without the consent in writing of the Purchaser.
10. We undertake to pay to the Purchaser any money so demanded notwithstanding any dispute or disputes raised by the Implementation Agency in any suit or proceeding pending before any court or Tribunal relating thereto our liability under this present bond being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Implementation Agency shall have no claim against us for making such payment.

11. We _____ Bank Ltd, further agree that the Purchaser shall have the fullest liberty, without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend time of performance by the Tendered from time to time or to postpone for any time of from time to time any of the powers exercisable by the Purchaser against the said Implementation Agency and to forebear or enforce any of the terms and conditions relating to the said contract and we, _____ Bank Ltd., shall not be released from our liability under this guarantee by reason of any such variation or extension being granted to the said Implementation Agency or for any forbearance by the Purchaser to the said Implementation Agency or for any forbearance and or omission on the part of the Purchaser or any other matter or thing whatsoever, which under the law relating to sureties, would, but for this provision have the effect of so releasing us from our liability under this guarantee.
12. This guarantee will not be discharged due to the change in the constitution of the Bank or the Implementation Agency.

Date _____

Place _____

Signature _____

Witness _____

Printed name _____

(Bank's common seal)

4 Scope of Work

4.1 Introduction

Department of Revenue, Government of Punjab administers a variety of Acts related to Land Records and Registration of Documents. The Department has recognized the need to modernize the State's Land Record & Registration of Documents administration so as to be in tune with current IT, economic and globalization trends. Land & Registration reform measures are also needed to ensure buoyant revenue flow, making the environment conducive for increased compliance levels and increased levels of transparency.

Department of Revenue has embarked on an ambitious project named Integrated Land Administration System for leveraging ICT in Land Records & Registration of Documents domains as an end-to-end, holistic Digital Governance initiative covering all stakeholders. Department of Revenue believes that such an approach would bring about qualitative improvements in the interaction of the Government with other stakeholders.

4.2 Project Vision and Objective

Vision

Integrated Land Administration System (I-LAS) in Punjab has been envisaged with a vision of having:

- Transparent land titles with clarity on area, share, and maps.
- Full information on disputes
- Digital procedures, documents and communication
- Digital interface between citizens and the Department
- Online transactions accessible through the mobile and the web
- Simplified procedures for all Departmental activities like Registration, Revenue Record Management and Recoveries among others
- Seamless interface with other systems like the Finance, Accounts, HR, Disaster Relief, Town Planning, etc.

Project Objective

The fundamental focus of I-LAS Project is to computerize various services of the Department of Revenue, to minimize the manual way of working leveraging ICT and to bring in efficiency and transparency in the existing processes/services. The new system would boost revenue collection, provide better and faster services to the citizens and considerably reduce the workload of Revenue officials. Key objectives of the project include:

- Improving citizen service delivery and providing a standardized service delivery experience to the citizens by enabling process and technology transformation from de-centralized solution to a centralized solution
- Removing inconsistencies in procedures due to difference in units, perceptions, terminology, practices, etc. with standardization of systems
- Providing complete access to the dynamically updated land records and registration data to the citizens in read only mode
- Facilitating easy and transparent transfer of Title
- Making all holdings as per Record of Rights (RoR) positively identifiable on cadastral maps and on the ground

- Providing for inbuilt checks and balances to avoid litigation, fraud, duplication of title, unauthorized transfer of title, etc.
- Developing a land evaluation method for assessing commercial potential of land for government levies, fee, taxes and mortgage purposes
- Providing secure access to third party organizations such as financial institutions, banks, courts, UIDAI, Income Tax Department, etc. for financial and legal purposes
- Ensuring multi-layered data security for all the systems
- Providing mobile based access to the citizens as well as officials from the Department, PLRS and other line Departments

Existing Integrated Land Management System Project for Computerization of Land Records and Registration of Documents for the State of Punjab started in year 2006 by the Department of Revenue through Punjab Land Records Society.

An RFP for selection of a suitable operator through competitive tendering for operations of the project for Computerization of Land Records and Registration of Documents was issued in year 2006. After evaluation, M/s CMS Ltd. was chosen to implement the project in the entire State except the districts of Sangrur & Barnala where M/s CMC Ltd. was already doing a pilot for registration services.

PLRS has established approximately 172 Fard Kendra to deliver the fard to the citizen across the state. The Fard operator is provided with one computer, printer and thumb impression device to login the system. In the envisaged system, it has been decided that all the citizen services shall be delivered through USDC in future.

Department of Revenue with the learning from the existing vendors envisage selection of IA for computerization of Land Records and Registration of Documents services in Punjab. This IA would take over the existing operations and support all the transitions till integrated solution is developed and deployed.

Currently Department of Revenue has deployed following applications:

- **Land Record Management System (e-Patwari)**
This application is used to digitize all the land record registers like Jamabandi, Mutation register, Roznamcha, Khasra Girdawari, etc. The Data Entry & Scanning using this application has been completed for Jamabandi register of approximately 12500 villages out of approximately 13000 villages in the State of Punjab. This application is developed by Microsoft and deployed in de-centralized mode in all the districts / tehsil's and sub-tehsils.
- **Property Registration Information System Module (PRISM)**
Property Registration Information System Module (PRISM) is an automated application developed by National Informatics Centre (NIC) for the State of Punjab. The main objectives of using and implementing PRISM is to introduce greater transparency, to ascertain accurate valuation of property, to speed up the process of registration and to introduce improved methods of storage for registered documents PRISM is a client server based application. It works in decentralized mode. The application was built with strong focus on ease of usage, simplicity and robust security controls. PRISM application is being used in all the district of Punjab.
- **Registration of Deeds (RoD)**

This application is developed by Microsoft. It was implemented as pilot in SAS Nagar district but failed to meet expectations of the domain user group. This is web based application which covers all registration processes. RoD application is still in stabilization mode and being tested by PLRS (Punjab Land Records Society) in house team.

4.3 High Level Project Activities & Approach

4.3.1 Broad Level Project Activities and Duration

Phase	Action/Deliverable	Timeline
Planning	Project Planning <ul style="list-style-type: none"> • Project Charter • Project Plans • Specification of IT & Non IT infrastructure 	2 Months
Implementation Phase	Software Development <ul style="list-style-type: none"> • Study Existing Business Process • Software Requirement Specification • Land Record Modules • Registration Document Modules • Other Supporting Modules 	10 Months
	Site Readiness <ol style="list-style-type: none"> 1. SRO, JSROs <ul style="list-style-type: none"> • Supply, Installation, Commissioning of IT Hardware Infrastructure • Supply, Installation of Non-IT Infrastructure 2. DC, DR & NLDC Sites <ul style="list-style-type: none"> • Supply, Installation, Commissioning of IT Hardware Infrastructure • Supply, Installation of Non-IT Infrastructure 	
	Networking <ul style="list-style-type: none"> • Primary connectivity has to be provided by Department of Governance Reforms through PAWAN and secondary connectivity shall be established by IA. • Secondary Connectivity between all DoR offices like SROs, JSROs, DROs etc. • Secondary Connectivity to be provided to all revenue officers like Divisional Commissioners, District Collectors and SDMs etc. • Connectivity between DC, DR & NLDC 	
	Legacy Data Conversion <ul style="list-style-type: none"> • Land Record Documents • Registration Documents (only this part may go up to 36 month as per the timelines) • Musavis/Cadastral Maps 	

Phase	Action/Deliverable	Timeline
	Data Migration <ul style="list-style-type: none"> Migration of existing Land Record & Registration data Migration of new digitized data 	
	Training & Change Management <ul style="list-style-type: none"> Department of Revenue and PLRS user training 	
	Manpower Deployment <ul style="list-style-type: none"> Manpower deployment at all operational sites 	
Go-Live		
“Operations and Maintenance” or “O&M” means the services to be rendered, as per the SLA, during the period commencing from the “Go-Live date” till the expiry or termination of the Master Service Agreement		
O & M	<ul style="list-style-type: none"> Maintenance and support of all IT & Non-IT Infrastructure Monthly log of service calls and problem resolution reports for Helpdesk Quarterly Performance Monitoring Reports for the system Updation of user manuals, administration manuals, training manuals etc. Software change logs 	5 Years
Exit Management	<ul style="list-style-type: none"> Transfer of Assets Transfer of Certain Agreements Confidential Information and Data Security Software/ Software code Any relevant documents <p>Please refer section 2.36 of this document for details</p>	On expiry or termination of the Contract, whichever is earlier
<i>*The term of this Contract period would be 12 months of implementation period followed by 5 years of O&M Phase.</i>		

4.3.2 Project Implementation Approach

Bidder is expected to adopt any of the following approaches or combination of following approaches:

- Bespoke development of the application OR
- Configuration / Customization of an existing application that may be either Commercially available Off-the-shelf product (COTS) or that might have been developed for deployment in another Land Record and Registration of Documents Administration environment including the existing software developed for Department of Revenue, Government of Punjab

However the bidder needs to select and declare one of the above mentioned option/approach for development of the application before initiating the project. In addition, IA shall ensure the bilingual interface (English and Punjab) of the software, modules and application

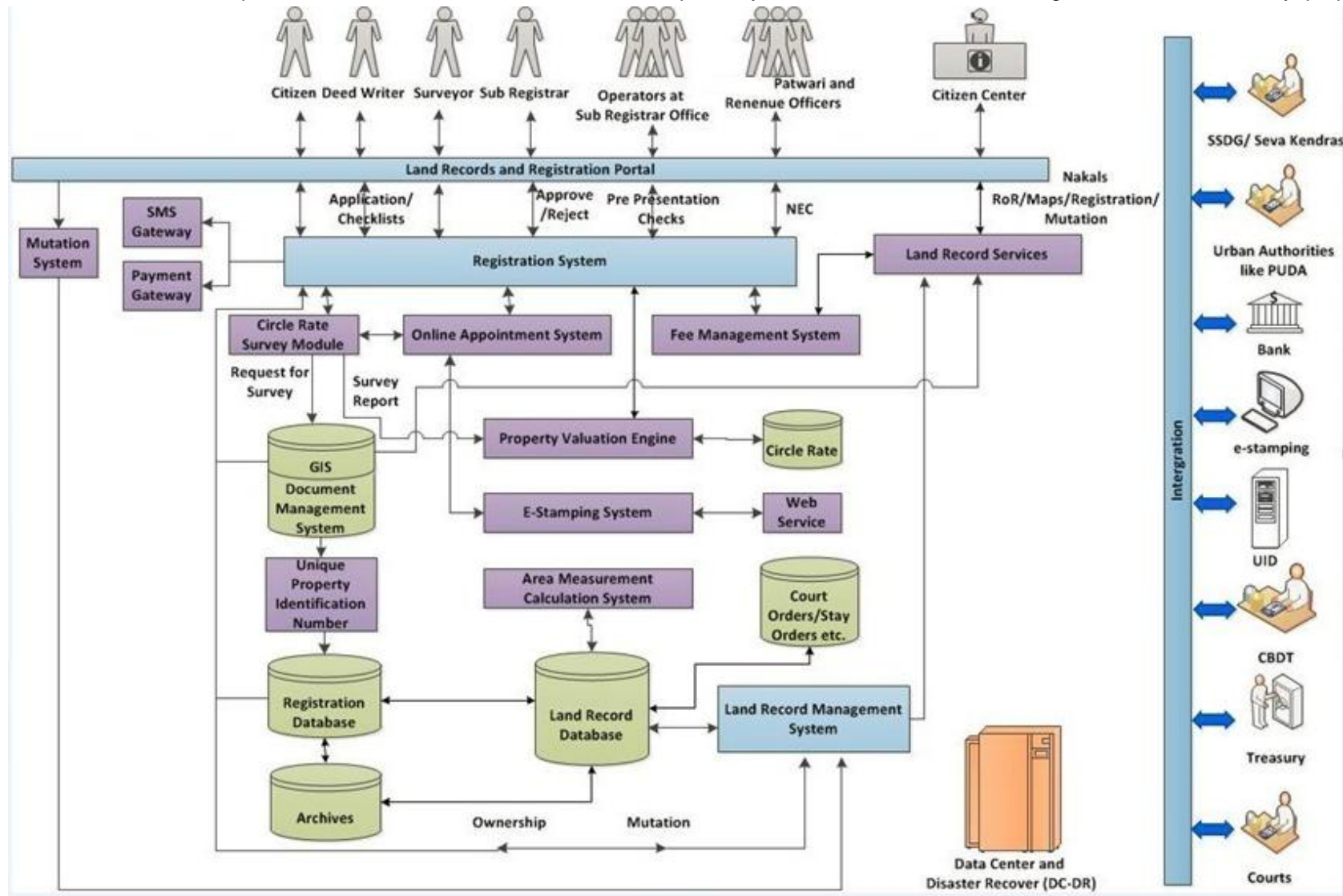
4.3.2.1 Enterprise System Architecture

The enterprise system architecture describes the holistic approach for the successful implementation of the I-LAS project. It will provide the channels and means of access of information that are delivered by user front-end and business interfaces of key information systems. It will also indicate the underlying internal and external interfaces of I-LAS. It will provide a high-level IT infrastructure enabling the application and information service delivery to the users. Please refer Annexure VII- 'Technology Architecture Requirements' for indicative Application Architecture Requirements, Database Architecture Requirements, Network Architecture Requirements, Security Architecture Requirement and Other Architecture Requirements.

IA shall consider the following parameters while developing the solution:

- **Scalability:** The system architecture has to be highly scalable in order to continue offering services at desired service levels during the entire duration of the contract
- **Performance:** Sufficient capacities have to be provided at all the levels of the solution (network, server capacity, application design, storage and others) to ensure satisfactory performance
- **Availability:** System has to be designed and built in a manner that provides for maximum availability as required to meet the specified service levels
- **Manageability:** The system has to be designed to provide necessary manageability of system to ensure effective monitoring and timely resolution of any issues relating to performance, availability and security of systems.

The summarized conceptual view of the various elements of Enterprise System Architecture and the organizational IT boundary proposed for I-LAS.



4.3.2.2 Project Phases

I-LAS project would be implemented in 5 phases:

Phase I: Planning

- IA shall prepare and submit the Project Charter, Project Plan and Specification of IT & Non IT infrastructure to the purchaser.

Phase II: Implementation Phase

In this phase, IA shall provide services for development and customization of the I-LAS Application with required hardware and software. The following services shall be provided by Bidder:

- Software development, customization and rollout of the software solutions involving all services and software functionalities as covered in this section which include.
 - Core Application and other supporting modules including mobile application as covered in the RFP
 - Workflow Management System
 - E-Mailing Solution
 - Document Management System
 - Business Productivity Suite
 - Operating System
 - Anti-virus and Anti-spam Solution
 - Software for Handheld devices
- IA shall submit the detailed software requirement specification document to the purchaser which shall cover the below, but not limited to:
 - Functional & non-Functional requirement
 - Overall descriptions
 - Requirements
 - Performance measurements
 - Constraints, assumptions and dependencies
 - Software development life cycle in detail (for all phases)
- Migration of legacy data from existing database to the target database
- Integration of I-LAS application with other applications like UID, Treasury, Urban local bodies, etc.
- Data Entry & Scanning (including scanning, indexing and tagging) of RoR and Land records document
- Development of Department of Revenue's website including providing citizen e-Services
- Integration with existing Call Centre for external stakeholders
- Provide Training / Orientation Sessions to Internal Users and external stakeholders
- Installation, Commissioning and Setup of the entire suite of applications at the sites identified by DoR.
- Installation, Commissioning and setup of the DR, DC and NLDC.
- Installation, Commissioning of IT and Non-IT infrastructure at all the sites Commissioning and Rollout of all hardware including desktops, printers (including paper for printing on legal, A3 and A4 sized papers), stationary (in case of paper, minimum 80GSM paper to be used),

scanners, bar code scanners, servers, consumables, storage infrastructure, information security infrastructure, digital signature etc.

- Establishment of the requisite non-IT infrastructure at various locations as identified and required in the project.
- Generation and submission of necessary documentation required in all five phases. Review and approval of Purchaser is required on all such documentation before commencement of activity.
- Documentation of the baseline configurations for all application equipment & facilities and getting it approved from Purchaser or the competent authority deputed by purchaser prior to commencement of installation. IA shall develop and implement a system to maintain these configurations and ensure adequate controls for change management process on an ongoing basis.
- Provide a single user development environment license in the name of the Purchaser for the various tools used by the IA during the development phase of respective solutions. These tools would typically include Application Development Framework / Environment for custom built and COTS based products, PDF Designer, Database Schema Designer, Help authoring tool etc., if used.
- Any additional components, sub-components, assemblies, sub-assemblies that would be required to meet the desired performance requirements will have to be provisioned by the bidder at no additional cost to the Purchaser and without any project delays.
- Develop Information Security Policies and Procedures for the Purchaser based on ISO/IEC 27002:2005 and implement the same after approval by the Purchaser before being implemented. The indicative list of mentioned domains as per ISO/IEC 27002:2005:
 - Security Policy
 - Asset Management
 - Human Resources Security
 - Physical & Environmental Security
 - Communications & Operations Management
 - Backup & Recovery
 - Access Control
 - Information system acquisition, development and maintenance
 - Incident Management
- Business Continuity Management
- SMS, Mail alerts and status updates
- Payment gateway

Phase III: Go-Live/Rollout

In this phase, IA shall Go-live/rollout the services to citizen as specified in “Section 4.21 - Timelines”

Phase IV: Operations & Maintenance

In this phase, Bidder would be responsible of operations and maintenance of the entire solution at Head Office, district offices, SROs and JSROs for the contract period. The bidder would also be responsible of operations and maintenance of the entire solution at Data Centre on cloud. The following services should be provided by IA:

- Operations Planning and Monitoring

- Ongoing Administration and Maintenance requirements
 - Operational Support
 - Maintenance and upgrade of solution
 - AMC Administration
- IT Helpdesk for internal users: IA shall establish the Helpdesk for approx. 15,000 internal and 1,000,000 external users and 500 concurrent users
- MIS Reports and Incident Reporting
- Required manpower and service delivery at all the sites to meet the SLA
- In case of changes in the location of the DoR offices during the contract period, the IA shall transfer the IT infrastructure to the new location and set it up without any additional cost to the Purchaser.
- The IA will be responsible for maintaining the required performance levels for the entire applications implemented during all three phases of the project.

Phase V: Exit Management

This phase will apply on expiry or termination of the Contract. Please refer section 2.36 of this document for details.

4.3.2.3 Standards and Frameworks

The Implementation agency should adhere with the latest data and metadata, information security, Indian government websites, digital signature standards & guidelines issued by the Department of Electronics and Information Technology, Government of India through its web site at <http://egovstandards.gov.in>. Additionally, the following standards shall be considered during development / implementation of the solution.

S. No.	Areas	Standard to be considered
1.	Data element encryption	AES
2.	Information security	ISO 27001
3.	Information transfer protocols	SOAP, HTTP/HTTPS
4.	Interoperability	Web services, open standards (An open standard is a standard that is publicly available and has various rights to use associated with it), e-governance standards (http://egovstandards.gov.in)
5.	Portal development	NIC Portal Framework http://egovstandards.gov.in
6.	Workflow design	WFMC/BPMN/BPEL Standards
7.	Application Security Verification Standard	OWASP
8.	Photograph	JPEG (minimum resolution of 640 x 480 pixels)

S. No.	Areas	Standard to be considered
9.	Scanned documents	PDF
10.	IT Infrastructure management	ITIL / EITM specifications
11.	Service Management	ISO 20000 specifications
12.	Software lifecycle processes	ISO/IEC 12207
13.	Fire Safety	Standard practices

4.3.2.4 Risk Matrix

For the scope of work that would be done by the Implementation Agency (IA) for the Purchaser, following risk-sharing matrix shall ensure accountability of IA and the Purchaser:

#	Risk Type	Responsible
A	Pre-Implementation Risks	
A1	Financing Risks	Implementation Agency
A2	Planning	Implementation Agency
B	Implementation Phase Risks	
B1	Design Risk	Implementation Agency
B2	Construction Risk	Implementation Agency
B3	Approvals	Implementation Agency
C	Operations Phase Risks	
C1	Technology Risk	Implementation Agency
C2	Operations & Maintenance Risk	Implementation Agency
C3	Traffic Risk	Implementation Agency
C4	Payment Risk	Implementation Agency
C5	Financial Risk	Implementation Agency
D	Handover Risk Events	
D1	Handover Risk	Implementation Agency
E	Other Risks	
E1	Change in Law	Department of Revenue
E2	Force Majeure	Shared
E3	Sponsor Risk	Implementation Agency
E4	Implementation Agency Event of Default	Implementation Agency
E5	Government's Event of Default	Department of Revenue

4.3.2.5 Responsibility Matrix

Party	Planning	Implementation	Go-Live	O&M phase	Exit Management
IA	<ol style="list-style-type: none"> 1. Team Mobilization, Detailed Project Plan & Project Charter 2. Specification of IT and Non-IT Infrastructure 	<ol style="list-style-type: none"> 1. Submission of SRS to the department 2. Connectivity and data replication of data between the sites including DC, DR and NLDC 3. Secondary Connectivity between SROs, Data Centres on cloud, Disaster Recovery on cloud, SR Offices and District Revenue Offices (Divisional Commissioners, District Collectors and SDMs etc.) 4. Designing and Development of Core Software and other supporting modules 5. Procurement and installation of IT and Non IT equipment at the respective sites 6. Setting up of Category A, B and C sites (including installation and commissioning of IT and Non-IT Infrastructure) 7. Data Entry & Scanning and Migration 8. Implementation of security controls in the system 	<ol style="list-style-type: none"> 1. Go live of all services and across sites as per the timelines covered in section 4.21 	<ol style="list-style-type: none"> 1. O&M of IT and Non IT equipment 2. Facility Management including management of infrastructure, utilities (like electricity, telephone etc.), ensuring safety and security of equipment of resources and data etc. 3. Up-gradation and renewal of licenses 4. Ensure Data Security, Maintenance, Management, Backup, Archival, Retrieval & Recovery. 5. Providing 11 defined services to the citizen 6. Back office operations 7. Generation of MIS etc. 8. Designing of supporting modules as and when it is required in future 9. Updation of Applications, Software and modules in the project 	<ol style="list-style-type: none"> 1. Transfer the licenses to the purchaser 2. All the documents related lying with IA to be transferred to the purchaser 3. All the I-LAS hardware and the systems to the purchaser

Party	Planning	Implementation	Go-Live	O&M phase	Exit Management
		9. Training and Change Management 10. Civil, Electrical, Furniture, Security services and Public health at the SRO and JSROs 11. Manpower deployment at all sites 12. Pilot run of the services in 2 district as decided by the department			
Department of Revenue/PLRS	1. Constitution of Steering Committee and Project Monitoring Unit 2. Deployment of Third party auditor or nominate officials for the audit 3. Review the various deliverables submitted by the IA 4. Project Monitoring and co-ordination with the Stakeholders 5. To provide space for Data Entry & Scanning to the IA at the existing SROs 6. To provide information, required by IA	1. Review various deliverables submitted by the IA 2. Project Monitoring and co-ordination with the Stakeholders 3. To provide the required space to IA for the establishment of SROs across the state 5. To approve the content of Capacity building and change management kits 4. To depute field officer for reviewing work being executed by the IA 5. To review and approve/reject the change request received from the IA 6. To perform UAT of site, Software and hardware deployed by IA	1. To monitor commissioning of sites and services as defined in timelines 2. SLA monitoring	1. Project monitoring 2. Transaction and finance monitoring 3. Service delivery monitoring 4. Coordination with DGR and other stakeholders 5. To review and approve/reject the change request received by the IA	1. Acceptance of all the deliverables/assets transferred by IA

Party	Planning	Implementation	Go-Live	O&M phase	Exit Management
Project Consultant	<ol style="list-style-type: none"> 1. To review the deliverables submitted by the IA 2. Co-ordination with the project stakeholders 3. SLA Monitoring 4. Ensuring quality in deliverables 	<ol style="list-style-type: none"> 1. To assist IA in the finalization of SRS. 2. To conduct sample site inspections and audit processes followed by the IA 3. SLA monitoring 4. Ensuring quality in deliverables 	<ol style="list-style-type: none"> 1. SLA Monitoring 2. Ensuring quality in deliverables 	<ol style="list-style-type: none"> 1. Assist the Department of Revenue and PLRS in monitoring the project 2. SLA Monitoring 3. Ensuring quality in deliverables 4. Monitoring and evaluation of project as per approved methodology 5. Periodic Project Reviews, Status and Inspection Reports as per approved Project Management, Monitoring and Evaluation Plan 6. Verification for release of payment to IA 	<ol style="list-style-type: none"> 1. Review the Exit Management Plan 2. Support Transition

4.4 Component Wise Scope of Work of IA

Component wise scope of work mentioned below is indicative in nature and the IA shall be provided detailed Functional Requirement Specification (FRS) document for developing / designing the final SRS. PLRS on behalf of DoR, GoP may propose modifications / deletions / additions in the SRS, which may or may not be in the FRS / RFP document. Therefore, the IA shall freeze the SRS after due discussion, deliberations and approval of the respective Committees appointed by DoR, GoP. The detailed scope of work is divided into different components as shown in the table below.

Component	Scope of Work Area	Responsibility
A	Legacy Data Conversion	Implementation Agency
B	Creation of Centralized Database	Implementation Agency
C	Development / Customization of Core Software Modules	Implementation Agency
D	Portal Development	Implementation Agency
E	Integration with Third Party Applications	Implementation Agency
F	Designing a GIS Solution	Implementation Agency
G	Commissioning of other Support Software Modules	Implementation Agency
H	Managed Services	Implementation Agency
I	Hardware, Equipment and Components	Implementation Agency
J	Training & Change Management	Implementation Agency
K	Implementation and Rollout	Implementation Agency
L	Ongoing Administration and Maintenance Services Constitution of the Team	Implementation Agency
M	Acceptance of System	Implementation Agency
N	Civil Infrastructure requirements for SROs	Implementation Agency

Note:

- IA needs to refer the Annexure IV – Functional Requirements Specifications for indicative functionalities of the core and other software applications.
- **Department of Revenue - Laws, Rules and Process:** IA shall match the Final System Requirement Specification (SRS) documents with the output / outcomes expected by the Department of Revenue, Government of Punjab; keeping in view of the fact that the proposed solution is to be aligned with following acts, rules and guidelines but not limited to:
 - Indian Stamp Act, 1899 and Punjab Stamp Rules, 1934
 - Registration Act, 1908
 - Punjab Land Records Manual
 - Punjab Land Revenue Act, 1887

- National Land Record Modernization Programme (NLRMP) / National Land Titling Guidelines of Government of India, (Gol)/ Digital India Land Record Modernization Programme
- The Punjab Regional and Town Planning and Development Act ,1995
- The Punjab Apartment and Property Regulation Act, 1995
- The Punjab Colonies Licence Rules
- Other revenue laws: Municipal Policies and Acts
- Town improvement Act
- Tenancy Act
- Any changes in the relevant acts and guidelines of Gol and State Government of Punjab Vis-a Vis this project shall be incorporated by the IA till the time the handover is completed successfully by PLRS/Purchaser.
- Purchaser may modify the respective FRS at any time until the handholding of the project is successfully completed, without any additional cost to Purchaser.
- An Indicative list of all the MIS reports (as mentioned in section 4.12.8) shall be finalized by the IA with the required approval of the respective Committees of DORs. The Purchaser may modify/Add/Delete the respective MIS reports at any time until the handholding is successfully completely, without any additional cost to Purchaser.
- On successful completion of User Acceptance Testing, the IA is to obtain a formal acceptance / sign-off from the authorised Committees The component wise scope of work is described in section 4.4

4.5 Component A – Legacy Data Conversion

4.5.1 Land Record Documents

- IA shall ensure that scanning of the land records documents is to be done at the existing SRO's but data entry of the scanned records can be done at central level. The Department will provide space at the existing SR offices as taking out the official records from sub registrar offices is not possible. IA shall scan all the documents at SRO and send the scanned copy to its central location for further data entry into the system/application.
- IA shall digitize (scanning, indexing & data entry) Mutation register data for all the 13000 villages (approx.) from April 2000 till date which are available in either English or Punjabi language.
- IA shall digitize Khasra Girdawari data for all the 13000 villages (approx.) for the last 5 years from the year of contract award
- IA shall do the Data Entry & Scanning of Jamabandi register for the pending 500 urban villages (approx.). IA shall also digitize any pending villages out of remaining 12500 villages (approx.) whose Data Entry & Scanning is not complete, from April 2000 till date.
- There are some missing/damaged field books which shall be reconstructed and digitized by the IA under the guidance of department which is approximately 2500 in numbers.
- IA shall digitize all the other land record registers like Roznamcha Waqiyati, Shajra Nasb, Field Books, Musavis etc. for approximate 13000 villages from the time of consolidation till date

4.5.2 Registration of Documents

- IA shall ensure that scanning of the registration deeds is done at the existing SRO's but data entry of the scanned records can be done at central level.

- IA shall setup central data entry facility for all the registration deeds for last 13 years starting from April 2002.
- Digitization would be done at local level at each of the SRO and JSRO locations where IA has to scan the Registration deeds for all the villages for past 13 years which are available in either English or Punjabi language.
- IA shall digitize the circle rates and stay order registers for all the SROs and JSROs.
- IA shall integrate Registration records with Record of rights.
- Details of khewats are as below:
 - Total number of khewats = 40,00,000
 - Number of khewats wherein property share does not match = 70,000
 - Number of khewats wherein data is not in correct format (as text entry has been done in cells) = 19,475

Moreover, databases are kept in decentralized format at each of the SR offices which needs to mapped with each other so that a centralized system can be made.

4.5.3 Scanning & Drafting/Digitization of Musavis Maps

IA shall digitize (scanning and drafting) 80,000 Musavis (approx.). IA shall create the damaged musavis using field book with relevance to digitized Jamabandi data. The Department of Revenue maintains cadastral maps (Musavis) for each village in physical form. These shall be digitized and brought under a standard projection/coordinate system for effective linkage with other land record information in the GIS environment.

The digitization (scanning and drafting) of the cadastral maps shall include following activities:

- Implementation agency shall verify the availability of the cadastral maps (Musavis) and their condition at the start of the project with reference to their suitability for scanning and drafting.
- A detailed report shall be submitted to the Department of Revenue including details of the missing / damaged maps.
- IA shall scan the cadastral maps (Musavis) as per NLRMP/DILRMP guidelines.
- Scanning of maps shall be carried out at tehsil offices or other authorized locations approved by the purchaser or the competent authority deputed by the purchaser. Physical maps shall not be carried outside the premises of Department of Revenue without written permission from purchaser.
- IA shall be responsible to provide scanner for musavis map scanning. The IA shall geo-reference the scanned cadastral maps (Musavis)
- Ortho rectified satellite imagery available with the Department of Revenue shall be used by the Implementation Agency for Geo-referencing of the cadastral maps.
- A map index sheet of the cadastral maps (Musavis) in the State linked with Khasra numbers shall be prepared which shall serve as reference grid.
- The index number shall be generated using the village metadata with respect to the various administrative codes (State, district, tehsil, village code, etc.)
- Vectorization of the cadastral maps should be as per NLRMP/DILRMP guidelines.
- Vectorised data shall be edge-matched, mosaicked, and the topology created as per the conventions specified
- The mosaicked maps shall be converted to GIS format and transformed using ortho-rectified geo-coded High Resolution Image
- Integration of spatial database with textual RoR data

- Damaged Musavis - As per the records, 12% of Musavis are either damaged or missing. These have to be rebuilt from the field books or other sources. IA shall prepare fresh Cadastral map with the help of team constituted especially for this purpose by the Purchaser or the competitive authority deputed by the purchaser.

Volumetric Estimation – Data Entry & Scanning

Document (A)	Approx. number of documents (B)	Approx. number of pages in each document (C)	Total Number of pages (D=BXC)
Number of physical registered deeds (last 13 years)	7068143	10	70681430
Stay Orders (for SROs/JSROs)	170	100	17000
Circle Rates (Current Year)	170	20	3400
Number of Musavis/Village Maps	80,000		80,000
No. of Land record Registers (Roznamcha Waqiyati, Mutation register, Khasra Girdwari, Shajra Nasb and field book) for 13000 villages – Total Number of pages for Data Entry & Scanning of "Land record Registers (Roznamcha Waqiyati, Mutation register, Khasra Girdwari, Shajra Nasb and field book) for 13000 villages" is 13,00,00,000 pages	1300000 (Books)	100	130000000
Pending Jamabandis of urban villages (approx. 500 villages)	500 (Books)	100	50000
Dispute Registers (April 2000 onwards)	170	100	17000
Approximate Number of Musavis / Village Maps to be created from Field book	2500		2500

Please refer section 4.2.9 of Annexure IV – Functional Requirement Specification for details.

4.5.4 Quality Checks, Data Migration and Validation of Data

4.5.4.1 Data Quality Checks:

IA shall adopt the following strategy for data quality checks:

- Each scanned document will be checked for quality as Data Entry & Scanning will be done on the basis of scanned record.
- The double blind method of data entry shall be used for each scanned document.

- In double blind data entry method, two data entry operators shall enter same record. System will automatically check both the records and if the record does not match, data entry of the same record shall be done again.
- IA shall deploy dedicated quality team to ensure 100% quality output of digitization.
- Composition of the Data Quality Assurance Team: Data Quality shall be assured by the IA and shall be responsible for verification and validation of digitized information. Purchaser may depute a team of experts (like domain experts, administration experts, technology experts, etc.) to conduct random checking of the record/data.
- Quality Assurance Team would at least undertake the below tests:
 - **Data Accuracy Tests:** Implementation Agency (IA) to electronically match data values between the source and destination tables. It would help to establish whether all the land records data has accurately been ported to the destination and will also ensure if all the data in the scanned images are reflecting correctly in digitized form.
 - **Data Completeness Tests:** Implementation Agency (IA) to electronically summarize and balance the record count or other control totals between the source and the destination database.
- IA shall ensure 100% data accuracy of each digitized record.

4.5.4.2 Data Migration:

- Data Migration in the context of Punjab Land Records is the process of transporting of the existing data that is spread in approximately 170 databases at tehsil/sub-tehsil level into the newly model centralized database.
- At present, there are approximately 70,000 Khewats out of approximately 40 lakh khewats in which, property share does not match. In that case, the IA shall correct the property records after getting the business logic from the Purchaser.
- If business logic does not work regarding the sharing issue then IA shall fix the issues with due consultation of the Purchaser.
- There are 19,475 khewats, wherein text entries are present (out of approximately 40 lakh khewats) which is required to be fixed with due consultation of Purchaser.
- Since the databases were created and established locally at Tehsils across the state without mapping among the different locations, these databases have localized master data in them. While consolidating the databases of various tehsils and sub-tehsils into a centralized database, such master data has to be managed properly so that the lineage of the records is not lost.

Data Migration would comprise of the following activities:

- Study of the existing data structure, identification of the potential problems that may create issues during the digitization and data migration.
- Identification of specific activities involved in the data migration process, preparation of detailed work breakdown structure for the data migration project and submission of relevant documents for each of the activity to the Purchaser for approval.
- Design of an extensible database according to the requirements in the FRS.
- Conversion of non-Unicode data in the existing databases to Unicode data.
- Porting data into the new structure using ETL tools, scripts or customized application and validation of the data after porting. The entire activity has to be audited in detail to find out any issue that may lead to loss of data.

- Validation of migrated data against the source data using relevant Tools/scripts/customized applications and documentation.
- IA should document each and every activity related to the database migration and the same to be submitted to the Purchaser. When it comes to data, the IA must maintain the details of each and every record that is corrected/ cleansed in the audit logs.
- IA must constantly validate the transported/ migrated data, as accuracy less than 100% will result in non-acceptance of the migrated data. In such cases the IA has to redo the migration of data. The variations have to be documented and submitted to the Purchaser. The same has to be corrected before the data is submitted to the Purchaser. Purchaser may check random records/data for the purpose of verifications.
- The migrated data to be submitted by IA may undergo 100% validation/verification from the concerned Revenue Officials of the department as and when required for making the record authentic and ready for Go-Live.

4.5.4.3 Data Validation

- Data is very sensitive and critical in nature; hence it has to undergo validation at multiple levels. Data validation may include both qualitative and quantitative analysis by the IA. The same data shall be verified by the concerned Revenue Officials, Patwari (100% data verification), Kanungo (100% data verification) and Tehsildars (25% - random data verification).
- Data validation of all the digitized land records such as Cadastral Maps, Field Books, Jamabandi, Mutation Registers, Roznamcha Waqiyati, Khasra Girdawari and Registered Documents is required.
- Auditing the data migration activity is to ensure that the data migrated is 100% replica of the existing data.
- Data Migration will require a proper validation of it to ensure the completeness of the full migration. Indicative method of the data validation has been depicted below:

#	Method	Controls required for validation to ensure successful data migration
1.	Programmatic Binary data analysis:	Number of records migrated should equal the number of records in the source database.
		Number of fields which are having NULL entry should match
		Number of fields which should not be null; but are having null values in the source database and migrated database should match
		Count of Owners in the source database and migrated database should match
		Count of entries in Khasra Number column in the source database and migrated database should match
		Count of entries in Rights & Liabilities Columns in the source database and migrated database should match

4.5.4.4 Transition and Data Migration of existing system

- Land Records data is computerized to the extent of 98%+, in the State of Punjab. The job of entering the mutations, updating the land records accordingly and issuing copies thereof is being carried out by CMS, a private firm in 20 of the 22 districts in the State and by CMC in the remaining 2 districts. In all, about 1000 IT officials have been deployed at 165 locations.
- It is proposed that the new vendor after signing of the contract will develop software for managing and updating the land records as per the upgraded requirements and take a copy of the entire data lying distributed at various locations across the State and pool it in a single database at a Central server. This will involve getting the records digitally signed from the concerned authorities. This will be done in a professionally managed data Centre (on cloud) using modern techniques such as double blind system of data entry to ensure correctness of data.
- Data entry/digitization of land records of the remaining 2% villages is very important as all the urban villages fall in this pendency. The IA shall undertake the data entry/digitization of the remaining urban land records.
- During the ensuing 4 months, the new vendor will carry out the field trial/ test run of the whole system on the Hardware, Software, Network and Manpower deployed at the designated locations and run the system in parallel to the existing system to fulfil the existing manpower and system without impacting the existing system
- Mutations that take place in the transition phase of 4 months, on the old system will be incorporated in the new database, as a one-time measure.
- It is at this stage that the IA will interface with Department of Governance Reforms, Punjab initiative Seva Kendras (USDC) to start selling the copies from the new system and be entitled for payments at settled rates. IA shall maintain database and will prepare interface with USDC. The USDC shall be maintaining the front end delivery centers and will deliver nakal and certificate services. The existing vendor will continue to sell the copies till this point at old rates.
- The registration process however will be developed and deployed by the IA as per the timelines (please refer section 4.21) and the Service Level Agreement (please refer Section 5), independent of the land records work.
- Land Records will be linked with the Registration Software as per the timelines given in the RFP and as per the SLA that prescribes withholding of the payments and penalties in case of delay.

4.6 Component B – Creation of Centralized Database on cloud

The envisaged system will have a Centralized Database on cloud of the property holdings, giving access of following information:

- RoR and Registration data
- Real time updation of RoR
- Property identifying data,
- Ownership data,
- Cultivator data,
- Property usage data (commercial / agriculture/ industrial)
- Fees & Circle rate
- Tagging on the property that will have a bearing on the RoR data (mortgage, disputes (restrictive covenants).
- Transactions on the property

- All historical information of changes in important data fields

Note:

- Currently, the existing vendor is undertaking the data entry of Jamabandi (Record of rights), Mutation, Girdawari and Roznamcha at each Tehsil/sub-Tehsil level.
- IA shall migrate the digitized land records to the new database, sanitize it and validate the migrated data before the transition period.

4.7 Component C - Development / Customization of Core Software Modules

The Integrated System, christened as I-LAS, is connected by a workflow subsystem and suitable ICT Infrastructure to deliver a consistent experience to everyone in the Department. I-LAS will provide a platform for integration of each area in the basic system which refers as the core functions: Land Records & Registration of Documents administered by the purchaser as per relevant acts & rules.

4.7.1 Component C.1 - Land Records - Modules

Existing CLR modules shall be replaced with the new enhanced land record software designed and developed by IA. The indicative modules, to be designed and developed, under Land Records Systems are as below:

4.7.1.1 Jamabandi Module

Jamabandi is the main document that is prepared as part of "Record of rights" (RoR). One Jamabandi is prepared for every village and a "presumption of truth" is attached to it. This document contains entries regarding name of land owners, owner's share in the land, cultivators of the land, details of all the Khasras in a Khewat, such as Khasra nos., mode of irrigation, tenancy rule, Land Revenue and Remarks. The main features of the Jamabandi module would cater to following:

- System shall be capable of updating Jamabandi on the approval of mutation and capturing complete audit/log trail.
- Provision to online view and generate a Nakal of Jamabandi. Please refer section 4.1.6 – Nakal Module of Annexure IV – Functional Requirement Specification for details
- Provision to view the updated Jamabandi at any instance
- The complete flow for correction in Jamabandi (Fard Badar) shall be incorporated in the system
- The system shall have the provision of generating MIS report of the Jamabandi for Daur period. IA should provision for providing printouts of the same to the purchaser
- The System shall have the provision to generate Village, Tehsil and District wise MIS report of Jamabandi
- The reports generated through the software shall be in compliance with the proformas given in the Punjab Land Records Manual.
- Digital linkage between registration & updation of land records, including auto-locking of the land transaction under mutation notice, which would reduce fraudulent multiple transactions.

Please refer section 4.1.5 - Land Record Management Module of Annexure IV – Functional Requirement Specification for detail

4.7.1.2 Mutation Module

The system shall show all types of mutation requests initiated through registration system, online user request and through court orders in a dashboard to the revenue officers (Patwari, Kanungo and Circle Revenue Officer). The main features of the Mutation module would cater to following:

- The system shall allow to cross-check the details of mutation request against the digitized Jamabandi from the land records database.
- The system shall allow the authorized user to approve/reject the mutation request. If approved, the Jamabandi will get auto updated and if rejected, the reasons of rejection would be captured in the system with proper log, tagging and there will be no change in Jamabandi.
- The system shall be capable of handling all types of Mutation administered by DoR as per applicable acts and Rules.
- The system shall be capable of handling contested mutation. The system should be capable to roll back the changes in Jamabandi after approval from the concerned authority.
- System shall be capable of updating land record as per the request for mutation initiation and the approval of concerned authorities.
- The system shall be able to initiate mutation on the various type of requests for example request through the registration of documents from SROs and other types of requests like Mutation based on court orders and mutation request received from the citizen through Seva Kendra/ online request
- The mutation module shall be integrated with RoR. For example: in case of partition, the ownership details for new two land parcels should be reflected in Jamabandi, field book and cadastral maps.
- The system shall be capable of handling appeal cases during mutation. In such cases, the system shall be capable of forwarding such issues to the higher authorities and tag such land parcels for future reference.

Please refer section 4.1.5 - Land Record Management Module of Annexure IV – Functional Requirement Specification for detail

4.7.1.3 Khasra Girdawari Module

Khasra Girdawari is the harvest inspection book maintained by Patwaris. Patwari conducts a field-to-field inspection in each harvest in their circle. They record the fact regarding crop grown, soil classification, Changes in rights of possession and rent, change in owner ship, etc. In addition, information regarding special inspection is recorded in this register. Special inspections are conducted when crop fails to germinate, dries up, or is destroyed by calamity of season. The main features of the Khasra Girdawari module would cater to following:

- The system shall be able to generate Khasra Girdawari register as per Land Record Manual.
- The Girdawari is updated every 6 months i.e. once for Rabi and once for Kharif crops every year. The software shall have the capabilities of rolling forward the land record information from previous seasons and modification of the same wherever applicable.
- The system shall generate a report with respect to crop type, land type and sources of irrigation.
- There shall be an option for finding owner-wise cultivator details
- Any change in cultivator during the survey by Patwari should be reflected in the Khasra Girdawari
- Any changes in ownership through mutation shall be reflected in Khasra Girdawari.
- The Khasra Girdawari system shall be mobile enabled so that Patwari's can enter data using same in order to achieve objective of paperless office.
- The system shall be capable of generating report on the basis of Khasra Number

- The system shall be capable of changing the land type, crop type, sources of irrigation etc. and such changes should be reflected in Khasra Girdawari. For example change from Agricultural land to Residential or commercial land.
- The system should be capable of generating updated report of Khasra Girdawari, related to change in land type as well as change in cultivator (as and when daur period of Jamabandi is completed or as and when required by the Department). The MIS shall be able to capture the list of changes.
- The Khasra Girdawari module shall be integrated with the RoR. The system shall be capable of real time updation of Khasra Girdawari register, after the approval from the concerned authorities.

Please refer section 4.1.5 - Land Record Management Module of Annexure IV – Functional Requirement Specification for detail.

4.7.1.4 Roznamcha Waqiyati Module

The Roznamcha Waqiyati is the book in which occurrences relating to the Patwari's duty and their Circle is to be entered day by day. To and fro activities of the Patwari are also to be entered in this book. It also captures rapats that impacts the RoR. The court orders related to any land parcel are also mentioned in this book. Roznamcha Waqiyati Module shall act as a log of events and activities performed by the Patwari on daily basis. The main features of this module would cater to following:

- The system shall have provision to maintain copies of all orders and instructions received by Patwari. The module shall capture the log of such orders and instructions.
- The system shall facilitate the scanning and uploading of court orders and other documents with the Roznamcha Rapats.
- The system shall have a provision to enter the details of daily activities performed by Patwari like all types of Mutations, Partition of property, Merging of Property, Demarcation request, Mortgages, any other updation related to Jamabandi, Khasra Girdawari, Field book etc. in this module.
- There shall be a provision to reflect the Roznamcha comments in the Jamabandi.
- There shall be a provision to view all the reports of Roznamcha on the basis of Khewats, Khasras and Khataunis number. The system shall also have a provision to generate category wise rapats.
- The system shall reflect the orders/ instructions as entered in the Roznamcha Waqiyati by the Patwari in the Jamabandi as well as mutation and other related modules etc.
- The MIS Reporting Tool shall be capable of generating report on the basis of Rapat number and Rapat date. . Please refer section 4.12.8 – MIS Reporting Tool for indicative list of MIS reports.

Please refer section 4.1.5 - Land Record Management Module of Annexure IV – Functional Requirement Specification and other related sections for detail

4.7.1.5 Field Book and Cadastral Maps

Field Book register is maintained by Patwaris and it contains dimensions of each Khasra in the village, their areas and formula to calculate the Khasra area, land types in that Khasra with their corresponding areas and remarks. Field book is used to draw the cadastral maps (musavis) of the village. On the map, dotted line is drawn to represent Gosha. Field Book register of a village was prepared at the time of consolidation of that village. The main features of this module would cater to following:

- Provision to generate Maps (where cadastral maps are not available)

- Provision to enter the area of a field in Jamabandi through this module
- Any special feature in the Khasra must be specified and entered in the Field Book
- There must be a validation check to match the Area calculated from the Field Book with the dimensions as per the Musavi and Jamabandi
- Integration with Mutation module.
- Provision to generate tatima fieldbook after capturing required details.

4.7.1.6 Mortgage

- The system shall allow the registration authority to capture the details of every mortgage or de-mortgage of property/land parcel as a part of registration of mortgage.
- The system shall provide an interface to the banks to mortgage or de-mortgage a property after approval from competent authority.
- The system shall be capable of generating report for the number of mortgage and number of de-mortgage properties with full details like owner name, land details, bank details etc.
- Following details will be shared by the Bank which will be checked and approved by competent authority in the department:
 - i. Name of the Bank or lender
 - ii. Tenure of loan
 - iii. Loan amount
 - iv. Mortgage Release Date
 - v. Registration Reference No.
 - vi. Registration Date
 - vii. Stamp Duty Paid
 - viii. Village
 - ix. Khewat Number
 - x. Khasra Number

Please refer section 4.1.5 - Land Record Management Module of Annexure IV – Functional Requirement Specification for detail

4.7.1.7 Partition Module

- The partition module shall be integrated with Jamabandi, field book and cadastral maps. For example: in case of partition, the ownership details for new two land parcels should be reflected in Jamabandi, field book and cadastral maps.
- This module will have parameter where number of parts in which property has to be divided is to be provided.
- The property identifying data and property usage data for each of the partitioned part would be recorded.
- New Unique Property Identification Number will be assigned to each partitioned part of Khasra number which will be linked to the original “mother UPIN”.
- Linkages of original property and its owner & partitioned property & its owners would be maintained.
- Partitioned Property will be available for transfer after confirmation by verifier. Sub-division and transfer would be carried out as separate transactions.

- The System will not allow partitioning in case of pending mortgage, judicial proceedings or specified tagging.
- System shall be capable of handling all types of stages of partitions like Naksha Alif, Bey & Zeem etc.

Please refer section 4.1.5 - Land Record Management Module of Annexure IV – Functional Requirement Specification for detail

4.7.1.8 Merger Module

- The merger module shall be integrated with Jamabandi, field book and cadastral maps. For example: in case of merger, the ownership details for the merged land parcel should be reflected in Jamabandi, field book and cadastral maps.
- In merger transaction two or more properties can be combined to form one piece of land. New UPIN will be generated for merged property. The system shall be capable of maintaining the history of such transactions.
- This transaction could be merger by private individual of multiple properties or land reorganization of multiple types including land acquisition, land agglomeration, land re-distribution by Governmental agencies which transforms the original land to create a public infrastructure (say SEZ/road).
- System will provide linkages between new UPIN and the UPINs of the original pieces of land that got merged.
- Merger transaction will have a field to record remark to indicate reason for merger.
- The System will not allow merger in case of pending mortgage, judicial proceedings or specified tagging.
- After the merger of multiple properties, it can be mapped to a specific category (like SEZ/ROAD/ Colony/) with a UPIN (eg SEZ-001)
- In case more properties are added to the same infrastructure (eg SEZ 001) the UPIN will remain the same. The UPIN of the new property after merging of the additional properties will be different
- The system will maintain the audit trail of each merger against the UPIN.
- System will not allow merger in case of pending mortgage, judicial proceedings or specified tagging.

Please refer section 4.1.5 - Land Record Management Module of Annexure IV – Functional Requirement Specification for detail

4.7.1.9 Tagging

- Authorized users will be given ability to tag following additional information pertaining to property:
 - i. Rival claim of ownership
 - ii. Restrictive Covenants
 - iii. Statutory Prohibitions
 - iv. Rights of Pre-Emption
 - v. Age & Transfer Restrictions
 - vi. Easements
 - vii. Judicial Order
- Master list of tags will be maintained in the central system.
- System administrator will be able to add new tags to this master.

- The System will not allow ownership transfer in case of pending mortgage, judicial proceedings or specified tagging.
- The System will not allow any other transaction once tagging is done.
- Provision for removal of TAG will be given with appropriate maker – checker / digital security certificate based option.
- The system should be capable of maintaining different levels of tagging i.e. Khewat, Khatauni or Khasra no.

Please refer section 4.1.5 - Land Record Management Module of Annexure IV – Functional Requirement Specification for detail

4.7.1.10 Query/Advance Search Module

- The system will have facility to inquire the title of particular property using browser based front end over the internet.
- Property record details can be searched using a combination of criteria such as:
 - i. Unique Land Identification Number (UPIN)
 - ii. Owner Name/Father's Name/Grandfather's Name
 - iii. District/Block/Village
 - iv. Tehsil/Sub-Tehsil
 - v. Ward No./Survey No./Colony/Landmark/PIN
 - vi. Date Range
 - vii. Transaction type and date
 - viii. Property Identifying Parameters
- System shall be able to search the property by entering the name of property owner, Khasra number, Khewat No. PAN number, UID etc. entered during the registration of the property.
- Search application should work like a search engine in the project

Please refer section 4.2.10- Query/Advance Search Module of Annexure IV – Functional Requirement Specification for detail

4.7.1.11 Circle Revenue Officer Module

- The circle revenue officer (CRO) module shall cater the following functions:
 - i. Updating land record dataas per CRO's approval
 - ii. Possession & Survey,
 - iii. Nishan Dehi / Demarcation
 - iv. Government Land Management
- In case of issues like execution of warrants related to financial / legal recoveries and any land record disputes, the CRO module shall be capable of forwarding such issues to higher authorities.

Please refer section 4.1.5- Land Record Management Module of Annexure IV – Functional Requirement Specification for detail

4.7.1.12 Circle Rate Module

- The IA shall plot the circle rate zone landmarks given by the purchaser on the base map for registration of deeds classified as residential, Commercial and Agriculture, etc. reflecting the true picture of the real estate market.

- IA to provide software for survey team so that they can input into the system key parameters for defining circle rates
- In the case of Agricultural land:
 - i. Classification of land as dry, garden, wet etc.
 - ii. Classification under various classes of soil in the survey records
 - iii. Value of adjacent lands in the vicinity
 - iv. Nature of crop and average annual yield from the land (integration with revenue record)
 - v. Proximity to road and market, level of land, transport and availability of irrigation facilities
 - vi. Other factors which influence the valuation of land in question
- In the case of House Sites
 - i. The General value of house sites in the locality
 - ii. Proximity to road, railway station, bus route
 - iii. Proximity to market, shops etc.
 - iv. Amenities available e.g. Schools, Hospitals, educational institutions
 - v. Development activities, industrial improvements in the vicinity
 - vi. Land Tax and valuation of sites with reference to taxation records of the local authorities concerned (integration with local municipal House Tax information in case of Urban)
 - vii. Any other special features like public water supply, lawn, swimming pools etc.
 - viii. Properties other than lands, house sites and buildings
 - ix. Nature and condition of the property
 - x. Purpose for which the property is being put to use
 - xi. Any other special feature that may have a bearing on the valuation of the property
- IA to provide one dedicated resource at each district for collecting Circle rate related information and submitting the same into the system
- The solution should be capable of integrating with Survey, registration and land record data and provide forecasting on circle rates as per defined zones.
- The system should be capable of marking zones and segments on the base map as proposed by the IA after approval from the department.
- Segmentation would be done for the purpose of determination of circle rates of urban and rural properties. Indicative Segmentation for Urban properties, a segment will consist of localities/ mohallas / nagars (Every locality would consist of blocks whose numbering would be done from left to right in the way Khasra numbers are arranged in a Mushtil.
- For Rural land parcels, segment will consist of Village, Khasra and Blocks and would be done by the Implementation Agency (IA) in coordination with Tehsildar, Kanungo, and Patwari.
- The system shall provide the functionality for creating and modifying Area/Zones/Circles/Segments by the authorized users.

Please refer section 4.1.5- Land Record Management Module of Annexure IV – Functional Requirement Specification for detail

4.8 Component C.2 - Registration of Documents - Modules

4.8.1 Online Application Form for Registration of Documents

The System shall have an online application form for registration of document. The online form for registration shall be accessed on the portal. It shall have facility to capture all the required details as per the type of deed. The online form for Registration to be filled by the user shall be bilingual (English and Punjabi) and shall be capable of accepting inputs in English and Punjabi languages. The system shall authenticate the genuine user through mobile OTP which will be delivered through the SMS Gateway. The system shall auto generate the Transaction Reference Number (TRN) on successful submission of the Registration Form. *Please refer section 4.1.1 - Online Request for Registration of Annexure IV – Functional Requirement Specification for detail*

4.8.2 Pre-Registration due diligence Module

This module shall cross check the details entered by the user while filling the online application form for registration of document by fetching the data from the centralized database and will notify the competent authority by generating alerts and notifications in case of mismatch. *Please refer section 4.1.1 - Online Request for Registration of Annexure IV – Functional Requirement Specification for detail*

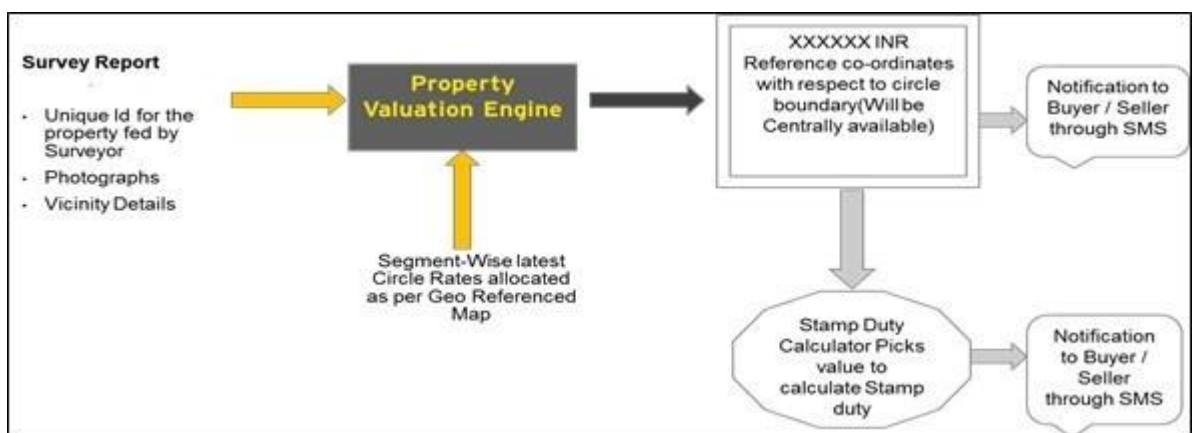
4.8.3 Circle Rate Due-Diligence Module

Mobile application based circle rate survey shall be mandatorily done to identify segment/location in which the property is located of each and every khasra in the state with due coordination with the department. The Surveyor shall capture data against the various parameters which will be further helpful in fixing the DC rate with due coordination of the concerned district officer. During the registration of documents process the system shall extract the circle rate of the particular khasra from the database.

Please refer section 4.1.1 - Online Request for Registration of Annexure IV – Functional Requirement Specification for detail

4.8.4 Property Valuation Engine

This shall be used for automated valuation based on circle rate survey report and updated circle rates in the system.



Primary Inputs to the engine would be:

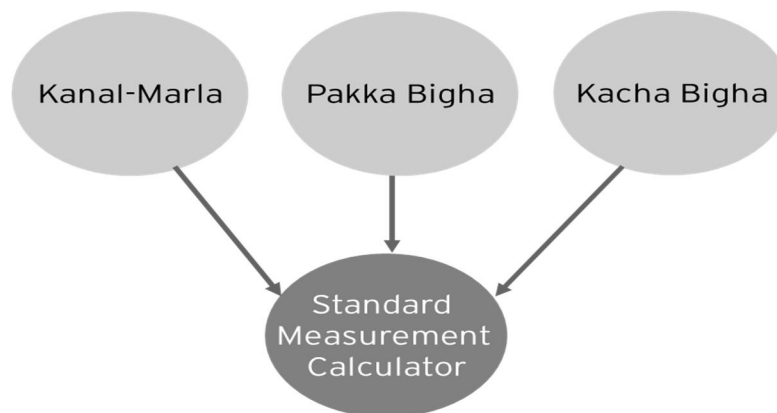
- a. Circle Rate Survey Reports of the property fed by surveyor along with photographs and vicinity details.

- b. Other major input to the Engine shall be the latest Segment-Wise Circle Rates which have been allocated as per the Geo referenced maps.

The Automatic Property Valuation Engine shall calculate the value of property based on the inputs provided. This valuation report shall be available centrally through the web-portal. Also, a notification with valuation details is sent to the Buyer / Seller through a SMS. The output from the engine i.e. the valuation details shall then be picked up by the Stamp Duty calculator to calculate the stamp duty and a notification is sent to Buyer / Seller through a SMS. *Please refer section 4.1.1 - Online Request for Registration of Annexure IV – Functional Requirement Specification for detail*

4.8.5 Property Area Measurement Calculator

Currently different regions in Punjab are using different dimensions for land measurements which cause problems during property valuation as measurement units defined in the Circle rates do not readily relate to land measurement dimensions. E.g. If Circle rates in a particular region in Punjab are mentioned in Kanal-Marla/Feet and area dimensions of the property is defined in Kacha Bigha; it becomes difficult to calculate the area and subsequently the value of that property. This is to introduce standard measurement for internal efficiency while continuing with local measurements for the public services. Thus, the Property Area Measurement Calculator shall convert the existing measurement units like Kacha Bigha, Pakka Bigha, and Kanal-Marla into a standard unit which will be Square yards. It shall relate to the circle rates which will also be available corresponding to Standard metric measurement for example Square yards. *Please refer section 4.1.1 - Online Request for Registration of Annexure IV – Functional Requirement Specification for detail*



An indicative representation of Property Area Measurement Calculator

4.8.6 Online Appointment System

The online appointment system shall be integrated with property valuation engine and e-Stamping solution. The property valuation engine will evaluate the stamp duty to be paid by the citizen as per the circle rate due diligence/DC rate of the particular khasra. The citizen who pays the stamp duty (through e-Stamping only) shall be able to book an online appointment for registration of documents by entering the unique e-Stamping number. This appointment system gives the citizen's flexibility to book their preferred day and time slots when they can come for getting their property registered. It will display all the time-slots in front of the user with a clear colour demarcation between the slots already taken and the available ones. Appointment system shall have the facility of re-scheduling the appointment before the schedule date by accessing "Re-schedule/ Cancel appointment" option available in the system. In case of deficiency of paper

or other administrative issue, System shall be able to re-schedule the appointment after getting the valid reason from the citizen (through online application/ Seva Kendra).

The system should be capable of rescheduling the appointment in case SR leaves the office or takes off due to some urgent call. In this case System should be capable of capturing the request through web application as well as mobile. The system shall provide a provision to Administrator to allocate time slots for VIP Persons, Celebrities etc. An indicative online appointment screen is below:

Choose your preferred Appointment Time																
Time	Appointment Slots															
Slots	:00				:15				:30				:45			
9	09:00	09:00	09:00	09:00	09:15	09:15	09:15	09:15	09:30	09:30	09:30	09:30	09:45	09:45	09:45	09:45
10	10:00	10:00	10:00	10:00	10:15	10:15	10:15	10:15	10:30	10:30	10:30	10:30	10:45	10:45	10:45	10:45
11	11:00	11:00	11:00	11:00	11:15	11:15	11:15	11:15	11:30	11:30	11:30	11:30	11:45	11:45	11:45	11:45

Please refer section 4.1.3 – Appointment Module of Annexure IV – Functional Requirement Specification for detail

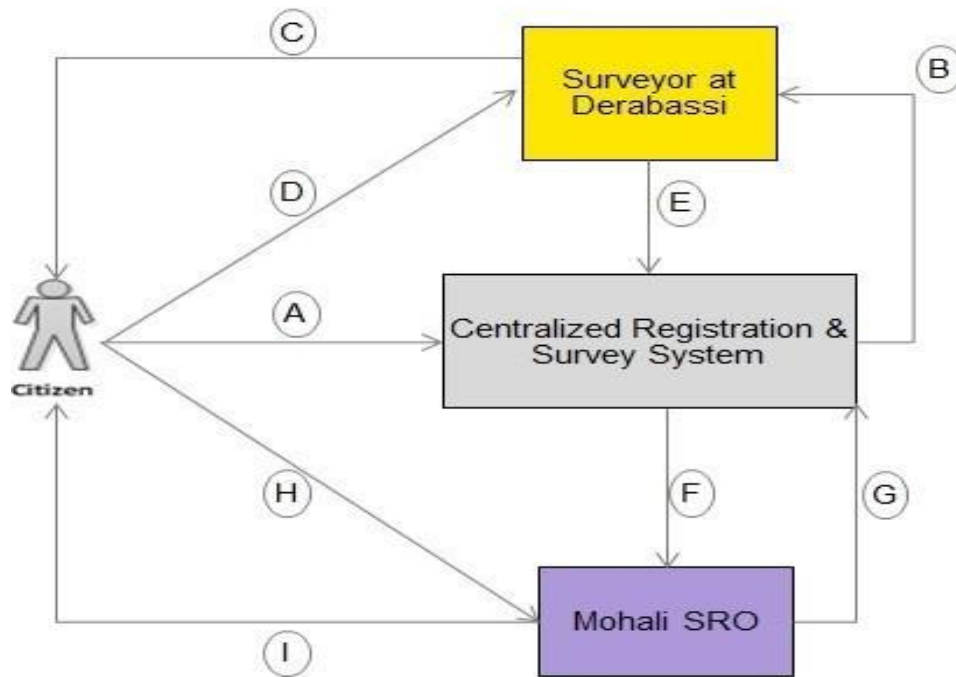
4.8.7 Audio video recording system

IA shall provide an **audio video recording system** setup in SR cabin to record the audio video especially in the case of registration of will. The recording shall be properly indexed by the system and stored in the centralized database for easy retrieval. *Please refer section 4.1.4 – Registration of Document Module of Annexure IV – Functional Requirement Specification for detail*

4.8.8 Anywhere Registration

The **Registration of Documents** system shall be capable of **Anywhere Registration** of documents in the State including On-line appointment & submission of documents, etc. Currently, due to decentralized system for registration a citizen can't register his property anywhere; thus, he has to mandatorily visit the SRO under which the jurisdiction of corresponding land lies. The SRO's sometimes are very far and cause a lot of inconvenience to the citizens. Now with the new centralized database, anywhere registration facility shall provide the flexibility to access any nearby SRO to register the land property in the same district. The System shall have the capability to register property anywhere in the State but initially it would be restricted to registration of properties within a district. It can be implemented only after the amendment of the Central Act. *Please refer section 4.1.4 – Registration of Document Module of Annexure IV – Functional Requirement Specification for detail*

Example: If a Citizen in Mohali wants to register a property in Derabassi, he would need to follow the below sequence of steps as mentioned in the indicative Anywhere Registration (within a district) process diagram below:



4.8.9 Process for Registration of deed

- The system shall allow the operator at reception to confirm the appointment by entering the TRN as mentioned on the appointment slip.
- The system shall display a checklist of documents to allow the operator to validate the list of documents.
- On successful validation by the operator, the system shall now generate a Token number.
- The system shall allow the operator at pre-presentation counter to display the token number and cross-check the documents brought by the party
- System shall be capable of capturing biometric thumb impressions and photograph of the parties
- The system shall be integrated with various databases like Land Records, circle rate database, registration database and SHCIL database (through a web-service).
- The system shall allow the operator to validate if there are any stay orders or any disputes on the property being registered.
- The system shall allow the operator at SR Cabin to display the token number for the party to proceed for the presentation activity.
- IA shall design “Electronic Queue Management System”.
- System shall be integrated with “Electronic Queue Management System”. The Electronic Queue Management System shall support following functional requirements:
 - Capacity to handle at least 100 transactions per hour/day
 - Integration with all the counters so as to display the token numbers and counter numbers dynamically through a digital display system
- IA shall design “Electronic Token Dispensing System”
 - Electronic Queue Management System shall be integrated with Token Issuance module of the system so as to achieve time stamping of various events like the issue of tokens to the citizens, calling the citizen to the counter, completion of transaction

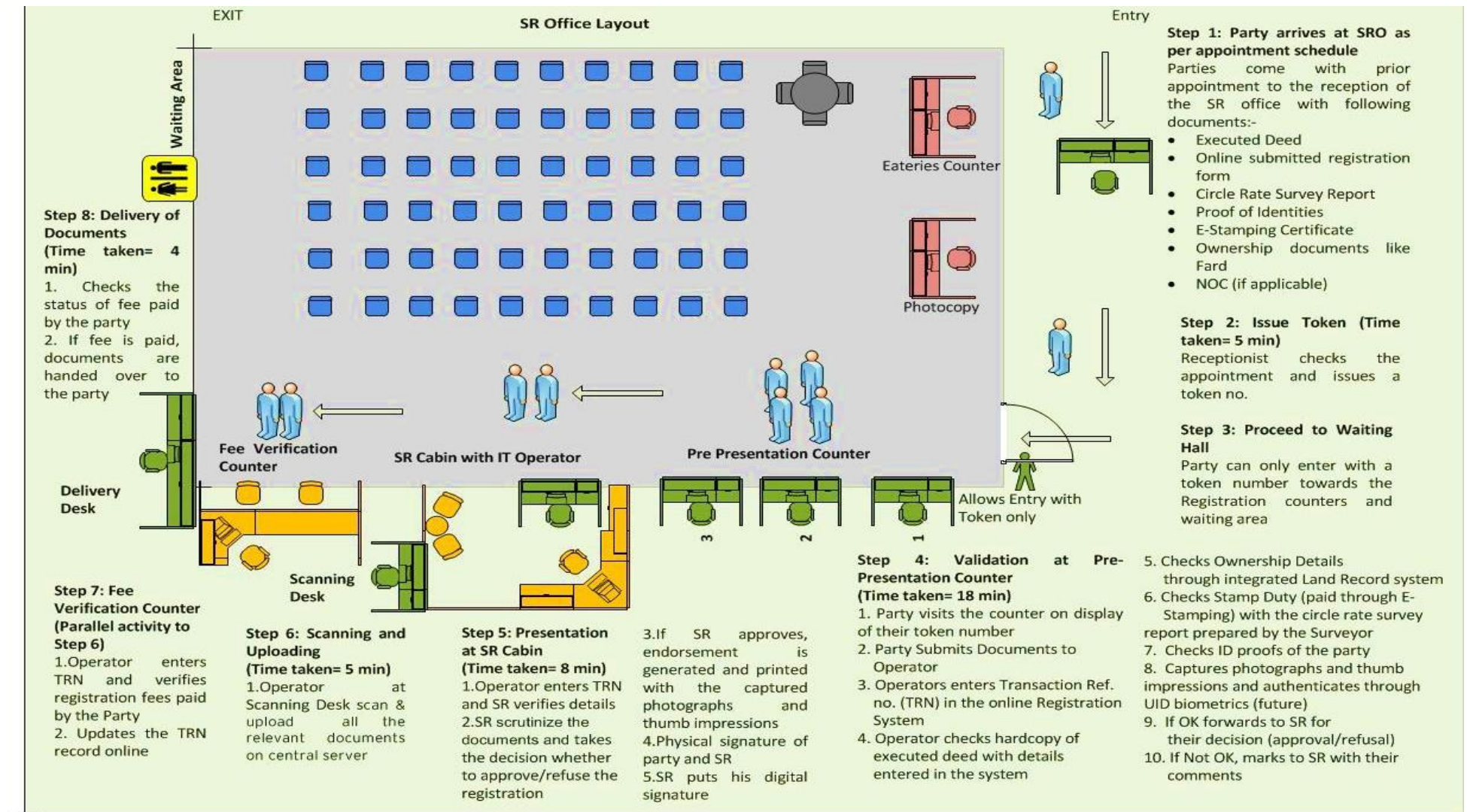
and passing on these parameters to the ILAS system. This sub-system would be used to track and measure the degree of compliance with the related SLAs on a continuous basis

- Electronic Token Dispensing System that can dispense a printed token in less than 2 seconds specifying the date, time, reference number and token number
- The tokens issued to walk-in applicants and those to online applicants with appointment will have to be different in appearance
- The system shall allow the SR to login using biometric authentication
- The system shall now allow the SR to fetch party details using the TRN and allow him to approve/reject the registration
- If approved, the system shall generate a unique registration number that shall be printed on the endorsement with the digital signature by SR and shall trigger the mutation process (with condition of fee-payment by the party at SHCIL counter). Once the Mutation process is triggered, the system shall show the mutation requests on the dashboard of Patwari for further action.
- If rejected, the system shall capture the reasons of refusal entered by the SR and maintain a log of such transactions.
- The system shall have the provision to allow SRO to impound/forward the deeds under section 33 of the stamp act and section 47 A of the registration act or any other provision available in the acts administered by the Department of Revenue as per stamp act 1908.
- The system shall allow the operator at scanning desk to scan the registered document and upload it to the centralized database in a compressed format.
- The system shall be integrated with 3-way replication solution on cloud including (Data Centre, Disaster Recovery Centre and Data Dump Centre) to achieve zero-data loss.
- The system shall allow the operator at Fee Verification counter to enter the TRN and collect the registration fee as calculated by the system.
- Citizen to submit the registration fee at the fee counter. Registration fee shall be comprised of IA's agreeable fee with the Punjab land record society for the registration services, PLRS facilitation charges and pasting fees.
- System shall update the flag stating the status of fees submission confirmation.
- The system shall be able to integrate with e-Stamping database. Please refer section 4.1.2 – E-Stamping module of Annexure IV – Functional requirement Specification for details
- The system shall allow the operator at fee counter to enter the TRN and verify the registration fee submission status.
- The system shall generate the fee-receipt and initiate the mutation process by auto-locking the land parcel till the mutation is approved.
- The user at delivery desk will hand over the registered deed to the party after checking the status of fee payment by entering the TRN in the system.
- The system shall make relevant entries in the digitized books and indexes according to the type of deed.
- The system shall generate mutation notices for buyer, seller and public after due approval of SR.
- The system shall allow showing all village wise notices. Status of mutations shall be shown on the basis of registration deed number and date under this.
- The system shall be integrated with Workflow Management system.

- In case of lapses of the scheduled appointment by the citizen, System shall be capable of providing the facility of re-appointment to the citizen.

Please refer section 4.1.4 – Registration of Document Module of Annexure IV – Functional Requirement Specification for detail

1. The workflow for registration of documents at SRO is shown below:



4.9 Component D - Portal Development

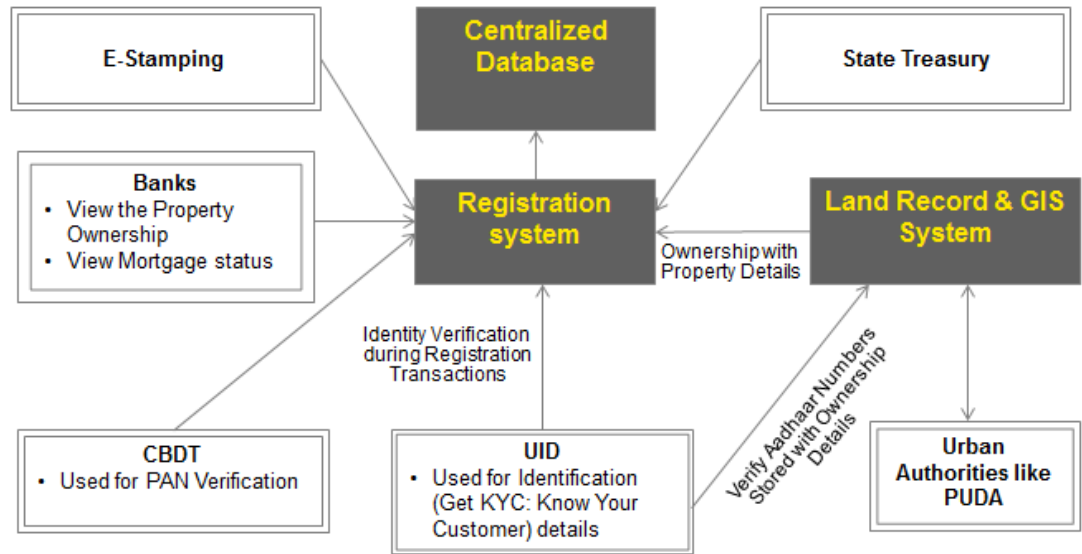
- All the Department of Revenue information for dissemination and online services to be provided to citizens will be part of portal to be developed. IA shall design a web portal and develop/design advance content management system for the Department. The portal shall contain admin section where selected users shall be provided authentication for accessing the portal content on the basis of role based access. Web portal shall have a citizen section wherein citizen can access the information related to the Department.
- Website/portal should follow the eGov Standards in the implementation and managing the contents.
- Portals provide a way for enterprises and organizations to provide a consistent look and feel with access control and procedures for multiple applications and databases, which otherwise would have been different web entities at various URLs.
- The features available may be restricted by whether access is by an authorized and authenticated user (employee, member) or an anonymous site visitor.
- The portal will provide information about Department of Revenue, Government of Punjab. Information about Department of Revenue structure, services offered and key notifications etc. to the citizen community have to be included. The PLRS website can be merged with this portal. Content architecture of the portal shall be in accordance with State Portal Framework (SPF).
- All information and services being published on state portal must have mandatory metadata as specified in NIC State Portal Framework (SPF).
- The portal would primarily be available in bilingual language (i.e. Punjabi & English).
- Shall be available anytime, anywhere: The portal will be available 24 hours a day, 7 days a week, and accessible from anywhere in the world via the internet. While the technology shall be available round the clock, functional support might be available only during the normal working day.
- Shall be accessible from a variety of channels: The portal can be accessed via a variety of established channels, including individual users (through PCs), USDC, Government Service delivery counters etc.
- Shall be capable enough to exchange information & services seamlessly across state government departments as well as central metadata repository as specified in SPF. This exchange should be in accordance with SPF.
- Content Management System: A robust content management system should be in place so that the Content can be regularly updated. Please refer section 4.2.4 – Content Management System of Annexure IV – Functional Requirement Specification for details.
- The proposed system should allow the flexibility to
 - i. Add a new service under Department of Revenue for Land Records and Registration Portal
 - ii. Add/Edit feature in the portal.
 - iii. Add/Edit features in Centralized Application
- Portal should be able to generate a checklist of the required documents for registration of documents. For example if the citizen wants to avail the registration services for sale deed, the system will automatically generate the checklist of required documents/proofs in the concerned processes.

- The system would be integrated with payment gateway used for collecting payments from the user i.e. Fees etc.
- An SMS gateway and e-Mailing solution would also be integrated with the system for notifications
- The portal shall be capable of being integrated with various social media platforms to provide Citizens / User Interface.
- Multiple user levels should be provided to manage the hierarchy and log updation for each of the activities should be embedded. Website/ Portal shall contain organization chart, Details of Sub-Registrar offices, List of Sub-Registrar and their contact details with email id.
- The Portal shall have organization chart in a separate section and shall have details of each of the levels including currently designated officer details.
- The portal shall have a contact section wherein contact details including email, mobile number, Addresses of the Government officials including SROs, DROs etc. shall be available.
- IA shall design “My Property” page wherein all the property of the particular user could be seen (Every user would be having his user id and password to access this report). The report shall be integrated with Portal.
- IA shall design “Property in Punjab” page in the portal wherein a user can see the property details in the state including Location, Property Type, Collector rate, Disputed/Non disputed, landmark, description etc. so that citizen can evaluate the property before buying it.
- The portal shall be capable of capturing Feedback of the user/applicant.
- As this portal is for citizen services hence the approximate concurrent user are 15000 (Includes internal and external). The total yearly growth of services would be approximate 5 to 8%. High availability of the portal is required
- The Web portal should have links to all the online services to be provided to citizens e.g. Online Request for Registration, Circle Rate due diligence (DC rate of the Khasra no.), all types of nakals and Certificates (like Non Encumbrance Certificate and Marriage Certificate) etc.

Please refer section 4.1.9 – Portal Development of Annexure IV – Functional Requirement Specification for detail

4.10 Component E - Integration with third party applications

- The system should have the capability to interface with other e-Governance initiatives in the Centre and State.
- The user applications should be able to integrate with the following external interfaces like:
 - i. Banks for viewing mortgage, UIDAI for party identification, CBDT for PAN verification, Urban Civic Authorities like PUDA, Treasury for re-conciliation and e-Stamping solution.
 - ii. An indicative diagram for the integrated centralized system is given below:-



Please refer section 4.1.7 – Integration with Third Party Applications of Annexure IV – Functional Requirement Specification for detail

4.10.1 Integration with State Service Delivery Gateway ('SSDG')

- In order to achieve integration of information across state departments, State service delivery gateway ('SSDG') has been conceptualized.
- SSDG acts as standards-based messaging switches and provides seamless interoperability and exchange of data across the departments.
- The applications developed at state level can interact with the gateway through connector.
- The web user (Citizen/ Dealer) shall first be routed to state service delivery gateway from Department of Revenue portal and after data and identity scrutiny shall be routed to Department of Revenue back office.
- The generic connectors will be provided by state and the application services specific connectors will be developed by the implementation agency for the DoR.
- SSDG will help system integrate with other departments like Municipal and Improvement trust systems for identification of property or building bylaws and plan approval status and data & Electricity Board for dues. The detailed technical connector manual can be downloaded from the following link: <http://nsdg.cdacmumbai.in/administration/Manuals.jsp> for reference.

4.10.2 UIDAI

- Registration – For authentication of buyer / seller thumb or finger impressions from UID database
- Capturing UID number for buyer / seller / identifier

4.10.3 CBDT (Central Board of Direct Taxation)

- Verification of PAN Number from CBDT

4.10.4 Banks

- View land / property Mortgage details

- Request for property to be marked as mortgage with supporting documents
- Provision of registering the documents of Mortgage without possession.

4.10.5 State Treasury Department

- Re-conciliation of Revenue/Service Charges and revenue submitted in state treasury.
- Integration with Integrated financial management system (IFMS)

4.10.6 E-Stamping

- The system should be integrated with e-Stamping solution

4.10.7 Urban Authorities

- The System should be integrated with Urban Authorities including PUDA, Municipal Corporation, Council and Committee
- The system should have interface with PUDA and capture details of the approved residential colonies / commercial projects with digitized maps. The system should capture common areas detail and entitlement of usage of these common areas to each buyer. This will help in making system more transparent and buyer informed about the common areas entitlement in each approved project. Currently, the concerned departments have developed application in different technologies. The System should be integrated with the existing applications available with Urban Authorities including PUDA, Municipal Corporation, Council and Committee as per the requirement of the department. If online applications are not available with these departments then the system should be capable of integrating with the application when it is available in the future.

4.10.8 Passport /PIO card and others

The system shall have the provision / capability to integrate with Passport / PIO card holders and others type of card holders, which can be used to authenticate the identity of Non-resident Indian (NRIs). This functionality is required to authenticate the identity of Non-resident Indian (NRIs) on the basis of Passport/PIO card holders and others type of card holders

4.10.9 Services through Fard Kendras

Presently, Fards are being delivered through Fard Kendras. IA shall provide IT and Non-IT hardware at fard Kendra and Puchaser shall provide manpower to manage the Fard Kendra across the State. The following services can be accessed by citizens online or though Fard Kendras:

- Nakal Jamabandi
- Nakal Map
- Nakal Registration
- Non - Encumbrance Certificate
- Nakal Mutation
- Other Nakals (Khasra Girdawari, Shajra Nasb, Field Book, Rapat etc.)
- Online Appointment for Registration of Documents
- Mutation service request

The IA shall also provision to manage the data and provide interface for integration with Seva Kendras. The IA shall ensure all the data management & back end support for nakal and certificate

services through Fard Kendra as well as Seva Kendra. *Please refer section 4.1.6 – Nakal Module of Annexure IV – Functional Requirement Specification for details.*

4.11 Component F – Designing a GIS Solution

4.11.1 Web Based GIS Application

The GIS solution shall be hosted from a centralized location. The scope of development will include:

- Database design and development
- Design, Development and deployment of GIS application
- The GIS solution shall be at the core of enterprise system providing visual representation of the information, along with, ability to collect, create and maintain spatial and textual information, related to land records and registration.
- Supported by a robust database this solution will help in streamlining the data accumulation, sharing and integrated views of the land record information for various requirements of governance. Integrated with other systems / components viz revenue information, tax information, etc. in an enterprise environment this solution is expected to enhance the decision support system of the state.
- The GIS solution shall have the following features:
 - Be scalable with inherent extensibility for future growth
 - Enable simultaneous access to multiple data sources (internal and external)
 - Provide tools for seamless integration of spatial and geo-tagged non-spatial data
 - Develop and deploy GIS centric decision support system using easy to use configuration and application tools
 - Dynamically fetch and display of spatial and non-spatial data from various sources
 - Establish connection to multiple non-spatial database engine, creation and consumption of web services
 - The front end shall be a user friendly web based portal providing access to maps, land records information and spatial queries.
 - Backend shall be a robust, high performance, scalable database which shall store all the data. The digital database prepared for the project shall form the base of any further activities, viz., revenue data management (RoR), spatial data management (geo-database), development and updation of land records, etc. The database design shall consider the following:
 - i. Objectives and requirements of the project
 - ii. Should contain only required data without redundancy
 - iii. Should organizes data so that different users access the same data
 - iv. Should accommodate different versions of the data (i.e., should allow manipulation and updates)
 - v. Should distinguish the applications that maintain data from those that use it
 - vi. Should appropriately represent codes and organizes geographical features and their relationships (topology)
 - vii. Should support interoperability
- Strong database standards, supported with the link to survey/resurvey procedures and future operational and maintenance procedures, are a must.

- This shall help in backward and forward integration of the existing database with the changing database management technology.
- Broadly, the database construction guidelines are divided into four major categories under the present scope of digitization of cadastral maps, overlay on the satellite imagery and integration with textual data:
 - i. Satellite imagery database
 - ii. Base map creation, digitization (paper to digital conversion) of cadastral village maps
 - iii. Geo-referencing of digitized GIS data with satellite image data
 - iv. Metadata generation and achieving of the database for transactional use
- The digitized cadastral maps shall be integrated with the RoR data and other spatial layers and ingested into the GIS solution. The GIS application shall be accessed by the Department and other stakeholders to view the land parcel/property details on map.
- The GIS Solution shall have the following functionalities / capabilities:
 - i. Map Display and Navigation
 - ii. Editing Features
 - iii. Attribute and Spatial Queries
 - iv. Support for Industry Standard Databases and GIS data formats
 - v. GIS Analysis
 - vi. Web services
 - vii. Data Caching
 - viii. Report generation & Printing
- The basic module for maps display and navigation shall be the first priority along with the map index sheet (reference grid), scanned – geo-referenced cadastral maps and the satellite imagery layer.

Please refer section 4.2.12 – Web Based GIS Applications of Annexure IV – Functional Requirement Specification for detail

4.11.2 Base Map Creation from Satellite Image

- All the data will be overlaid over the base map.
- IA has to digitize and creates the base map from satellite images. Department of Revenue has procured Worldview II Color Ortho rectified Satellite Imagery (0.5 m resolution, 25 Sq. Km tiles) in 2011 and shall be provided to the selected Bidder.
- The following Layers to be digitized shall be as under:

Category	Layer Name	Layer Type	Comments
Reference	Musavi Grid	Polygon	
	Muraba grid	Polygon	
	Control Points (Geodetic Grid)	Point	

Category	Layer Name	Layer Type	Comments
	Imagery	Raster	Ortho rectified Satellite imagery tiled to small manageable units
Administrative	State Boundary	Polygon	
	District Boundary	Polygon	
	Tehsil Boundary	Polygon	
	SRO Boundary	Polygon	
	Municipal Boundary	Polygon	
	Village Boundary	Polygon	
Revenue	Revenue Zones	Polygon	
	Parcel Boundary	Polygon	
	Government lands	Polygon	
Roads	National Highways	Line	With centreline
	State Highways	Line	
	Major District roads	Line	
	Other District roads	Line	
	Village roads – Metalled	Line	Pakka Roads
	Village Roads – Un metalled		Kacha Roads
Railways	Railway lines	Line	
Water Bodies	Lakes / Ponds / Tanks	Polygon	All water bodies used for irrigation
	Rivers	Line	With centreline
	Major streams	Line	
	Irrigation channels	Line	
Forest	Forest Boundary	Polygon	
Power	HT Lines	Line	
	HT Towers	Point	

Category	Layer Name	Layer Type	Comments
Others (External Sources)	Forest Maps / Soil Maps	Polygon / Raster	Through web services from NSDI / NNRMS. SW shall be capable of streaming maps from external sources.

- These shall be tiled to smaller manageable units for better performance and enhanced user experience.

4.11.3 Standards / Specifications / Guidelines

- Standards / specifications have been defined and shall be adhered to strictly. Where not specified industry standards (ISO, OGC, NSDI etc.) shall be adopted.
- NLRMP/DILRMP guidelines shall be followed for scanning, digitization, surveys and parcel mapping.

4.12 Component G - Commissioning of other Support Software Modules

IA shall implement other essential software which will help the project in the execution. The suggestive software (but not limited to) have been described below:

4.12.1 Enterprise Workflow Management

- IA is required to provide integrated web based workflow system using web services and others.
- The data entry of the master data and the transaction data would be done as per the requirements of the Workflow
- System shall maintain separate workflow in Land records and Registration for same user and maintain logs for each of the activities
- Workflow management system shall maintain to-do list for the Department of Revenue and PLRS users and provide the notifications.
- Workflow would be required for various instances, such as but not limited to:
 - i. E- Form submission post system checks
 - ii. E-Service delivery to the citizen
 - iii. Web portal of the department
 - iv. Mailing and messaging services
 - v. Approvals for any citizen centric service
 - vi. Approvals for internal matter of department
- Workflow Management would be based on predefined workflows and should also incorporate ad hoc workflow requirements

Please refer section 4.2.1 – Enterprise Workflow Management of Annexure IV – Functional Requirement Specification for detail

4.12.2 Document Management System

- IA shall provide integrated web based workflow system which would include Document management, record management, Archival, viewing & information rights management based on eGov Standard formulated by DeitY-Gol
- Any supporting document related to transaction needs to be uploaded on the system for easier access and retrieval
- DMS should cater to all requirements of purchaser related to management of documents submitted by the citizen.
- DMS should allow the Department of Revenue and PLRS officials to easily store and retrieve data, based on the unique number of the request with full authentication.
- DMS should provide clear metadata for categorization of any document entering the system. The DMS must also support a string based search.
- IA shall propose infrastructure that shall be sufficient for leveraging all the capabilities of the DMS suite to the fullest extent.
- IA shall provide requisite licenses for all the software required for the DMS suite, along with DMS database, add-on tools / modules, etc.

Please refer section 4.2.3 – *Document Management System of Annexure IV – Functional Requirement Specification for detail*

4.12.3E-Office Module

The system shall be capable to integrate with e-Office Module available with the Department of Revenue.

4.12.4Anti-Virus Solution

- In order to protect all the desktops, thin clients and all the servers from any kind of virus / worm / Trojan attack, IA shall provide and implement an enterprise wide Anti-Virus and Anti-Spam solution, which will include the following:
 - i. Agent for all the desktops and laptops being used in this project
 - ii. Agent for servers
 - iii. Agent for tablets
 - iv. Anti-Virus and Anti-Spam Gateway
 - v. Virus and spam scanner for SMTP
 - vi. Virus scanner for HTTP
 - vii. Virus and spam scanner for the e-mails
- IA shall propose the latest version of the antivirus solution available in the market on the day of submission of the bid. However, it is mandatory that IA shall deploy the latest version of the Anti-virus available at the time of implementation in case newer version is available after the submission of bid.

Please refer section 4.2.5 – Anti-Virus of Annexure IV – Functional Requirement Specification for detail

4.12.5SLA Monitoring Tool

- The SLA monitoring tool shall be capable of calculating performance and quality for all services being provided to the citizens, Department and other Stakeholders as per the SLAs mentioned in this document.
- IA shall integrate the SLA monitoring tool with the enterprise management, invoice and payment module.
- SLA monitoring tool shall maintain the feedbacks, comments and suggestion received by citizen/ stakeholders through online portal of the Department.

Please refer section 4.2.6 – SLA Monitoring Tool of Annexure IV – Functional Requirement Specification for detail

4.12.6Common Software Requirements

Common requirements are needed to define standard requirements related to software and application modules. IA must adhere to the basic requirement in the development of core software and various supporting modules.

Please refer section 4.2.7 – Common requirements of Annexure IV – Functional Requirement Specification for detail

4.12.7 Security Requirements

- External users will be accessing the e-Services and related application features hosted in a de-militarized zone in Data Centre. The traffic of external users will be routed through security devices such as Firewalls and IPS. The users will be authenticated through their biometrics or digital signatures. IA shall facilitate the department in creating the digital signatures of the officers and the cost for this purpose shall be borne by IA.
- Department of Revenue users on Intranet will be routed to the core business applications through Application Proxy Firewall and authenticated using their log-in credentials
- Core application and the e-Services hosted in de-militarized zones are segregated through a layer of security devices such as firewalls which are to be provided by the IA.
- IA shall get the security and quality testing of the various applications and mobile apps from the Cert-in empanelled agencies. All the cost in this regard shall be borne by the IA only

Please refer section 4.2.8 – Security Requirements of Annexure IV – Functional Requirement Specification for detail

4.12.8 MIS Reporting tool

- IA shall design MIS reporting tool in the system to generate the reports by accessing the application.
- Citizen shall be able to view the Nakals online but he/she can download the same only after paying the service charges for the respective Nakal.
- IA shall provide the physical copies of MIS reports to the Purchaser as and when required. IA will not charge any printing, stationary cost regarding the MIS reports from the purchaser for example printout of Jamabandi of daur period etc.
- Indicative list of reports is as below, but not limited to (User can generate the desired reports which is not there in below list through Ad-hoc reporting tool mentioned in the below point namely “Other Software – ad hoc reporting tool”):
 - i. Online Requests reports
 - List of online requests for all services (like registration and nakal)
 - ii. Survey reports
 - DC rate survey of each and every khasra no.
 - iii. Appointment reports
 - Dashboard view for available timeslots for appointment as per SRO on daily, weekly and monthly basis
 - List of scheduled appointments for registration as per SRO on daily, weekly and monthly basis
 - List of re-scheduled appointments for registration as per SRO on daily, weekly and monthly basis
 - List of availability and non-availability of Sub Registrars as per SROs
 - List of SROs with their details like address and telephone number
 - iv. SRO reports
 - SRO wise Report to:

- View Property Details by TRN
 - List of approved registration cases by SR
 - List of refused registration cases by SR along with the details for reason of refusal
- v. Transactions reports
 - List of transactions done for online requests (integrated with payment gateway of treasury)
 - List of transactions done by paying stamp duty(integrated with web service of e-Stamping)
- vi. Reconciliation reports
 - Daily Reconciliation Report
 - Weekly Reconciliation Report
 - Monthly Reconciliation Report
 - Yearly Reconciliation Report
 - Period Specific Reconciliation Report
- vii. Books and Indexes reports
 - Fee Book Report
 - Book 1 Report
 - Book 2 Report
 - Book 3 Report
 - Book 4 Report
 - Book 5 Report
 - Book 6 Report
 - Index 1 Report
 - Index 2 Report
 - Index 3 Report
 - Index 4 Report
 - List of Complete Scanned Document with its indexing details
- viii. Audit Log reports
 - List of logs generated for various requests (like total time taken for delivery of sale deed etc.)
 - List of logs generated for area measurement calculator
 - List of logs generated for generated TRNs for each service
 - List of logs generated for property valuation engine
 - List of logs generated for SMS gateway
 - List of logs generated for Payment gateway
- ix. Nakal reports
 - Online requests received
 - Online Nakals delivered
 - List of pending requests
 - Nakals delivered from delivery counters
 - Nakals delivered by Patwaris
 - Cash Collection from delivery of Nakals on daily, weekly and monthly basis
- x. Area wise reports
 - List of partition requests received

- List of demarcation requests received
 - List of pending requests
 - List of owner report as per Khasra Report, Khewat report, Khatauni report, Locality
 - Compiled Report for each owner as per his name, father's name, date of birth etc.
 - Shareholder wise report for a property
- xi. Mutation reports
- All types of Mutations related reports
 - Pending / Approved / Rejected Mutations
 - Category wise Mutations Report
 - Public Notices Report for mutation
 - Disputed Mutation cases
 - Monthly Report
 - Mutations since last Jamabandi
 - Summary of Mutations
- xii. Khasra Girdawari reports
- Owners of the land
 - Cultivated Lands
 - Crops in a village
 - Types of lands
 - Means of irrigation
 - Cultivator Change
 - Updation in Jamabandi as per latest Girdwari Report
- xiii. Shajra Nasab reports
- List of property details as per family tree/Shajra Nasab to show the property details for each family member in the family
 - List of New Entries/Deletion of Entries done to update the Shajra Nasab
 - Updated list of owners in RoR
- xiv. Other reports like
- Fard Badar Report
 - Mortgaged Land Report
 - Government Land Report
 - Disputed Land Report
 - Circle Rate Report
 - Updation/revisions required in the circle rate
 - Patwar Circle wise report
 - Kanungo Circle Report
 - CRO wise Report
 - Roznamcha Waqiyati/ Daily Activity Report for Patwari
 - List of pending cases as per circle of Patwari, Kanungo and CRO
 - Disposal of Uncontested, Unregistered Will and Mutations
 - Statement showing the updated Jamabandis as per daily transactions
 - Statement showing The Disposal Of disputed Cases related to Jamabandi and Girdawari
 - Statement showing The Disposal Of Partition Cases By The CRO
 - Statement showing The Field Verifications Done by the CRO/SDM

- Statement showing Grievances/Suggestions by Citizens
- Dashboard report for Top Management showing the total number of transactions approved and denied along with their reasons and other relevant details.
- Any other(s) may be generated through ad hoc reporting tool

Please refer section 4.2.11 – MIS Reporting Tools of Annexure IV – Functional Requirement Specification for detail

4.12.9 Ad hoc reporting tool

- A tool should be available to fetch the customized data from available databases and generate report and should also support menu driven query and reporting tool
- System should have provision to print and export the report generated in the pre-defined file format (e.g. spreadsheet, word processing, etc. as per desktop office solution)

Please refer section 4.2.2 – Ad-Hoc reporting tool of Annexure IV – Functional Requirement Specification for detail.

4.12.10 Enterprise Management Solution (EMS)

- Configuration Management and Version Control: With the objective of keeping track of the version updates in the applications, the IA shall adhere to the configuration management process defined in conjunction with User. The IA shall be required to ensure that a copy of the production environment is backed up and stored in the repository before the new / modified components are copied to Production environment. The IA may be required to restore the backed up application versions for testing purpose mainly addressing the restorability of the media.
- IA should ensure the usage of configuration management and version control tool and own the necessary licenses for its team to deliver software development and maintenance services. Additionally, IA should provide single user license for the Configuration Management and Version Control tool for the Purchaser.
- IA shall share the EMS report on daily/ fortnightly/ monthly with the department.

Please refer section 4.2.22 – Enterprise Management Solution (EMS) of Annexure IV – Functional Requirement Specification for detail

4.12.11 Mobile Application for Departmental users

- IA shall design a mobile application to run on smartphones, tablet computers and other mobile devices for accessing the Process, Forms and Reports related to Registration, Land records and Circle Rate Survey. Mobile application should be defined on the basis of roles defined for the users/stakeholders in the project.
- The Mobile application shall work on multiple platforms like IOS, Android, and Windows etc.

Please refer section 4.2.21– Mobile Application of Annexure IV – Functional Requirement Specification for detail.

4.12.12 Mobile Application for Citizen

- IA shall design the mobile app for the citizen for various activities like accessing the online appointment services, registration form, to access the application status, survey; access the details of lands/properties by accessing “My Property” page.

- Citizen should be able to follow his/her status of registration, Survey, mutation and other related applications.
- Citizen should be able to view the online Registration and Land records related public report through the mobile app.
- The mobile app shall be integrated with the payment and sms gateway. Citizen should be able to pay online fee through mobile for accessing online services like nakal of Jamabandi etc.

Please refer section 4.2.21 – Mobile Application of Annexure IV – Functional Requirement Specification for detail.

4.12.13 Invoice and Payment module (IPM)

- The IPM shall be able to calculate the payment to be made to IA after every successful transaction of the services and generate system generated monthly payment invoice.
- This module will be used to project the revenue trend.

Please refer section 4.2.15 - Invoice and Payment Module of Annexure IV – Functional Requirement Specification for detail

4.12.14 Knowledge Management System

- Knowledge Management System should be integrated with content management wherein all Acts, Rules and Guidelines shall be stored.
- Knowledge management system shall be further integrated with Portal so that user can take the guidance and help from the system by putting query regarding the Acts, rules and Guidelines.
- The system should be able to provide the information about Rules, Acts and Guidelines to the users on request
- User can query to the system for the Acts and rules in case of doubt. For example SR can query to the system that what the implications in accepting or rejecting the application
- All the acts, rules and guidelines shall be uploaded on departmental portal with annotating the metadata. Metadata would be used for advance search in the system.
- This module shall be useful for the citizen also in getting the information on various acts and rules.
- This module should work as digital library which can be accessed by the stakeholders as and required.

Please refer section 4.2.23–Knowledge Management System of Annexure IV – Functional Requirement Specification for detail

4.12.15 Revenue/Court module

IA shall design and develop Revenue/Court module with facility for registration of disputes, marking a property under dispute, updation of status about the court case and tracking of decisions taken by the concerned authorities. This module will help department to analyze the cases under dispute and take the appropriate action.

The module must have capability to fulfill the below functional requirement, but not limited to:

- IA shall design and develop Revenue/Court module to capture the various types of land/property disputes that arise due to various causes.

- The system shall have the provision of capturing relevant details (like details of parties involved in that case, Type of Case, Date of Case filed, Status of Case, summoning of parties etc. Even stages of the case shall also be intimated to the parties via SMS/IVR or email.
- In case of any wrong decisions made by any of the revenue officers or any issues registered by the citizen, the system should be capable of incorporating the decisions taken with proper reasoning and sufficient proofs. For example, if during mutation or appeal or court orders (by any Revenue Court/High Court/Any other Court), there is a change in registration details. In such case, the system should capture the relevant change with remarks and should notify the higher authorities by generating alerts and notifications via SMS or e-mail about the relevant changes and the system shall be capable of rolling out the changes.
- System shall be capable of maintaining the log details and tag the property / land parcel for the future reference
- The system should notify about any changes to the relevant modules
- The system shall be capable of modifying/updating the processes and flows of the application in case of any changes occur in rules, Acts and Guidelines in future without affecting the previous data.
- This module should be incorporated with advance search facility by village-wise, khasra-wise, dispute type etc. This facility shall be useful to consolidate the case-wise disputes. Official in the DoR should be able to access the cases and analyze accordingly. Official from the DoR should be able to analyze the similar dispute cases through mobile also.

It may further be noted that Implementation Agency is expected to design and implement a robust security framework as per the industry standards and using latest technologies.

Please refer section 4.2.19 – Revenue/Court Module of Annexure IV – Functional Requirement Specification for detail.

4.12.16 Database Security

Database security refers to the collective measures used to protect and secure a database or database management software from illegitimate use and malicious threats and attacks.

Please refer section 4.2.16 – Database Security of Annexure IV – Functional Requirement Specification for detail.

4.12.17 Identity Access Management Tool

An identity management access (IAM) system is a framework for business processes that facilitates the management of electronic identities. The framework includes the technology needed to support identity management. IAM technology can be used to initiate, capture, record and manage user identities and their related access permissions in an automated fashion. This ensures that access privileges are granted according to one interpretation of policy and all

individuals and services are properly authenticated, authorized and audited. This tool shall be applicable for internal users only

Please refer section 4.2.17 – Identity Access Management of Annexure IV – Functional Requirement Specification for detail.

4.12.18 Web Access Management Tool (Single Sign on)

Web access management (WAM) is a form of identity management that controls access to web resources, providing authentication management, policy-based authorizations, audit and reporting services (optional) and single sign-on convenience.

Please refer section 4.2.18 – Web Access Management of Annexure IV – Functional Requirement Specification for detail.

4.12.19 Error Detection and Error Correction

- The system shall have provision to capture all the business logic for each type of processes in land record management
- The system will provide mechanism for error alert in all the processes after comparison to business logic entered as per act with new registration, Jamabandi, mutation etc. entry
- The system should provide a module which will carry out:
 - Checks on whether all mandatory data has been supplied for the process and
 - Internal consistency checks on the data provided in the process
- The system should guide the user by providing a series of well-defined options to select the right Format for performing different processes like mutation. Edition in Girdawari etc.
- The system should provide a well-designed set of Instructions to the user to help in filling up the format and complete the process for mutation, Jamabandi edition, and Girdawari edition.
- The system should be designed in such a way that the process based calculations like partition of share is computed automatically by the system depending upon the business logic entered as per the corresponding act
- The system shall have pre-defined process of correction once error is detected
- The system shall help the user with pre-defined processes for correction and log will be maintained for each error detected with reference to business logic entered as per act.
- The system shall be able to automatically record an audit trail of events under the control of the system, storing information about:
 - i. Action which is being carried out
 - ii. The object(s) to which the action is being applied
 - iii. The user carrying out the action
 - iv. The date and time of the event

Please refer section 4.2.24 – Error Detection and Error Correction of Annexure IV – Functional Requirement Specification for detail

4.12.20 Admin Module

- IA shall design admin module to manage the complete user management, create users and give access and roles to users. Please refer section 4.2.13 – Admin Module of Annexure IV – Functional Requirement Specification for details.
- This module shall have Super admin, Admin and Sub admin whose details are mentioned below:
 - **Super Admin:** There shall be one “Super admin” for the system. The super admin shall be responsible of creating and managing the accounts of Admins.
 - **Admins User:** There shall be two types of Admins
 - **Admin – Resource:** It is responsible for creation and management of account of Sub-Admins. The admin-Resource will be responsible of monitoring the SLA, Invoice and Payments etc.
 - **Admin- System:** It is responsible for the management of process flow, application content, form and reports.
 - Admin shall create credentials for State level officers, account of USDC, Sub Admin, line departments etc. as per their roles and responsibilities.
 - Sub admin shall be at district level who will manage the user account of concerned officials which will be decided at the time of finalization of SRS.
 - Citizen shall register himself to access his services and their account shall be managed by Super admin only.
 - System shall be able to manage internal audit for all the logs/ activities. Please refer section 4.2.20 – Internal Audit of Annexure IV – Functional Requirement Specification for detail

4.13 Component H - Managed Services

4.13.1 SMS gateway

- IA will integrate the proposed solution with SMS gateway provided by Department of Governance Reforms, Punjab
- The system shall be capable to inform citizen through SMS to the registered mobile number.
- Illustratively following intimations would be sent to the citizen through SMS:
 - Appointment confirmation - Average of 3 SMS per transaction
 - Registration Confirmation - Average of 2 SMS per transaction
 - Mutation Confirmation - Average of 3 SMS per transaction
 - Confirmation of any payment made to the Department - Average of 2 SMS per transaction
 - Notification - Refund of stamp duty or registration fee - Average of 5 SMS per transaction
 - Reminder / update about the notices sent to the citizen - Average of 5 SMS per transaction
 - Any news / update / announcement by the Department - Average of 10 SMS per registered user per year

- Citizen should also be able to retrieve the information from SMS Gateway. This information would illustratively include:
 - Status of Mutation Application.
- Log of all the SMS sent to the citizen should be maintained by the system.

4.13.2 Mailing Solution

- IA will integrate proposed solution with mailing solution provided by Department of Governance Reforms, Punjab
- System shall allow configuring the mailing system for sending the e-mail notifications to users/ stakeholders on various events including calendars events, various service notifications, password change, content change, etc.
- System should be interoperable and compatible with all browsers/ mail/ hardware etc. It holds contact details also which is accessible to users.
- System Should be capable to manage the user defined folders.
- Email system shall be provided by Department of Governance & Reforms Punjab

4.13.3 Integration with existing Citizen Call Centre

- The IA shall leverage the existing call Centre available with the Purchaser.
- The IA shall provide all online help link, Online FAQ's and training to existing call Centre manpower to cater to the needs of citizen.
- Call Centre to be created will handle all technical and land record management & registration related queries/ complaints/ requests.
- All complaints collected through various forms such as submission of e-form on website, complaint registered through phone call to Call Centre, Complaint form dropped at the department offices, complaint sent through email/ fax/ letter would be consolidated at Call Centre.
- All complaints then to be segregated based on type and delegated to respective office of User.
- Call Centre will follow up and coordinate with the respective offices and contact the citizen once the action is taken regarding the complaint. Indicative but not exhaustive responsibilities include:
 - Liaison with the citizens providing information in the event of survey, appointment, stamp duty payment, registration, mutation etc.
 - Updating the system for record of completion of activities, changing the status of complaints etc.
 - Responding to citizen complaints: Receive, delegate, process/resolve and reply all types of citizen complaints, queries and requests only selected cases to be forwarded to top management at Department of Revenue or PLRS Head Office
 - Send alerts to concerned district/tehsil/sub-registrar offices to respond to pending complaints

4.13.4 Payment Gateway Service

- IA to integrate proposed solution with payment gateway (GovPay / Any other Gateway Provided by DGR, Punjab)

- System should be able to accept the payment through mobile systems such as PayTM, Rupay, and MPesa etc.
- IA is expected to enable Payment Gateway including a secure site page using industry-standard encryption technologies like Secure Socket Layers (SSL) to handle the backend communications and transactions, contacting the bank and reporting back on the results
- Payment gateway would enable payment receipts for various payments like registration fees, other online services etc.
- System should provide option of Credit card, Debit card or Net Banking to the citizen for online transactions and payment at SHCIL counter

4.13.5 Helpdesk for Internal users

The helpdesk team shall be responsible for providing technical solutions to queries raised by internal users. Indicative list of activities shall include:

- Deployment of sufficient manpower to attend the helpdesk requests for extending technical support on hardware, network, application etc. to end users
- Deployment of web-based tool for the helpdesk
- Operational window for helpdesk – 6 days X 12 hours starting at 8 AM
- Provide Help Desk facility for agreed SLAs for reporting technical incidents / issues / problems with the system. Help desk facility shall be provided through a dedicated phone number
- Implement a call logging system in line with the severity levels as per the SLAs. The Help desk shall log user calls related to system and assign an incident/ call ID number. Severity shall be assigned to each call as per the SLAs.
- Space, for the establishment of Helpdesk for Internal Users, shall be provided by the IA and he is free to choose the location in Punjab or Chandigarh.
- Track each incident / call to resolution.
 - i. Escalate the calls, to the appropriate levels, if necessary as per the escalation matrix agreed upon and developed by IA and the User.
 - ii. Coordinate with respective OEM for closure of calls.
 - iii. Analyze the incident / call statistics and provide monthly reports including but not limited to:
 - i. Type of incidents / calls logged
 - ii. Incidents / calls resolved
 - iii. Incidents / calls open
 - iv. Update the frequently asked questions on the DoR website to assist end users in resolving basic issues themselves.
 - v. Helpdesk manpower requirement shall be for 2 Shifts

Please refer to “Annexure V - Minimum qualification for the staff proposed” of this document for the detailed requirements.

4.13.6 Services of Hand-holding Support

- Providing Hand holding and technical assistance to the DoR, till the end of contract of IA, at each district level – Minimum 22 Handholding staff (Indicative). IA can increase or decrease the number to meet the SLAs
- Implementation Agency shall depute handholding staff at the district level to provide support at each of the SRO/Tehsil/Sub-Tehsil/DoR offices in the concerned District. Details of hand holding staff in the state is as below:

Manpower	Minimum No. of staff - per District	Total No. of Hand Holding Support across the state (22 Districts)	Duration of handholding staff in the district
Handholding Staff	1	22	Till the end Contract period of IA

- Roles and responsibilities of handholding staff are as below but not limited to:
 - i. Provide technical support at all SRO's within the district
 - ii. Maintain escalation matrix against each of the project components including IT (core software, IT equipment etc.), Networking etc.
 - iii. To coordinate with Project Management Unit.
 - iv. Prepare Weekly/Monthly status report and share with Project Management Unit.
 - v. Providing support to Department of Revenue personnel in accessing the application on requirement basis.

4.14 Component I - Hardware, Equipment and Components

IA shall install and establish IT and Non IT infrastructure at all the sites including DC, NLDC, DRC, Category A, Category B and Category C as per indicative infrastructure mentioned in the Annexure I- Technical Requirement Specifications – Hardware, Annexure-II – Civil Specification and Annexure III- Furniture Specification.

4.14.1 OEM Tools

- The IA shall propose standard OEM Tools for Content Management System, Workflow Management, database security tool, RDBMS etc.
- OEM tool should be proposed with OEM patches updates and version upgrades along with OEM support for the contract period.
- The key OEM technologies proposed shall reflect in any of the leading analyst Gartner/IDC/Forrester report at least once in last three years
- The IA shall provide OEM authorization for proposing OEM products for the project and unlimited email and telephone support for the contract period without any capping on number of hours or number of incidents.

4.14.2 Data Centre & Disaster Recovery Data Centre and Near Line Data Recovery

IA is to provide 3 data Centre (1+1+1 strategy)

- IA shall provide the cloud system for data center, DR and NLDC.

- IA shall coordinate with Department of Governance Reforms during selecting the cloud service provider for DC, DR and NLDC.
- Manpower requirement is on a per shift basis. for example 02 Database administrators per shift is required - please refer the section "Manpower Requirement" in the next section
- Data must be secured at the cloud system and the cloud service provider must share the declaration with required supporting document that data hosted at cloud.
- The Implementation agency shall ensure the cloud service provider should be based on India only and cloud infrastructure must be installed in the India.
- IA shall take daily back of all the data of DC, NLDC and DR from cloud and store at SAN to be installed at the State data Center.
- Strategy for Cloud infrastructure at tier 3 or above data center to be proposed to meet SLA and Should attach the agreement with the cloud service provider for the proposed Infrastructure Compliance

Please refer the minimum specification for the hardware of DC/ mentioned in "Annexure I: Technical Requirement Specifications – Hardware".

Deployment model for DC/DR

The Bidder is expected to provide complete DC / DR and NLDR site on lease or self-owned basis to be hosted on Public Cloud. The following factors to be considered for hosting on Public Cloud:

- The public cloud should support on elasticity on demand in order to cater to solution peak requirements.
- The nature of data is very sensitive and important. There shall be strict prohibition of sharing the data with any other organization.
- The application and data shall be hosted in a cloud data center located in India
- The cloud data center should be Tier 3 Data center with ISO 27001 certified and other relevant certifications.
- The public cloud proposed for DC/DR will be responsible adhering to SLAs mentioned in this RFP.
- There should be Zero data loss and Continuous downtime for all applications not to exceed one hour post the time of impact or the time of the incident logged (applicable only for single DC failure)

4.14.3 Data Centre ('DC')

- The core business of DoR or PLRS is not IT infra management and hence it is responsibility of Implementation agency to provide complete cloud system for Data Center
- The Core Software application infrastructure and Web Portal are expected to be hosted at the Data Centre (DC) which is on cloud.
- The responsibility of monitoring the DoR web portal and application requirement at the DC on cloud to ensure availability as per agreed SLA's will lie with the Implementation agency.

- During the Contract period, all project assets hosted on the cloud should be in safe custody and due reasonable care should be taken on the behalf of the DoR or Purchaser to prevent any unauthorized use.
- Roles and responsibilities of IA cloud system of DC:
 - i. IA to propose solution for infrastructure to be deployed at data Centre
 - ii. IA to use virtualization technology for solution proposed for the infrastructure
- Manpower Requirement to manage the cloud system

S. No.	Profile	Number required	personnel	Shifts
1.	Database administrator	2		2
2.	System administrator	2		2
3.	Network administrator	2		2
4.	Technical Assistant	3		3
5.	Back up Admin	1		1
6.	Security Admin	1		1

- *Please refer “Annexure I - Technical requirement Specification” for detailed IT infrastructure specification.*
- *Infrastructure Requirement: Please refer “Annexure II -Section 2.4 & 2.5” for indicative list of infrastructure at all the locations.*

4.14.4 Disaster Recovery Centre (‘DRC’)

- Cloud technology should be used for the DRC which should be hosted at difference seismic zone.
- In recent years, added emphasis has been placed on the continuation of business functions or core domain in the face of potential disasters. Such disruptive acts may be natural disasters such as earthquakes, severe storms, flooding or deliberately caused by man (bombings, arson and sabotage).
- As this project revolves around IT, it is imperative that means are devised for the continuity of the same. It is proposed that there should be a Disaster Recovery site (DR site) ready to manage its activities in case of a disaster.
- Hence there is a need for Purchaser to identify and implement a DR site placed at a remote site, and kept in readiness to take up the work of the primary services
- The Implementation shall ensure that following business requirements are met in case of disaster or unplanned disruption of services:
 - i. Zero data loss at all time
 - ii. Continuous downtime for all applications not to exceed one hour post the time of impact or the time of the incident logged (applicable only for single DC failure)
 - iii. In the event of multiple DC failures, the User, Purchaser and the selected IA will decide on the recovery time based on the type of incident

- iv. The Implementation agency can propose near line data Centre to achieve zero data loss at all the time
- v. All services and related transactions will be linked with the defined SLA

- Manpower Requirement:

S. No.	Profile	Number personnel required	Shifts
1.	Database administrator	1	All the administrators to be on call 24*7 other than the User working hours.
2.	System administrator	1	
3.	Network administrator	1	
4.	Technical Assistant	3	Technical assistants to be present on-site 24 * 7 for monitoring, issue logging and escalation.
5.	Back up Admin	1	
6.	Security Admin	1	

- Please refer "Annexure V - Minimum qualification for the staff proposed" for minimum qualification of manpower required.

4.14.5 Near Line Data Recovery Centre ('NLDC')

- Cloud shall be used for NLDC system. The Service providers of DC, DR and NLDC clouds should be different and ensure that these should be in hosted at different zone in India.
- The Implementation agency should be responsible for providing manpower as per requirement to meet the prescribed SLAs. IA shall identify a location near to Primary DC for setting up the NLDC with due coordination of the department.
- NLDC on cloud will only be a data dump site and no services will be run from the NLDC.

4.14.6 Networking Infrastructure

- There are numerous internal flows between Department of Revenue and PLRS officials and locations. To accommodate this movement of information, the purchaser needs to envisage using a Wide Area Network ('WAN') that will integrate systems.
- In case of connecting Department of Revenue (DoR) offices to cloud system, redundant connections (1 + 1 strategy) will be used, out of which one will be PAWAN and other will be proposed by the IA.
- PAWAN to be used as the primary source of connectivity. The IA would propose a secondary source of connectivity that should be of high bandwidth for example 3G, 4G etc. The Implementation agency should provide the high bandwidth available between the SR offices and Cloud system through internet to ensure the business requirements are met in case of disaster or unplanned disruption of services
- IA shall install a Network Monitoring system at DC to monitor the performance.

4.14.7 Between Data Centre and Disaster Recovery Centre

- The DRC on cloud will contain the second operations string and shall be the failover site should the primary site become not operational.
- Hence, 24X7 reliable connectivity will be required between DC and DRC to make sure that backup of data is facilitated.

4.14.8 Between Data Centre and Near Line Data Recovery Site

- Real time replication of database and files will be performed between data Centre and near line data recovery Centre on cloud.

4.14.9 Between Data Centre / Disaster Recovery Centre and Department of Revenue Office Locations

- Sub-Registrar offices and Joint Sub-Registrar offices are the main locations which cater to the land record & registration requirements of all the citizens of State of Punjab. The amount of transactions handled by these offices requires dedicated connectivity with primary & secondary data centers on cloud.
- Redundant connectivity (1+1) strategy will used, out of which one will be PAWAN (Punjab Wide Area Network) connectivity.
- IA shall be responsible to provide secondary connectivity without any fail and he shall be responsible for continuing the services without having any dependency on PAWAN.

4.14.10 Patwari Laptop’s networking

Purchaser shall provide laptops to Patwaris. IA shall ensure connectivity for the laptops by providing high bandwidth data cards with minimum of 5 GB per month plan per data card. IA shall bear the data charges of the provided data plan and over & above charges shall be borne by the Purchaser. Approximately 4500 data cards are required.

4.15 Component J - Training & Change Management

4.15.1 Training to Internal Users

- IA shall ensure necessary environment setup, data creation to conduct end user training
- IA shall assess the training centers provided by the DoR and accordingly plan for training
- IA shall design the training calendar and share with the purchaser for approval and the availability of training centers as well as trainees on mentioned date.
- IA shall assess and develop Course Contents (with respective course durations (please refer below section for indicative training duration)) in English and Punjabi languages on the basis of the type of trainings and share with the purchaser for the approval. Indicative course contents for Basic IT, Role Based Training, Train the Trainers and Surveyors are as below:

Courses	Details
Basic IT Training	Fundamentals of Computer Software and hardware Basic functions and operations of Computers

Courses	Details
	Introduction to peripherals Typing MS office, etc.
Role Based Training	Role based course content Training in simulated environment as per the role assigned in the Department of Revenue and PLRS
Train the Trainers	Fundamentals on computers Email, MS office, typing, operation systems etc. Training on all modules in the application Training delivery skills etc.
Existing Call Centre Manpower	Training to Existing PLRS call Centre on FAQ's , Online help and Citizen Services processes

- **Requirement of Refresher trainings :** It has been observed in other MMP's that over an extended period of time, employees tend to forget the project-specific IT workflows which hampers the day to day performance and may even lead to the failure of project. So, it is imperative that Refresher training programs are designed and included as part of the overall training curriculum as per the target audience requirement. 50% of the Indicative target number of audience against each of the training components, mentioned in the the table below will be considered for refresher trainings for at least once in a year for each program. Target audience for these refresher trainings can be selected through various methods including:
 - i. Recommendation for training from handholding staff/ Project Monitoring Unit
 - ii. Self-Recommendation
 - iii. Recommendation by the purchaser
 - iv. Periodic refresher training
 - v. Embedding online LMS system with the application
- IA shall develop Online learning management tool which should be effective and easy to understand for the trainees. IA can use commercial off the shelf (COTS) or open standard or self-developed LMS tools. *Please refer section 4.2.14 – Learning Management System of Annexure IV – Functional Requirement Specification for detail*
- Third party audit of training and certification for the trainees
- Implementation Agency shall engage a third party auditor for evaluating the quality of training and shall share the final report with purchaser. IA or TPA shall be entitled to provide the certificate of participation/successful completion of training
- Training should be conducted in batches centrally in Punjab Land Records Society Director of Land Records, Punjab, Kapurthala Road, Jalandhar City, Punjab. Space will be provided by the Purchaser. Following infrastructure in PLRS, Jalandhar can be used by IA for training:
 - i. Two Training Labs

- ii. One Class room
- iii. 60 employees can be trained at a time
- iv. 30 desktops in each training lab
- v. One Overhead Projector
- vi. Power backup
- vii. Back up of approximately 3 Hours
- viii. Guidelines for Trainers
- IA has to provide refreshment like lunch snacks to the trainees during training. Transportations and Accommodations will be borne by Purchaser.
- IA shall Issue guidelines and notifications on regular basis for better control and for trainers for better output from trainings. Guidelines for training should be provided on the following:
 - i. Selection criteria for trainers
 - ii. Guidelines on training delivery
 - iii. Appreciation mechanism (Awards, Certificates etc.)
- Indicative target number of audience against each of the training components are as below:

Sr. No.	Training Types	Total No. of Trainees
1	Basic IT Training	6500
2	Role based Training	6500
3	Train the Trainers	50
4	Training for Surveyors (surveyors would be deputed by IA only)	500
5	Existing Call Centre Manpower	20

- IA shall design feedback form (after completion of training session) and share with the purchaser for the approval. Indicative feedback form is as below:

Name:		State: Punjab					
District:		Name of Tehsil/SRO/Village					
Designation:		Training Batch no. & date					
Sr. No.	Trainer Assessment Parameters	Assessment (please mark the appropriate box)					
		Very less	Less	Moderate	Above Moderate	Good	Excellent
1	Basic IT knowledge (MS Word, MS excel, PPT, wordpad, Notepad etc.)						
2	Hardware infrastructure knowledge						
3	Knowledge about Core Application and its benefits						

Name:		State: Punjab					
District:		Name of Tehsil/SRO/Village					
Designation:		Training Batch no. & date					
Sr. No.	Trainer Assessment Parameters	Assessment (please mark the appropriate box)					
		Very less	Less	Moderate	Above Moderate	Good	Excellent
4	Understanding of Modules in Core Application						
5	Hands on understanding on Application						
Feedback:							
Suggestions:							
Training Requirement in Other IT Solutions:							
Trainee Name							
Place							
Date							
Trainer Signature							

4.15.2 Change Management for Internal and external users

- IA shall develop awareness about new changes and its benefits to the Department of Revenue users and the Citizen
- IA shall develop communication strategy for the Department of Revenue which is as below:

Mode of Communication	Key Message	Purpose of Message
Workshop / Training	<ul style="list-style-type: none"> • Introduction to new process initiatives • Salient Features of the project • Benefits of computerization 	<ul style="list-style-type: none"> • To introduce them to broad project features • Prepare them to accept the change • Appreciate the benefits it will accrue
User Manuals	<ul style="list-style-type: none"> • To provide detailed guidelines and instruction for any time reference 	<ul style="list-style-type: none"> • To improve skills further and making system more efficient
Emails	<ul style="list-style-type: none"> • To update people of any recent changes • Updating them with new tips and features introduced 	<ul style="list-style-type: none"> • Continuously updating the skills of people

- IA shall develop communication strategy for the citizen which is as below

Mode of Communication	Key Message	Purpose of Message
Newspapers	<ul style="list-style-type: none"> Announcement of Initiative and new schemes and services 	<ul style="list-style-type: none"> To make people aware of new initiatives
Banners, Pamphlets, Hoardings	<ul style="list-style-type: none"> Announcement of new initiatives Salient features of initiative in services 	<ul style="list-style-type: none"> To make people aware To interest them in taking benefit of initiative
Mobiles	<ul style="list-style-type: none"> Inform people about various locations where services can be obtained Key service 	<ul style="list-style-type: none"> To spread the basic minimum information in a cost effective manner To reinforce the information in public mind
Internet & Social Media	<ul style="list-style-type: none"> Detailed information of services, locations, schemes, procedures etc. 	<ul style="list-style-type: none"> Once citizens are interested, this channel will serve to provide detailed information they seek

- IA shall identify change characteristics (assess the size and nature of change)
- IA shall assess the readiness of the organization of the change
- IA shall prepare pedagogy and training material for change management team

- IA shall prepare resistance management plan and share with the purchaser for approval
- IA shall design Implementation plan for change management plan for external as well as internal users and submit to department for their approval
- IA shall develop a strategy for Encouraging the employee to accept the changes in the computerization of Department of Revenue and automated work environment
- IA shall Implement the public awareness about the new initiative in the Department of Revenue and presenting the benefits to them regarding security, easy access of the services, transparency of the services through various mode of communications including media, newspapers etc. for example property survey. Indicative mode of communication is described in in this section.
- IA shall prepare Change management workshops and public awareness plan and share with the purchaser for approval. Indicative plan and occurrence of the event is as below

Sr. No.	Training Types	Occurrence
1.	PLR - Group I & II	6
2.	PLR – Group III & IV	90
3.	Citizen – Newspaper	2 Advertisement each in 2 English daily and 1 Punjabi national newspaper for the contract period (In 1 quarter 6 Advertisement)

Sr. No.	Training Types	Occurrence
4.	Citizen – Banners, hording, pamphlets etc.	(For 5 years) as per Civil Architecture proposed. Two Boards in Each SR office

4.16 Component K - Implementation and Rollout

4.16.1 Roll-out of solution and Operations of Service Delivery

- IA should provide services for setting up of new sub registrar (required room space shall be provided by the Department of Revenue) offices as per requirement specified in this document.
- IA should provide services installation, commissioning, integration and rollout of the solution at the Department Revenue offices
- The Services including, but not limited to the following should be provided
 - i.Planning and Scheduling for installation and commissioning of hardware and equipment.
 - ii.Installation and commissioning of hardware and equipment.
 - iii.Configuration and tuning of all the installed equipment and software.
 - iv.Integration and testing of installed systems/ subsystems / equipment / Software.
 - v.Co-ordination and troubleshooting with existing vendors to ensure that the solution is properly configured.
 - vi.Registration Data scanning and digitization for last 13 years and remaining Land record data to be digitized.
 - vii.Planning and Implementation of migration of legacy data from existing database to the target database.
 - viii.Ensure that all the solutions are properly rolled out.
- IA will be responsible for the generation and submission of necessary documentation required during various stages viz. Planning, Installation, Commissioning and Rollout. Prior approval of purchaser is required on all such documentation before commencement of activity.
- IA will be responsible for the installation of the equipment supplied, commissioning of the infrastructure, integration of the infrastructure with network, installation of system software and other related software and assistance and coordination to/with other vendors/entities to ensure proper rollout of the application.
- IA should document the baseline configurations for all equipment and get it approved from purchaser prior to commencement of installation. IA should develop and implement a system to maintain these configurations and ensure adequate controls for change management process on an on-going basis.
- Solution would be considered acceptable only after the conditions of this tender are completely met to the satisfaction of the purchaser.
- IA should be responsible for co-ordination with all the vendors, troubleshooting, addressing borderline issues, coordinating with users at Department of Revenue and PLRS, to ensure successful rollout of the solution.
- The Following services should be provided by IA under Implementation and Rollout':
 - i. Project Planning and Monitoring
 - ii.Requirement Validation
 - iii.Preparation of Core Database design
 - iv.Software Development, Customization, Rollout for Applications
 - v.Installation, Commissioning and Rollout of Hardware
 - vi.Integration of Network

4.16.2 Project Charter

IA shall share the project charter and it will be online dash board for component wise status/progress tracking. Project charter shall comprise of following but not limited to:

- a. Team deployment plan
- b. Transition plan
- c. Setting up of SRO's plan at the room space provided
- d. Application/Software development plan
- e. Disaster recovery plan
- f. Business Continuity plan
- g. Data Entry & Scanning plan
- h. Data Migration plan
- i. Training & Change Management Plan
- j. Test plan
- k. Exit Management Plan

4.16.3 Project Planning and Monitoring

- Within 15 calendar days of the effective date of the Contract, IA will be required to finalize the Project Charter (online dash board for monitoring the status/progress) with due consultation with the Department.
- Finalize the Project Charter in order to determine and agree on the project expectations, ground rules, work plan, communication matrix, timelines, Quality Plan, Configuration Management Plan etc.:
 - i. Project Quality Plan should document specific process elements and the quality actions that the project intends to implement.
 - ii. This should include the derivation of quality goals, standards followed, schedule of quality assurance activities in the project, defect control, correction and preventive methodology, handling process deviations.
 - iii. Configuration Management Plan should contain procedures to be implemented for managing the configuration of the software solution to be produced by the project.
 - iv. In this plan, IA should identify configuration items, responsibilities of configuration controller, access restrictions, directory structure needed for configuration management, procedure for change control, method of tracking the status of configuration items, backup procedure, configuration audits, release management, archival procedure, procedure for version / revision numbering.
- IA shall prepare a detailed project plan (as part of the Project Charter) clearly specifying the tasks, the dependency among the tasks, the duration to perform the tasks, the resources allocated to perform the tasks, the scheduled start and finish dates for the task.
- This project plan should also clearly mention the various project milestones and project deliverable schedules.
- IA shall also prepare a detailed register of project related risks with details such as Probability of Occurrence of the Risk Factor, Severity of the Risk Factor, Risk Rating, Risk mitigation plan, etc.
- The detailed project plan should be internally reviewed for completeness and correctness by IA and subsequently delivered to purchaser for its review and acceptance.

- The mutually agreed Project Plan by IA and purchaser will form the basis for regular project monitoring.
- IA shall revise the project plan to incorporate changes due to requirement changes, delay in approvals, etc., if any, and submit the revised project plan to purchaser.
- IA shall hold fortnightly review meetings with user providing detailed report on the progress of the project (Project Progress Report) clearly highlighting the activities completed in the reporting period, activities planned for the next reporting period, deviations from the planned dates, issues / concerns affecting the project progress, impact on the overall project timelines, project related risks with their mitigation plans.
- IA shall monitor the quality of the solution being developed in line with the project quality plan. IA's Project Manager should periodically review the performance of the project against defined quality goals and take necessary actions for any deviations.
- IA shall ensure proper configuration management functions are being performed as per the configuration management plan. IA's Project Manager should review the activities periodically.
- IA's independent quality assurance team shall conduct regular reviews / audits of the project and ensure that the project adheres to the project plan documents

4.17 Component L - Ongoing Administration and Maintenance requirements

- **Extensions and Modifications:** Changes, extensions and modifications that are deemed necessary will not be afflicted to the system at a time unless and until it is of a major nature. All the changes, extensions and modifications will be requested by the user by filling in change requisition forms and the same will be affected, only on quarterly basis. i.e. new version only to be released after 3 months of the release of previous version for smaller systems and half yearly basis for bigger systems. The changes, modifications and extensions made to the system will also be effected to various reports and manuals and the updated copies of the same shall be submitted as stated here in above. The IA shall have to maintain existing intranet-based solutions along with enhancements and new implementations
- IA to provide following support services:
 - a) Software application maintenance
 - i. End user support
 - ii. Application enhancement / new development
 - iii. Configuration management and version control
 - iv. Release management
 - b) AMC administration
 - c) Administration of Database, System and Network

4.18 Component M - Constitution of the Team

4.18.1 Core Software/ Solution Development Team

- A core Software Development Team, comprising of dedicated skilled and experienced resources from the IA team would be deployed
- Any dispute related to software modules, integration with internal as well as external application/modules shall be taken up by this team. The team shall be responsible for the coordination between the stakeholders during the software development phase.
- The team shall be constituted for first 12 months of the project.
- Team shall be responsible for SRS finalization with due coordination with Project Consultants and purchaser. This team would undertake Software development on the basis of approved SRS.
- Team shall be responsible of designing and developing the new modules, if required or suggested by the purchaser.
- Team shall be responsible for conducting pilot of the various modules and services.
- IA shall have a full design team and experts onboard including Hardware/Networking, Application/ Software Development, Integration/ Tool Smith, Solution design and architecture, database expert.
- Deputed team shall be evaluated as per the qualifications mentioned in the Annexure V - "Minimum Qualification for Staff Proposed"

4.18.2 Core Project Management Team of IA

- IA to establish a core Project Management team comprising of dedicated skilled and experienced resources as per requirement of the project and as detailed in below point

- IA shall depute the following staff for the purpose of maintenance, support, new enhancements required in software solution till the contract period:

#	Profile	Indicative Number of personnel required
1.	Program Director	1
2.	Programme Manager	1
3.	Solution Architect	1
4.	a. Service Manager - Registration & Circle Rate Survey and Due Diligence b. Service Manager - Land Records	1 each
5.	a. Project Manager – IT b. Project Manager - Operations c. Project Manager –Survey d. Project Manager - Data Centre / cloud e. Project Manager – Facilities/Civil f. Project Manager – Data Entry & Scanning	1 each
6.	a. Team Leader - Survey b. Team Leader - Hardware/Networking c. Team Leader - Application/ Software Development d. Team Leader – Integration/ Tool Smith e. Team Leader - Operations f. Team Leader - Capacity Building, Training & Change Management g. Team Leader – Facilities/ Civil h. Team Leader - Data Entry & Scanning	1 each
7.	System Analyst	1
8.	System Administrator	1
9.	Quality Assurance	1

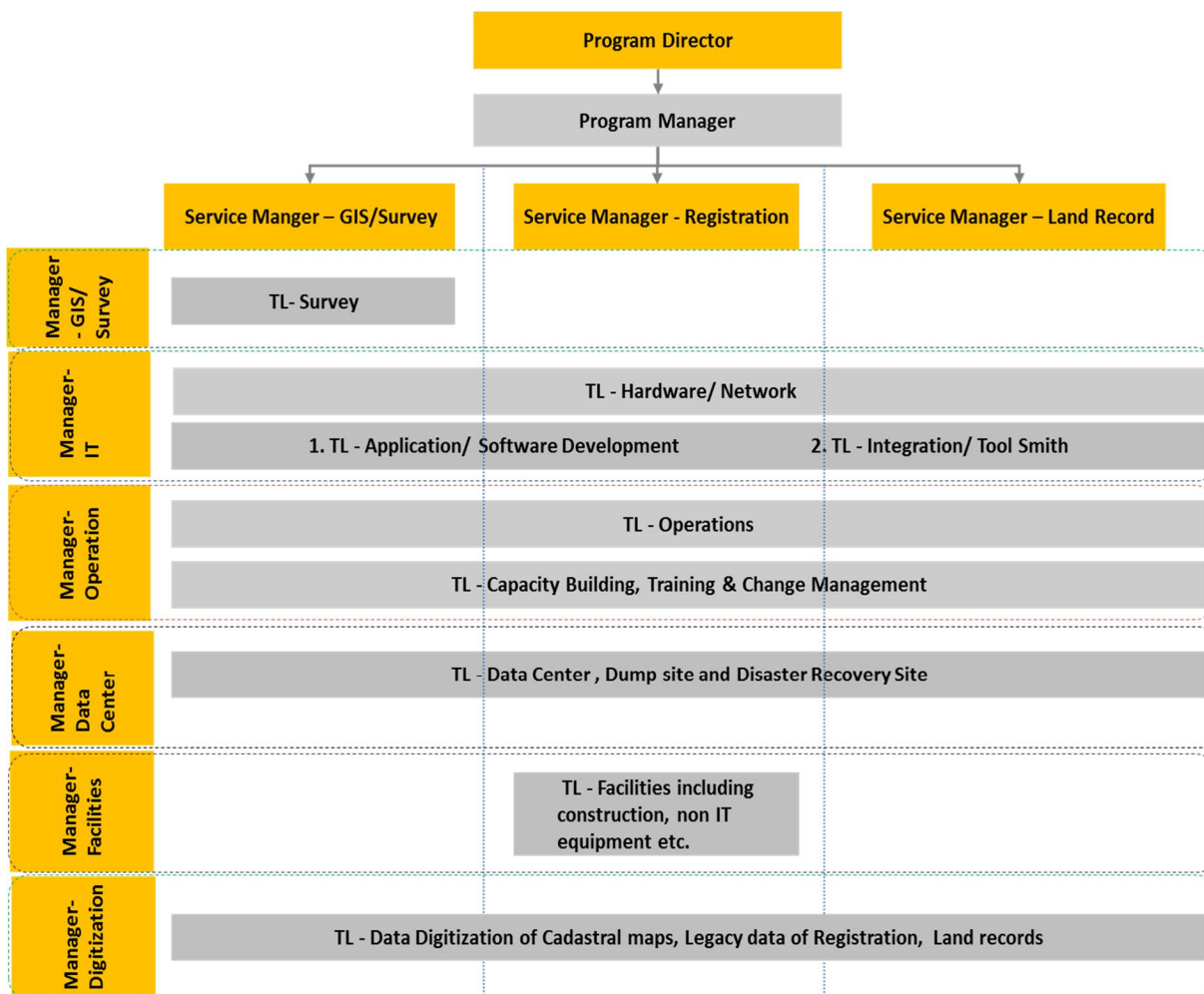
- IA shall deploy the programmer, coder, content writer, data entry operators, Web/Application-Designers, Networking Engineer, system administrator, Network administrator, Database administrator etc. under the above mentioned verticals to meet the Service Level Agreement.
- IA shall share the complete plan to depute the members apart from the above mentioned list with the purchaser.
- Service Managers are responsible for the seamless flow of services to the Citizen.
- Indicative description of above team are as below:
 - Program Director shall be responsible for the overall implementation and execution of the project. He shall present the project progress before the Project Monitoring Unit and Steering committee. He shall be responsible for the standards and guidelines to be incorporated in the execution of the project. He shall monitor the project and provide his

experience to avoid litigations in the implementation as well as Go-live phase. All the finance related matter shall be duly authorized by the Project Director.

- ii. Program Managers of IA team shall have a regular co-ordination with Service Managers & Project Managers both. Program Manager shall escalate the issues to the Project Monitoring Unit or Steering committee if any. He shall be responsible for the co-ordination with all stakeholders. He shall be responsible for all communications regarding integration with Third party, integration with other Department of Revenue services (with due consultation of respective project managers and teams). Program Manager shall be taking care of SLA's in various services.
- iii. Service Managers shall be responsible to take care of all the services in their respective verticals (Registration, Survey and Land Records) during go-live phase. Service managers shall be responsible for attending technical issues with citizen, employee of Department of Revenue, requirement of improvement in services and provide the instruction/suggestion to the concerned Project Manager for the improvement. Service manager shall also be responsible for any inconvenience for citizen and the employee from the Department of revenue and PLRS. So he shall review the quality and scope for the improvement in providing the services to the citizen. Service Manager can take the progress status from the Project Managers.
- iv. Project Managers of IA team (as indicated in "IA team hierarchy" below) shall be responsible to implement and maintain their assigned component for example IT, Survey, Operations, Data Centre, facilities and Digitization. Project Managers shall form a team of essential resources and depute a team leader to monitor and guide them. Project Manager shall assess the requirement of manpower in his team to implement his assigned component. Project Manager shall be responsible for end to end development of his respective components.

Please refer Annex V- Minimum Qualification for the Proposed Staff the minimum requirement of the staff.

- The IA is obligated to modify / enhance software solution without any extra financials or raising change order using the above deployed team till the contract period.
- Deputed team shall be evaluated as per the qualifications mentioned in the Annexure V - "Minimum Qualification for Staff Proposed"
- The Project Management Unit, constituted by the Purchaser, shall monitor the project implementation, execution and take the project status from the IA Team members on regular basis.
- Essentially the IA team shall ensure the success of the project by liaison and coordinating with all the stakeholders of the Department of Revenue , their own employees, Consortium partners, other state departments etc., wherever it is required
- Replacement of the proposed resources shall not be allowed. IA shall need to deploy the same personnel as proposed and selected through the bid
- IA shall establish project governance mechanism.
- IA shall form the team hierarchy which is as below:



- Set up escalation and issue/ risk management mechanisms / procedures along with purchaser
- Program Director and Program Manager from IA shall be the point of contacts and shall be responsible for overall implementation of the project. They shall represent their team and provide project status on regular basis to the Project Management Unit and Steering committee as and when required. They shall be responsible for monitoring & executing the day to day operations of the project. Purchaser shall have regular meeting with following members from the IA team:
 - a) Program Director
 - b) Program Manager
 - c) Service Manager – Registration
 - d) Service Manager – Land Records
 - e) Service Manager –Survey
 - f) Retired Patwari
 - g) Retired Tehsildar / Sub-registrar

4.18.3 Project Monitoring Committees

Purchaser and DoR shall establish two high level committees for the smooth implementation of the project which are below:

- Project Steering Committee
- Project Monitoring Unit (PMU)

4.18.3.1 Project Steering Committee:

This is a high level committee which will comprise the representatives from Department of Revenue, Punjab Land Records Society, Department of Governance Reforms, Finance Department and the members nominated by the Department of Revenue from the other Departments. The committee will be chaired by the Finance Commissioner – Revenue. The role of this committee would be as follows, but not limited to:

1. Provide overall leadership, vision and direction for the implementation of the project.
2. Take decisions on matters requiring Policy and Regulatory matters
3. Review and monitor program progress
4. Accord financial approvals
5. Review budgetary requirements and financial monitoring of allocated funds
6. Review the progress of project
7. Provide direction on operational matters related to the progress of the project
8. Facilitate Program implementation and Project Management
9. Carry out technical assessments and facilitate decisions that are of technical nature
10. Review and acceptance of deliverables including user acceptance testing
11. Suggest remedial measures for problems that are technical in nature
12. Resolve key technical conflicts during the entire project
13. Oversee the IA's tasks
14. Review performance levels and endorse payments to IA
15. Carry out any other tasks as may be assigned by the PMU

4.18.3.2 Project Monitoring Unit (PMU)

This will be a Technical Working Group will be nominated by the Steering Committee as a support structure for examining matters that are related to the project. This group will be constituted with the members from both Domain expert (Land Records and Registration of Document) and IT expert. Project Monitoring Unit (PMU) shall have domain as well as Technical experts. This group will comprise officials from Punjab land Records Society, Department of Revenue, Project Consultant or Purchaser may depute domain experts (for example retired officials etc.) The role of this team would be as follows, but not limited to:-

1. Facilitate Program implementation and Project Management
2. Carry out technical assessments and facilitate decisions that are of technical nature
3. Review and acceptance of deliverables including user acceptance testing
4. Suggest remedial measures for problems that are technical in nature
5. Facilitate the implementation of approved policy / regulatory changes and other techno-commercial issues
6. Resolve key technical conflicts during the entire project
7. Oversee the IA's tasks
8. Review performance levels and endorse payments to SI
9. Carry out any other tasks as may be assigned by the Steering Group
10. Ensuring regular coordination among all stakeholders of the project

It is recommended that for the User Acceptance Testing, apart from the central officers, select Department of Revenue officers representing each district and provision office should be included in the user acceptance group.

The Department of revenue or purchaser representatives (from district and provincial offices) would be required to use the system and report their observations and findings to the Project Monitoring Unit on the challenges and changes required in the system. The Project Monitoring Unit would be required to assess the inputs of the users and liaison with the IA to close the UAT and issue the acceptance certificate. A group of citizen shall also be introduced for conducting user acceptance testing.

This would ensure that the user acceptance test team would have adequate representation from all the relevant user groups who would be using the system post go-live and maximum process or system level defects and bugs would be detected prior to the system go-live.

4.19 Component N - Acceptance of system

4.19.1 Acceptance of Civil sites/ SRO set up by IA

- The IA shall present the architectural design of the site and take the approval of PLRS / Competent Authority (deputed by DoR).
- The IA shall take the approval of the Infrastructure to be installed at the SRO from PLRS / Competent Authority (deputed by DoR).
- System testing schedules, formats for testing and commissioning reports and dissemination mechanism for such reports shall be drawn by the IA in consultation with the purchaser.

4.19.2 Acceptance criteria for Servers, Devices and Solutions

- Acceptance schedules, detailed acceptance tests, formats for acceptance reports and dissemination mechanism for such reports shall be drawn by the IA in consultation with the purchaser
- The Acceptance of the solution shall be provided by the purchaser only after the following conditions have been met successfully to the satisfaction of the department.
 - i. Successful rollout of the system to all the locations of the Department of Revenue from Data Centre and functioning to DR site to the extent necessary for meeting the desired objectives of the DC / DR / NLDC sites on cloud.
 - ii. Successful operation of the system for 90 working days after complete rollout of the system meeting the response time and performance criteria provided as part of this tender.
 - iii. Completion of all the documentation required as part of this tender and as desired by the purchaser to the satisfaction of purchaser
 - iv. Installation and Configuration of all the components of the solutions including, but not limited to, hardware, software, devices, accessories, etc. to the satisfaction of the purchaser at DC, DR, NLDC, offices site and successful testing of all components.

4.19.3 Work Products / Documents / Reports

- Work Products / Documents / Reports required for each Phase / stage of the project (wherever applicable)

Work Products / Document / Reports
a. Software Requirement Specifications (SRS)

Work Products / Document / Reports
b. System Design Document (SDD) / Process Design Report
c. Testing Stage <ul style="list-style-type: none">• Integration Test Cases with Results• System Test Cases with Results• Performance and Load testing
d. User Acceptance Testing <ul style="list-style-type: none">• UAT Case and Results• Source code and executables• Installation Manuals
e. Implementation <ul style="list-style-type: none">• Implementation Plan including data migration, user training and rollout plan• User Manuals• Training Manuals• FAQ & Trouble Shooting Guide
f. Warranty Support <ul style="list-style-type: none">• Defect / Bugs log with resolution• Consolidated List of Common Errors and their Resolution
g. Requirements Change Management <ul style="list-style-type: none">• Change Request Log• Impact Analysis including changes in effort and schedule
h. End user Support <ul style="list-style-type: none">• Defect / Bugs log with resolution• Consolidated List of Common Errors and their Resolution
i. Application enhancement and new developments <ul style="list-style-type: none">• Change Request logs• Impact Analysis with Effort Estimates• Software Requirement Specifications (SRS)• System Design Document / Process Design Document• Source Code & Executables for the CR• Integration Test cases & results• System Test Cases & Results• UAT Case and Results• Source code and executables• Installation Manual• Training Manuals / User Manuals• FAQ & Trouble Shooting Guide
j. Release Plan and Release Note

4.19.4 User Acceptance stage

UAT will be deemed to be successful on the timely completion of the following User Acceptance activities:

1. IA to assist the purchaser to develop user acceptance test cases
2. IA shall deploy the solution in the test environment.
3. IA is responsible to create datasets required to carry out the acceptance testing.
4. IA shall re-test the solution to ensure closure of identified defects / bugs.
5. IA shall assist the users during acceptance testing.
6. After the defects are resolved, IA shall deploy the solutions on the production environment.
7. The solution will be monitored under production use for a pre-defined period of time for satisfactory performance of the solutions.
8. In case of any performance issues during this period, IA shall resolve the issues identified on a priority basis.
9. Provision testing tools and automatic scripts of UAT test cases to conduct UAT in the automatic mode.

4.20 Component O - Civil Infrastructure Requirement for SRO's

Scope of work in this component is as below, but not limited to:

- IA shall manage the operations at all the 170 SROs across the state.
- IA shall design counters and Infrastructure as per all the categories (A, B and C) of the respective SRO's as mentioned below.
- IA shall provide Electrification, Public Health, Furniture and Air-conditioner at all the SRO locations falling in Category A, B and C.
- IA shall do the civil work at all the SRO as per the requirement. IA shall modify the interior as per the requirement.
- IA shall bear the recurring cost for all the operations at all SRO locations
- All the Sub Registrar offices for A, B and C categories will be upgraded at the Govt. premises. Department will provide the space for set up of SRO as per proposed design. If it is not available with the purchaser then purchaser shall take on rent and handover to the IA. In this case, purchaser shall bear only rent of the SR Offices and rest shall be taken care by the IA.
- As category A and B SR offices have larger transaction of the registration services then provision of 3 cabins for category A offices and 2 cabins for Category B offices with required IT and Non-IT hardware be provisioned.
- IA shall keep the provision for adding number of SROs in future depending upon work load and performance
- Please refer "Annexure II – FRS – Civil" for detailed requirements for the SROs.
- Purchaser shall provide the parking space at all SROs as per PUDA specification for all the categories
- IA shall provision a separate room at SR office for the CRO (Circle Revenue Officer) of the same area (Sub Registrar and Circle Revenue Officer are two different roles assigned to the same officer). Leveraging the same premise with different workplaces for CRO and SRO, to executing their roles and responsibility, will lead to efficiency and effectiveness in the performance.
- IA shall setup SRO's as per the following categories
- Please refer "Annexure II - Section 2.4 & 2.5" for indicative list of infrastructure at all the locations

4.20.1 Category A

- All the sub registrar offices where numbers of transactions are more than 60 per day constitute as Category A. there are 14 SROs in this category.
- The indicative required space for operating such SRO's will be approx. 6000 square feet per module.
- IA needs to adhere to the following design and infrastructure as shown in the figure below:

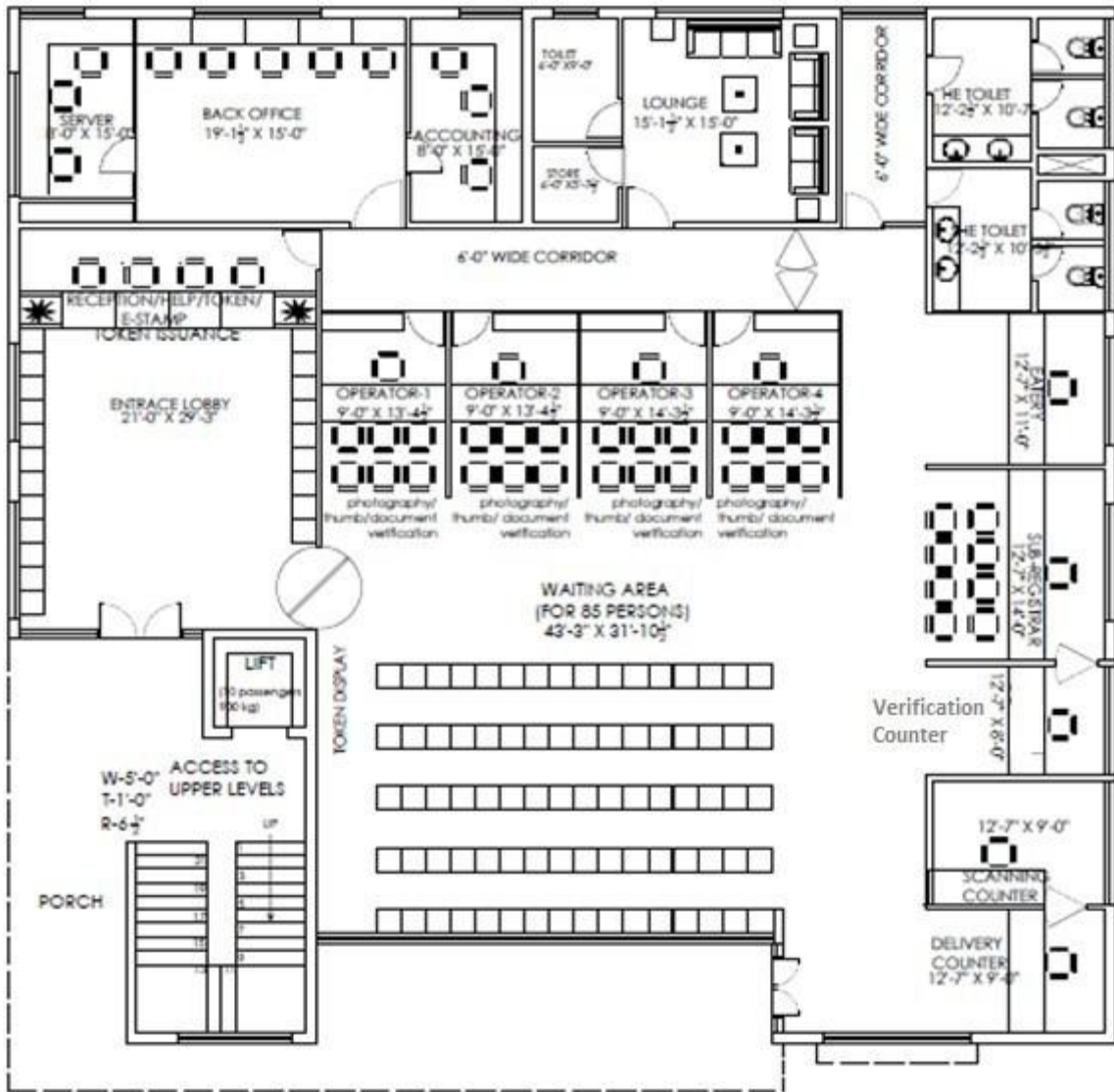


Figure: Illustrative SRO layout for Category A

List of locations in 'Category A' are as below:

Sr. No.	Name of Sub Registrar Offices	Factor of Site
1.	Amritsar 1	0.013
2.	Amritsar 2	0.013
3.	Bathinda	0.013
4.	Derabassi	0.013
5.	Hoshiarpur	0.013
6.	Jalandhar-1	0.013
7.	Jalandhar-2	0.013
8.	Kharar	0.013
9.	Ludhiana (central)	0.013

Sr. No.	Name of Sub Registrar Offices	Factor of Site
10.	Ludhiana (east)	0.013
11.	Ludhiana (west)	0.013
12.	Moga	0.013
13.	Pathankot	0.013
14.	Patiala	0.013

Table: Indicative Locations in Category A

4.20.2 Category B

- All the sub registrar offices where numbers of transactions are more than 30 and less than 60 registrations per day constitute as Category B Offices. There are total 42 SROs in this category.
- The indicative required space for operating such SROs will be 2500 square feet.
- IA needs to adhere the following design and infrastructure as shown below:

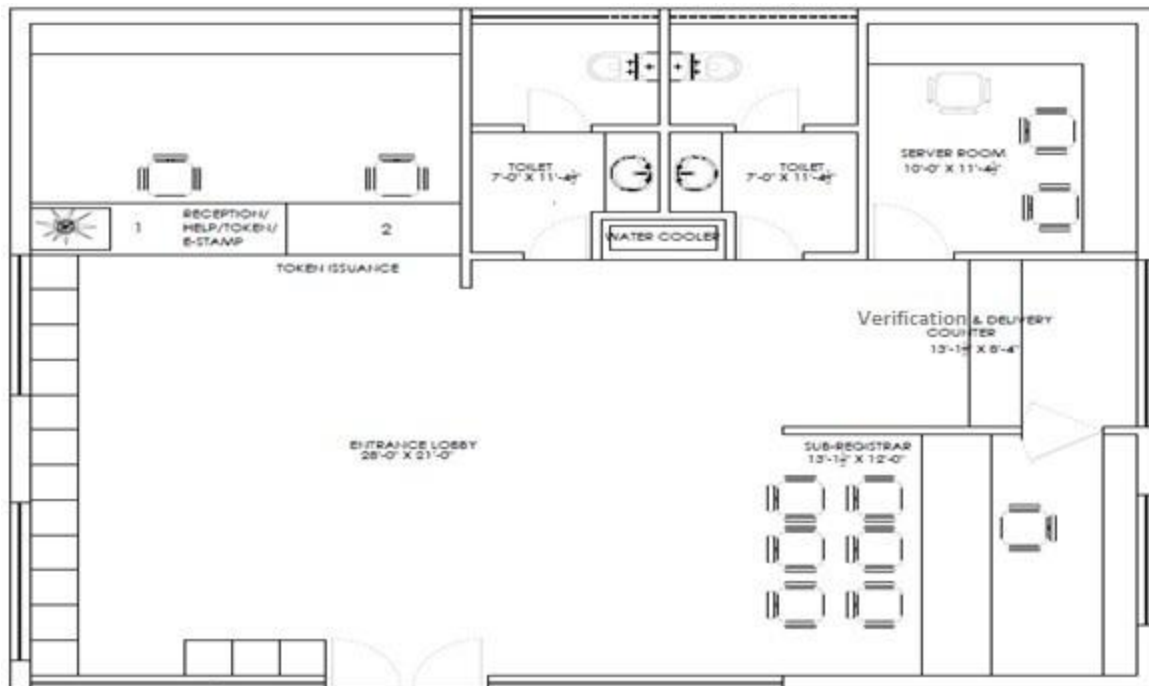


Figure: Illustrative SRO layout for Category B

List of locations in category B are as below:

Sr. No.	Name of Sub Registrar Offices	Factor of Site
1.	Abohar	0.009
2.	Ajnala	0.009
3.	Baba Bakala Sahib	0.009
4.	BALACHAUR	0.009
5.	Banur	0.009
6.	Barnala	0.009
7.	Batala	0.009
8.	Dasuya	0.009
9.	Dhanaula	0.009
10.	Faridkot	0.009
11.	Fazilka	0.009
12.	Ferozepur	0.009
13.	Garhshankar	0.008
14.	Gurdaspur	0.008
15.	Guruaharsahi	0.008
16.	Jagraon	0.008
17.	Jaitu	0.008
18.	Jalalabad	0.008
19.	Kapurthala	0.008
20.	Khanna	0.008
21.	Kotkapura	0.008
22.	Majri	0.008
23.	Malerkotla	0.008
24.	Malout	0.008
25.	Mansa	0.008
26.	Mukerian	0.008
27.	Nawanshahr	0.008
28.	Patti	0.008
29.	Phagwara	0.008

Sr. No.	Name of Sub Registrar Offices	Factor of Site
30.	Raikot	0.008
31.	Rajpura	0.008
32.	Rampura Phul	0.008
33.	Rupnagar	0.008
34.	Sahnewal	0.008
35.	Sangrur	0.008
36.	Sri Muktsar Sahib	0.008
37.	Sunam	0.008
38.	Talwandi Sabo	0.008
39.	Tanda	0.008
40.	Tapa	0.008
41.	TarnTaran	0.008
42.	Zirakpur	0.008

Table: Indicative Locations in Category B

4.20.3 Category C

- There are total 114 SRO's in this category.
- IA requires to run the remaining SRO (in category C) sites with essential infrastructure at existing offices
- Indicative layout of category C is as below:

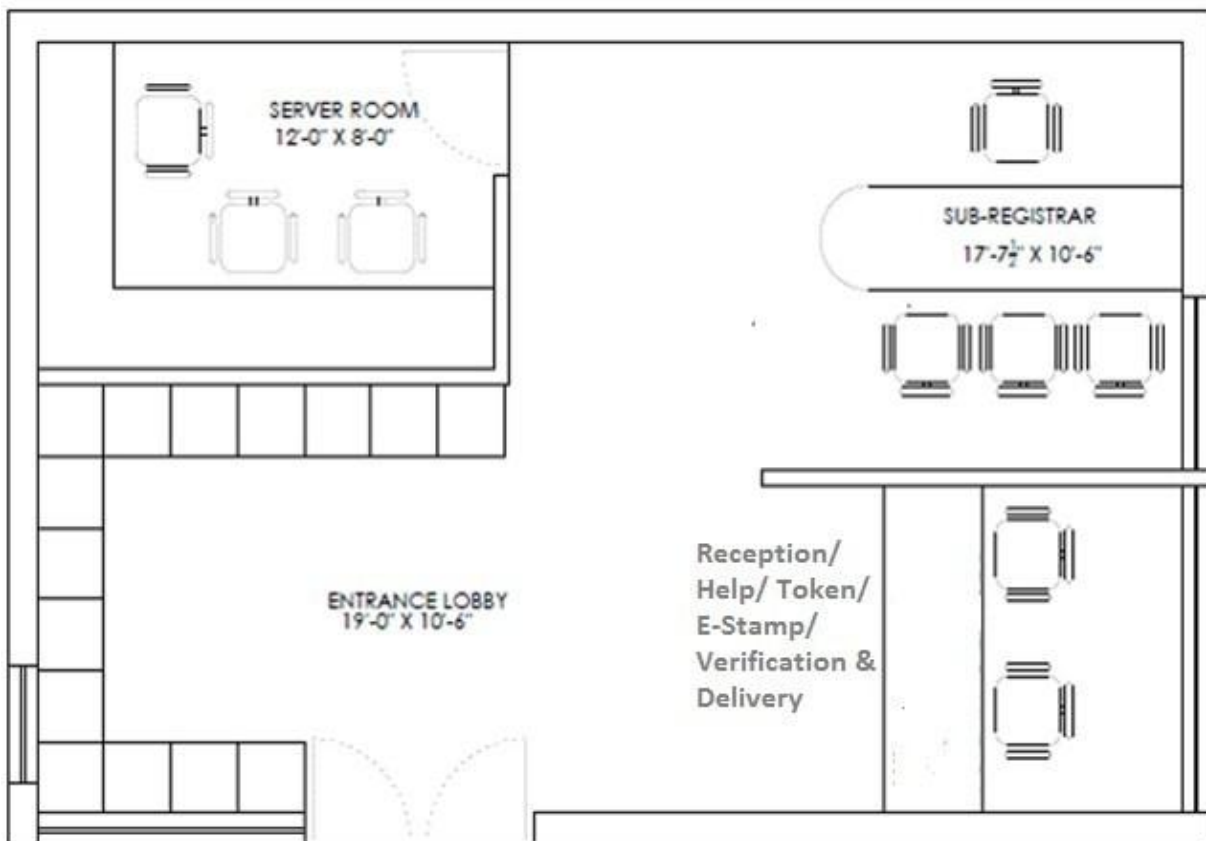


Figure: Illustrative SRO layout for Category C

List of locations in category Care as below:

Sr. No.	Name of Sub Registrar Offices	Factor of Site
1.	Adampur	0.005
2.	Ahmedgarh	0.005
3.	Amargarh	0.005
4.	Amloh	0.005
5.	Anandpur Sahib	0.005
6.	Arniwala	0.005
7.	Attari	0.005
8.	Badhni Kalan	0.005
9.	Baghapurana	0.005
10.	Balianwali	0.005
11.	Bamail	0.005
12.	BANGA	0.005
13.	Bareta	0.005
14.	Bariwala	0.005

Sr. No.	Name of Sub Registrar Offices	Factor of Site
15.	Bassi Pathana	0.004
16.	Bhadaur	0.004
17.	Bhadson	0.004
18.	Bhagta Bhai Ka	0.004
19.	Bhikhi	0.004
20.	Bhikhiwind	0.004
21.	Bhogpur	0.004
22.	Bholath	0.004
23.	Bhunga	0.004
24.	Bhwanigarh	0.004
25.	Budhlada	0.004
26.	Cheema	0.004
27.	Chohl Sahib	0.004
28.	Dehlon	0.004
29.	Dera Baba Nanak	0.004
30.	Dharamkot	0.004
31.	Dhariwal	0.004
32.	Dharkalan	0.004
33.	Dhilwan	0.004
34.	Dhuri	0.004
35.	Dina Nagar	0.004
36.	Dirba	0.004
37.	Doda	0.004
38.	Dudhan Sadhan	0.004
39.	Fatehgarh Sahib	0.004
40.	Fatehgarh Churian	0.004
41.	Gardiwala	0.004
42.	Ghanour	0.004
43.	Gidderbaha	0.004
44.	Goindawal Sahib	0.004

Sr. No.	Name of Sub Registrar Offices	Factor of Site
45.	Goniana Mandi	0.004
46.	Goraya	0.004
47.	Hajipur	0.004
48.	Harike	0.004
49.	Jandiala	0.004
50.	Jhabal Kalan	0.004
51.	Jhunir	0.004
52.	Joga	0.004
53.	Kahnuwan	0.004
54.	Kalanaur	0.004
55.	Kartarpur	0.004
56.	Khadoor Sahib	0.004
57.	Khamano	0.004
58.	Khanauri	0.004
59.	Khemkaran	0.004
60.	Khuiyan Server	0.004
61.	Koom Kalan	0.004
62.	Kot Ise Khan	0.004
63.	Lakhewali	0.004
64.	Lambi	0.004
65.	Lehra	0.004
66.	Lohian	0.004
67.	Longowal	0.004
68.	Lopoke	0.004
69.	Machhiwara	0.004
70.	Mahilpur	0.004
71.	Majitha	0.004
72.	Makhu	0.004
73.	Maloud	0.004
74.	Mamdot	0.004

Sr. No.	Name of Sub Registrar Offices	Factor of Site
75.	Mandi Gobindgarh	0.004
76.	Maur	0.004
77.	Mehal Kalan	0.004
78.	Mehatpur	0.004
79.	Mohali	0.004
80.	Moonak	0.004
81.	Morinda	0.004
82.	Mullanpur	0.004
83.	Nabha	0.004
84.	Nakodar	0.004
85.	Nangal	0.004
86.	Nathana	0.004
87.	Naushehra Pannu	0.004
88.	Nihal Singh Wala	0.004
89.	NJ Singh	0.004
90.	NM Singh	0.004
91.	Noormahal	0.004
92.	Nurpur Bedi	0.004
93.	Patran	0.004
94.	Payal	0.004
95.	Phillour	0.004
96.	Qadian	0.004
97.	Ramdass	0.004
98.	Sadiq	0.004
99.	Samana	0.004
100.	Samrala	0.004
101.	Sangat	0.004
102.	Sardulgarh	0.004
103.	Sh. Chamkaur Sahib	0.004
104.	Shahkot	0.004

Sr. No.	Name of Sub Registrar Offices	Factor of Site
105.	Sherpur	0.004
106.	Shri Hargobindpur	0.004
107.	Sidwan Bet	0.004
108.	Sitto Gunno	0.004
109.	Sultanpur Lodhi	0.004
110.	Talwandi Bhai	0.004
111.	Talwandi Chaudhrian	0.004
112.	Talwara	0.004
113.	Tersikka	0.004
114.	Zira	0.004

Table: Indicative Locations in Category C

4.20.4 Operations and Manpower at each counter:

- IA shall depute manpower at each counter as per the requirement at each category
- Operations and manpower at SRO are as shown in Image below:

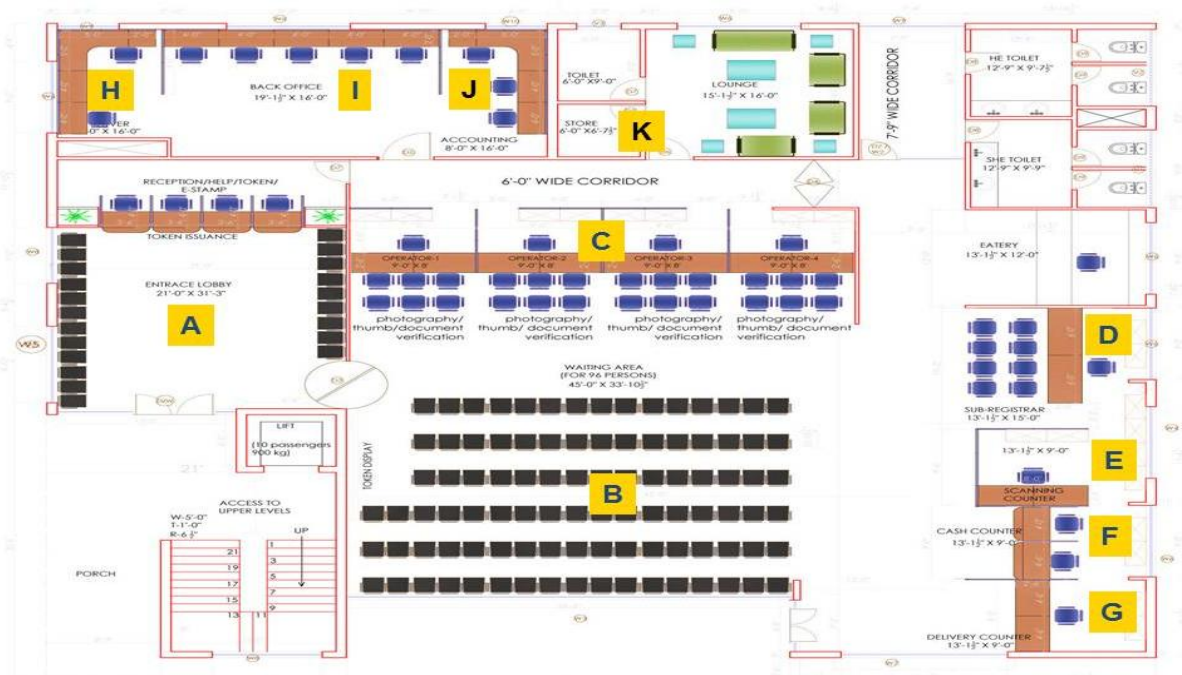


Figure: Counters in SRO

A - Reception Counter:

There will be 2 operators at Reception Counter. Their duties shall include the following:

- To check the appointment slip and confirming the appointment from the system.
- To check Identity Proof of the party as mentioned in the deed.

- To check Documents as per the required checklist (if any document missing then party will not be allowed to enter the waiting area).
- To issue Token Number to the party and 2 witness.
- To issue Access Cards to the concerned party and 2 witness for entering the waiting area (extra person will not be issued access cards).

B - Waiting Area:

- The party shall enter the Waiting Area which has the capacity for sitting of 96 persons.
- The party shall wait for the token display for their turn to visit the Pre-Presentation Counter for the Pre-Presentation.

C - Pre-Presentation Counter:

There will be 4 operators each one at every Pre-Presentation Counter. Their duties shall include the following:

1. To call the concerned party for Pre-Presentation through token display.
2. To validate all the documents brought by the party.
3. To check ownership details (as mentioned in RoR) from system Integrated Land Record Database.
4. To check Stay Orders, Court Orders and any other disputes (like bank loan or property lying in Government area).
5. To check Stamp Duty Paid (from the Property Valuation Engine Integrated with Surveyor Report and Circle Rate Database)-Focusing on the Transaction Area mentioned in the deed with the DC rate of the particular Khasra no. (identified during Survey and due coordination with the concerned officer) according to which the Stamp Duty has been calculated.
6. To capture the Photographs of the Party.
7. To capture the Biometrics/Thumb impressions of the Party.
8. To enter the comments if any correction required in the documents.
9. To release the Token Number from the system and forwarding it to SR for Presentation.

D - Presentation at SR:

There will be 1 SR and 1 operator (to assist SR) in SR cabin. Their duties shall include the following:

1. The Operator will call the concerned party in SR cabin for Presentation through token display.
2. SR will enter the TRN and check the comments (if any) given by the Operator at Pre-Presentation Counter.
3. SR will scrutinize the documents and stamp duty paid by the Party to take the decision whether to approve or refuse the registration.
4. If SR approves, the Operator will take the print out of the Endorsement (which will contain the captured Photographs and Thumb impressions of the Party including the Digital signature of SR and system generated Unique Registration Number).

5. If SR refuses, the party will be asked to do the necessary corrections. In such cases, SR will mention his comments/reasons for refusal and tags it with the TRN.
6. The Operator will assist the party and SR to physically sign the endorsement.
7. SR will use his biometrics to initiate the process of Mutation (with one condition i.e. Fee payment by the Party).
8. The system shall be able to capture remarks entered by SR in case he approves or rejects the registration of the documents during the presentation process. All the remarks entered by SR can be generated in the form of in the form of log trail.
9. During the presentation process, Audio and Video of the party with SR shall be captured especially in the case of Registration of wills and system shall be able to index the audio and video files for the future references. The operator will hand over the documents (including the deed) to the Scanning Operator for scanning and uploading.
10. SR will store the registered wills in a Safe under his custody.
11. SR will personally scan the registered wills and adoption deeds.

E - Scanning Desk:

There will be 1 operator at Scanning Desk. The duties of that operator shall include the following:

1. To scan the whole documents and tag it with the TRN.
2. To upload the scanned documents at Centralized Server/Data Centre, Disaster Recovery and Data Dump Sites at cloud.
3. All the scanned documents shall be stored in an encrypted form (for security reasons).
4. Entry in Digitized books and Indexes for easy retrieval of records.

F - Fees Verification Counter:

There will be 1 operator at Fees Verification Counter. The duties of that operator shall include the following:

1. To enter the TRN in the system and collect the auto calculated fee from the party.
2. To issue the system generated fee slip to the party.
3. The operator shall handover the mutation notices to IA to deliver them to Buyer, Seller and Public without any delay (as per the defined SLA's).

G - Delivery Counter:

There will be 1 operator at Delivery Counter. The duties of that operator shall include the following:

1. To check the status of fee paid by the party (by entering TRN in the system).
2. To hand over the documents to the party (if the fee status against the TRN is updated).
3. To collect the access cards back from the party.

H - Server Room:

1. There is a provision of server room at SRO.

I - Back Office:

1. The back end operations shall be handled from the back office.
2. The compactors shall be installed here to store the manual records and books.

J - Account Room:

1. The operator at Accounts Room shall generate the MIS reports and reconcile the amount collected by SHCIL with Treasury

K - Store:

1. The store shall be used to keep the consumables for SR operations.

Indicative Counters and Infrastructure at category A, B and C:

Indicative counters and infrastructure at all the SROs in category A, B & C are as below:

● **Category A**

Sr. No.	Counter/ Infrastructure	Indicative Number
Counters		
1	Reception	2
2	Pre Presentation	4
3	SR Counter	3
4	Scanning	1
5	Fees Verification Counter	1
6	Delivery Counter	1
Infrastructure		
1	Local Server Entry Level	
2	Laser Printer	
3	Thin Client	
4	Photocopy Machine	
5	Digital Camera & QR Code Reader	
6	Scanner	
7	Finger print scanner (Biometrics)	
8	Biometric device for Citizens	
9	Token Display System	
10	Switch (24 ports)	
11	Patch Cords	
12	Generator (40 KVA)	
13	UPS (20 KVA)	
14	Air Conditioner	
15	Furniture	
16	Public Health	
17	Electrical Work	
18	Router	
19	WAN optimizer	
20	Jack Panel (for Router Installation)	

Table: Counters and Infrastructure in Category A

• **Category B**

Sr. No.	Counter/ Infrastructure	Indicative Number
Counters		
1	Reception	1
2	Pre Presentation	2
3	SR Counter	2
4	Scanning	1
5	Fees Verification Counter & Delivery	1
Infrastructure		
1	Local Server Entry Level	
2	Thin Client	
3	Scanner	
4	Digital Camera & QR Code Reader	
5	Finger print scanner (Biometrics)	
6	Biometric device for Citizens	
7	Token Display System	
8	Switch (16 ports)	
9	Patch Cords	
10	UPS (5 KVA)	
11	Generator set (20 KVA)	
12	Laser Printer	
13	Air Conditioner	
14	Furniture	
15	Public health	
16	Electrical Work	
17	Router	
18	WAN optimizer	
19	Jack Panel (for Router Installation)	

Table: Counters and Infrastructure in Category B

- **Category C**

Sr. No.	Counter/ Infrastructure	Indicative Number
Counters		
1	Pre Presentation	1
2	SR Counter	1
Infrastructure		
1	Desktop	
1	Thin Client	
2	Digital Camera & QR Code Reader	
3	Finger Print Scanner (Biometrics)	
4	Biometric device for Citizens	
5	Multi-Function Printer	
6	Switch (8 ports)	
7	Patch Cords	
8	Generator (5 KVA)	
9	UPS (1 KVA)	
10	Air Conditioner	
11	Furniture	
12	Public health	
13	Electrical Work	
14	Router	
15	WAN optimizer	
16	Jack Panel (for Router Installation)	

Table: Counters and Infrastructure in Category C

Note: IA shall install split AC of 5 Star rating considering 2 AC of the capacity of 2 Tons for 1000 Sq Ft. for SR Offices. For example: for 6000 sq ft. IA shall install 12 split ACs and for 2500 sq. ft IA shall install 5 ACs at SR offices.

- **CRO Room at the SR office**

S. No.	ICT component
Other Offices	
1.	Thin client
2.	Network Printer
3.	UPS (1 KVA)
4.	Switch (8 port) cum Router
5.	Tables and Chairs
Any other additional items required over and above indicative required stated to meet the desired SLA in the RFP	

- **Fard Kendra**

S. No.	ICT component
Fard kendra	
1.	Desktops (02)
2.	Printer (to print the Nakals and other relevant documents) (01)
3.	UPS (1 KVA) (02)
4.	Switch (8 port) cum Router (1)
5.	Table (2)
6.	Chair (2)
Above components are numbers are mentioned for each location. There are total 172 fard Kendra in the State	

4.21 Timelines

4.21.1 Timeline - Completion of SROs

S. No.	Milestone	Expected Completion from the date of Award of Work Order	Deliverables / Solutions
1.	Setting up of all "Category A" SR offices	4 Months	<ul style="list-style-type: none"> ▶ Plan for setting – up of SRO's ▶ Setting up SRO's as per details in scope of work ▶ Commissioning of infrastructure as per details given in this document
2.	Setting up of "Category B" SR offices	9 Months	
3.	Setting up of "Category C" SR offices	12 Months	

Table: Timeline – Completion of SROs

4.21.2 Timeline – Services (As per prioritizations)

S. No.	Service Prioritization	Expected Completion from the date of Award of Work Order
1.	Only Registration Service (No Integration with Circle Rate Due-Diligence and Land Records) Priority 1 Service: 1) Only Registration* with Online Appointment and E-Stamping <i>*Note: please refer section 4.22.3 for various type of registration of deeds</i>	4 Months
2.	Registration with Circle Rate Due-Diligence Integration Priority 2 Services: 2) Registration with Circle Rate Due-Diligence 3) Marriage Registration 4) Rent Deed Registration	9 Months
3.	Integration of Registration and Land Record Priority 3 Services: 5) Mutation Process 6) Nakal Registration	12 Months

S. No.	Service Prioritization	Expected Completion from the date of Award of Work Order
	7) Nakal Jamabandi 8) Other Nakals (Khasra Girdawari, Shajra Nasb, Field Book, Rapat etc.) 9) Nakal Mutation 10) Nakal of Map 11) Non-Encumbrance Certificate *All nakal and certificate services will be rolled out for the data digitized till year 2010 and the rest will be rolled out as per Data Entry & Scanning timeline.	

4.21.3 Timeline - System Implementation

S. No.	Milestone	Expected Completion from the date of Award of Work Order	Deliverables / Solutions
Phase I – Planning			
1.	Submission of detailed Project Management Plan, Exit Management Plan along with establishment of live project management dashboard	2 Weeks	Project Charter - Certification by the purchaser or competent third party auditor nominated by the purchaser
2.	Specifications of cloud system (Network, Servers, Hardware, Storage, System Software in the data centre, near data centre , disaster recovery centre and office locations)	4 Weeks	Validated bill of materials and specifications of the IT infrastructure - Certification by the purchaser or competent third party auditor nominated by the purchaser
3.	Finalization of “System Requirement Specifications” (‘SRS’) on the basis of FRS (Functional Requirement Specification)	6 Weeks	System Requirement Specifications document - Certification by the purchaser or competent third party auditor nominated by the purchaser
4.	Completion of configuration of services at cloud Data Centre , Disaster recovery Centre and near line Data recovery	10 Weeks/	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
Phase II –Implementation			
5.	User Acceptability of Priority 1 Services and relevant software/applications	12 Weeks/ 3 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser

S. No.	Milestone	Expected Completion from the date of Award of Work Order	Deliverables / Solutions
6.	Setting up of category A SR offices	4 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
7.	Completion of Primary & Secondary connectivity to all the DoR offices of category A and connectivity between DC , DR and Near DR and all connectivity requirements as per RFP	4 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
8.	Rollout of Priority 1 services at Category A sites	4 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
9.	Development of Information Security Policies and Procedures (This activity to be started only after completion of solution Go-Live)	8 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
Roll out of Category B Sites and Priority 2 services (Please refer section 4.21)			
10.	User Acceptance of Priority 2 Services	9 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
11.	Setting up of Category B sites	9 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
12.	Completion of Primary & Secondary connectivity to Category B Sites i.e. 42 Sites	9 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
13.	Roll out of Priority 1 and 2 services at Category A and B sites	9 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
14.	Migration of legacy data	10 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
15.	Completion of Training	11 Months	Training to the Department of Revenue personnel, manuals, material and training completion report - Certification by the Purchaser or competent third party auditor nominated by the Purchaser
Roll out of Category C Sites and Prioritization 3 Services (Please refer section 4.21)			
16.	<ul style="list-style-type: none"> Pilot Run of integrated RoD and Land record modules in 	From 11 th to 12 th Month	<ul style="list-style-type: none"> Integrated ROD and LR services - Certification by

S. No.	Milestone	Expected Completion from the date of Award of Work Order	Deliverables / Solutions
	one of the selected District in Punjab <ul style="list-style-type: none"> • Pilot Run of land record services in one of the selected District in Punjab 		the Purchaser or competent third party auditor nominated by the Purchaser
17.	User Acceptance Testing of the Integration of Land Record, Registration Software and other supporting software mentioned in the Functional requirement Specification	12 Months	<ul style="list-style-type: none"> • Unit and Integration Testing Plan and Procedure • UAT Test cases • Testing report with fail / pass results and plan to fix the defects • Department to review and accept the system • Certification by the Purchaser or competent third party auditor nominated by the Purchaser
18.	Installation and commissioning of invoice and payment module, SLA management tool and EMS	12 months	Developed and tested Invoice and Payment Module - Certification by the Purchaser or competent third party auditor nominated by the Purchaser
19.	Software development as per RFP requirements	12 Months	<ul style="list-style-type: none"> • Digitized and migrated Database • Master data creation • Full customization or development of the application software • Rollout for UAT • Application Software and other requirements such as source code, library files, DLL's, setup programs, documentation, etc. • Certification by the Purchaser or competent third party auditor nominated by the Purchaser etc.

S. No.	Milestone	Expected Completion from the date of Award of Work Order	Deliverables / Solutions
20.	Setting up of Category C Sites	12 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
21.	Completion of Primary & Secondary connectivity to all the remaining DoR offices i.e. 114 Sites of category C	12 Months	Certification by the Purchaser or competent third party auditor nominated by the Purchaser
22.	Roll out of category A, B and C Sites with Priority 1,2 and 3 services	12 months	Category C sites and category 3 services - Certification by the Purchaser or competent third party auditor nominated by the Purchaser
Phase III – Go live			
Phase IV – Operational & Maintenance			
23.	Operation & Maintenance Support (Post Implementation Phase)	Contract period is 12 months of Implementation Period and 5 years of operations/ post implementation	For each year of support and maintenance phase: <ul style="list-style-type: none"> • Monthly log of service calls and problem resolution reports for Helpdesk • Quarterly Performance Monitoring Reports for the system • Updated system design documents, specifications for every change request • Latest source code, application deployment files, configuration files for entire solution • Updated user manuals, administration manuals, training manuals etc. • Software change logs

Table1: Timeline – System Implementation

4.21.4 Timeline - Data Conversion

S. No.	Milestone	Estimated Records	Expected Completion from the date of Award of Work Order	Deliverables / Solutions
Scanning and Tagging				

S. No.	Milestone	Estimated Records	Expected Completion from the date of Award of Work Order	Deliverables / Solutions
1.	Scanning of Registration Deeds years (Current Date to 2002)	70,68,143	12 Months	<ul style="list-style-type: none"> Scanned images. Certification by the Purchaser or competent third party auditor nominated by the Purchaser
Digitization/Data Entry				
2.	Digitization of Registration Deeds (Current Date to 2010)	23,23,567	12 Months	<ul style="list-style-type: none"> Setup Central Data Entry & Scanning facility Digitize past 13 years registration data as per requirement of RFP Data Validation of Registration Deeds Certification by the Purchaser or competent third party auditor nominated by the Purchaser
3.	Digitization of Registration Deeds (Yr. 2009 to 2005)	26,47,114	24 Months	
4.	Digitization of Registration Deeds (Yr. 2004 to 2000)	20,97,462	36 Months	
Scanning and Digitization of Cadastral Map				
5.	Scanning and Digitization of Cadastral Map	80,000	12 Months	<ul style="list-style-type: none"> Scanned Image Digitized GIS layers Certification by the department committee or competent third party auditor nominated by the department
6.	Digitization of GIS Layers from Satellite Image for Entire Punjab State	Punjab State	12 Months	<ul style="list-style-type: none"> Digitized GIS layers Certification by the Purchaser or competent third party auditor nominated by the Purchaser
Digitization of Land records data				
7.	Stay Orders and Notices	17000	9 Months	<p>Digitization of all stay orders and notices</p> <p>Certification by the Purchaser or competent third party auditor nominated by the Purchaser</p>

S. No.	Milestone	Estimated Records	Expected Completion from the date of Award of Work Order	Deliverables / Solutions
8.	Circle Rates (Current Year) for each and every khasra of the State of Punjab	3340	9 Months	Digitization of Circle rates of the current year Certification by the Purchaser or competent third party auditor nominated by the Purchaser
9.	Land record Registers (roznamcha waqiyati, Mutation register, Khasra Girdwari, field book) for 13000 villages	13000000	12 Months	Digitization of land records – Certification by the Purchaser or competent third party auditor nominated by the Purchaser
10.	Approximate Number of Musavis / Village Maps to be created from Field book	2500	12 Months	Creation of Musavis / Maps - Certification by the Purchaser or competent third party auditor nominated by the Purchaser

Table: Timeline – Data Conversion

4.21.5 Timeline – Deliverable Review by the Purchaser

S. No.	Deliverable Type	Expected Timeline to provide review comments or Certification by the Purchaser or competent third party auditor nominated by the department
1.	Document review and approval	2 Week
2.	Issue & risk resolution	2 Week
3.	User Acceptance – Software (in phased manner)	4 Week
4.	User Acceptance– Hardware (IT & Non IT) – in phased manner	2 Week
5.	User Acceptance– Data & information	2 Week

S. No.	Deliverable Type	Expected Timeline to provide review comments or Certification by the Purchaser or competent third party auditor nominated by the department
6.	User Acceptance–Sites (Sub Registrar Offices)	2 Week
7.	User Acceptance – Data Validation	4 Weeks

IA shall share the Data Entry & Scanning production plan to the purchaser on weekly basis before commencing the Data Entry & Scanning activity.

4.22 Transaction Details

4.22.1 Estimated Transaction Volume for 5 Years

S. No.	Services	Year 1	Year 2	Year 3	Year 4	Year 5	Total
1	Circle Rate Due Diligence	1,56,000	1,56,000	1,56,000	1,56,000	1,56,000	7,80,000
2	Registration	4,60,000	4,60,000	4,60,000	4,60,000	4,60,000	23,00,000
3	Marriage Registration	1,50,000	1,50,000	1,50,000	1,50,000	1,50,000	7,50,000
4	Rent Registration	1,50,000	1,50,000	1,50,000	1,50,000	1,50,000	7,50,000
5	Nakal Jamabandi	11,25,000	11,25,000	11,25,000	11,25,000	11,25,000	56,25,000
6	Nakal Map	7,500	7,500	7,500	7,500	7,500	37,500
7	Nakal Registration	75,000	75,000	75,000	75,000	75,000	3,75,000
8	Non-Encumbrance Certificate	95,000	95,000	95,000	95,000	95,000	4,75,000
9	Mutation Application	25,000	25,000	25,000	25,000	25,000	1,25,000
10	Nakal Mutation	50,000	50,000	50,000	50,000	50,000	2,50,000
11	Other Nakals (Khasra Girdawari, Shajra Nasb, Field Book, Rapat etc.)	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000	5,00,000

4.22.2 Table below shows Annual transactions for year 2014-15 with Project Transactions for Land, Marriage and Rent registrations

Information regarding Registration of Documents in 2014-15											
Sr. No.	Name of District	Name of SRO/JSRO	No. of Sale Deeds	Mortgage Deeds	Power of Attorney	Wills	Others	Total	Total Registries Excluding Mortgages	Registries per year (Including Land, Marriage and Rent, excluding Mortgage Deeds)	Registries per day (Assumed 200 Working days in a Year)
A	B	C	D	E	F	G	H	I	J	K	L
1	Kapurthala	Kapurthala	3,034	625	543	598	437	5,237	4,612	7,610	38
		Phagwara	3,813	300	645	600	155	5,513	5,213	8,601	43
		Sultanpur Lodhi	918	402	85	189	188	1,782	1,380	2,277	11
		Bholath	1,641	327	231	293	377	2,869	2,542	4,194	21
		Dhilwan	558	224	59	103	145	1,089	865	1,427	7
		Talwandi Chaudhrian	358	201	25	48	75	707	506	835	4
2	Mansa	Mansa	2,839	1,150	77	663	958	5,687	4,537	7,486	37
		Bhikhi	502	482	7	175	241	1,407	925	1,526	8
		Joga	497	426	8	158	257	1,346	920	1,518	8
		Budhlada	1,450	806	27	471	552	3,306	2,500	4,125	21
		Bareta	633	302	8	196	291	1,430	1,128	1,861	9
		Sardulgarh	1,127	700	23	248	400	2,498	1,798	2,967	15
		Jhunir	475	399	13	127	191	1,205	806	1,330	7
3	Fazilka	Fazilka	2,730	1,036	98	411	451	4,726	3,690	6,089	30
		Abohar	2,953	1,061	102	388	511	5,015	3,954	6,524	33
		Jalalabad	2,561	864	74	281	430	4,210	3,346	5,521	28

Information regarding Registration of Documents in 2014-15											
Sr. No.	Name of District	Name of SRO/JSRO	No. of Sale Deeds	Mortgage Deeds	Power of Attorney	Wills	Others	Total	Total Registries Excluding Mortgages	Registries per year (Including Land, Marriage and Rent, excluding Mortgage Deeds)	Registries per day (Assumed 200 Working days in a Year)
A	B	C	D	E	F	G	H	I	J	K	L
		Arniwala	776	547	33	155	147	1,658	1,111	1,833	9
		Khuiian Server	491	431	12	91	109	1,134	703	1,160	6
		Sitto Gunno	212	283	3	40	64	602	319	526	3
4	Patiala	Patiala	7,693	1,169	845	1,191	3,699	14,597	13,428	22,156	111
		Rajpura	2,311	2,032	235	426	475	5,479	3,447	5,688	28
		Nabha	1,666	2,375	68	415	379	4,903	2,528	4,171	21
		Samana	1,399	1,886	104	214	284	3,887	2,001	3,302	17
		Patran	1,321	2,295	53	273	700	4,642	2,347	3,873	19
		Dudhan Sadhan	573	1,054	6	161	172	1,966	912	1,505	8
		Bhadson	365	606	6	81	115	1,173	567	936	5
		Ghanour	435	1,452	11	151	136	2,185	733	1,209	6
5	Bathinda	Bathinda	5,556	1,297	341	886	1,177	9,257	7,960	13,134	66
		Rampura Phul	1,967	988	88	469	506	4,018	3,030	5,000	25
		Talwandi sabo	1,979	1,378	36	449	448	4,290	2,912	4,805	24
		Bhagta Bhai Ka	568	351	40	177	145	1,281	930	1,535	8
		Sangat	533	1,028	5	80	140	1,786	758	1,251	6
		Nathana	1,300	834	20	269	287	2,710	1,876	3,095	15

Information regarding Registration of Documents in 2014-15											
Sr. No.	Name of District	Name of SRO/JSRO	No. of Sale Deeds	Mortgage Deeds	Power of Attorney	Wills	Others	Total	Total Registries Excluding Mortgages	Registries per year (Including Land, Marriage and Rent, excluding Mortgage Deeds)	Registries per day (Assumed 200 Working days in a Year)
A	B	C	D	E	F	G	H	I	J	K	L
		Goniana Mandi	976	894	20	155	189	2,234	1,340	2,211	11
		Balianwali	590	600	12	211	180	1,593	993	1,638	8
		Maur	963	738	15	219	259	2,194	1,456	2,402	12
6	TarnTaran	TarnTaran	3,333	747	174	374	385	5,013	4,266	7,039	35
		Patti	1,967	961	62	374	270	3,634	2,673	4,410	22
		Khadoor Sahib	856	651	39	241	151	1,938	1,287	2,124	11
		Jhabal Kalan	930	560	14	165	184	1,853	1,293	2,133	11
		Chohl Sahib	457	333	19	125	93	1,027	694	1,145	6
		Khemkaran	744	433	9	156	161	1,503	1,070	1,766	9
		Naushehra Pannu	478	176	15	63	105	837	661	1,091	5
		Bhikhiwind	1,273	586	32	219	172	2,282	1,696	2,798	14
		Harike	170	36	5	26	26	263	227	375	2
		Goindawal Sahib	465	240	22	98	135	960	720	1,188	6
7	Rupnagar	Rupnagar	1,747	1,066	141	371	364	3,689	2,623	4,328	22
		Sh. Chamkaur Sahib	645	862	40	207	200	1,954	1,092	1,802	9
		Anandpur Sahib	1,035	276	41	149	217	1,718	1,442	2,379	12
		Nangal	1,221	157	71	211	209	1,869	1,712	2,825	14

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Information regarding Registration of Documents in 2014-15											
Sr. No.	Name of District	Name of SRO/JSRO	No. of Sale Deeds	Mortgage Deeds	Power of Attorney	Wills	Others	Total	Total Registries Excluding Mortgages	Registries per year (Including Land, Marriage and Rent, excluding Mortgage Deeds)	Registries per day (Assumed 200 Working days in a Year)
A	B	C	D	E	F	G	H	I	J	K	L
		Nurpur Bedi	1,305	843	39	202	304	2,693	1,850	3,053	15
		Morinda	1,059	423	215	73	236	2,006	1,583	2,612	13
8	Gurdaspur	Gurdaspur	3,193	623	198	382	422	4,818	4,195	6,922	35
		Batala	3,420	515	129	386	594	5,044	4,529	7,473	37
		Dera Baba Nanak	944	412	22	195	250	1,823	1,411	2,328	12
		Kahnuwan	1,048	507	44	176	329	2,104	1,597	2,635	13
		Kalanaur	752	418	27	146	203	1,546	1,128	1,861	9
		Dinanagar	1,445	268	47	172	261	2,193	1,925	3,176	16
		Dhariwal	1,125	334	35	124	195	1,813	1,479	2,440	12
		NM Singh	496	278	25	129	113	1,041	763	1,259	6
		Qadian	1,089	440	39	192	243	2,003	1,563	2,579	13
		Shri Hargobindpur	905	444	29	187	271	1,836	1,392	2,297	11
		FG Churian	748	312	19	126	187	1,392	1,080	1,782	9
9	Sangrur	Sangrur	2,032	824	109	451	429	3,845	3,021	4,985	25
		Bhwanigarh	825	953	26	349	212	2,365	1,412	2,330	12
		Longowal	390	281	2	141	49	863	582	960	5
		Dhuri	1,583	995	63	461	303	3,405	2,410	3,977	20

Information regarding Registration of Documents in 2014-15											
Sr. No.	Name of District	Name of SRO/JSRO	No. of Sale Deeds	Mortgage Deeds	Power of Attorney	Wills	Others	Total	Total Registries Excluding Mortgages	Registries per year (Including Land, Marriage and Rent, excluding Mortgage Deeds)	Registries per day (Assumed 200 Working days in a Year)
A	B	C	D	E	F	G	H	I	J	K	L
		Sherpur	676	622	28	282	211	1,819	1,197	1,975	10
		Sunam	1,653	1,224	52	489	434	3,852	2,628	4,336	22
		Dirba	851	679	24	289	0	1,843	1,164	1,921	10
		Cheema	418	498	4	149	98	1,167	669	1,104	6
		Malerkotla	1,489	7	79	300	1,105	2,980	2,973	4,905	25
		Amargarh	982	985	18	169	133	2,287	1,302	2,148	11
		Ahmedgarh	922	344	72	199	211	1,748	1,404	2,317	12
		Lehra	1,102	914	32	347	263	2,658	1,744	2,878	14
		Moonak	681	499	15	183	0	1,378	879	1,450	7
		Khanauri	500	309	11	101	112	1,033	724	1,195	6
10	Moga	Moga	4,499	50	445	838	1,981	7,813	7,763	12,809	64
		Baghapurana	1,756	1,272	100	363	70	3,561	2,289	3,777	19
		Nihal Singh Wala	874	567	49	264	303	2,057	1,490	2,459	12
		Dharamkot	1,415	742	70	257	378	2,862	2,120	3,498	17
		Kot Ise Khan	671	254	14	73	170	1,182	928	1,531	8
		Badhni Kalan	326	175	15	101	120	737	562	927	5
11	Pathankot	Pathankot	5,231	1,097	380	550	0	7,258	6,161	10,166	51

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Information regarding Registration of Documents in 2014-15											
Sr. No.	Name of District	Name of SRO/JSRO	No. of Sale Deeds	Mortgage Deeds	Power of Attorney	Wills	Others	Total	Total Registries Excluding Mortgages	Registries per year (Including Land, Marriage and Rent, excluding Mortgage Deeds)	Registries per day (Assumed 200 Working days in a Year)
A	B	C	D	E	F	G	H	I	J	K	L
		Dharkalan	983	45	26	53	5	1,112	1,067	1,761	9
		NJ Singh	528	0	7	37	0	572	572	944	5
		Bamail	192	0	3	11	0	206	206	340	2
12	Amritsar	Amritsar 1	8,550	554	1,964	1,523	1,278	13,869	13,315	21,970	110
		Majitha	821	545	30	132	132	1,660	1,115	1,840	9
		Amritsar 2	12,484	96	2,476	1,446	287	16,789	16,693	27,543	138
		Attari	409	365	7	87	29	897	532	878	4
		Ajnala	2,299	1,192	90	346	1,416	5,343	4,151	6,849	34
		Lopoke	871	747	13	165	12	1,808	1,061	1,751	9
		Ramdass	378	379	5	64	59	885	506	835	4
		Jandiala	0	0	0	0	0	0	0	0	0
		Baba Bakala Sahib	2,201	702	76	466	293	3,738	3,036	5,009	25
		Tersikka	676	417	10	153	18	1,274	857	1,414	7
13	SAS Nagar	Mohali	318	260	11	114	51	754	494	815	4
		Kharar	6,661	435	421	424	604	8,545	8,110	13,382	67
		DeraBassi	8,196	769	396	303	527	10,191	9,422	15,546	78
		Majri	2,715	9	342	267	517	3,850	3,841	6,338	32

Information regarding Registration of Documents in 2014-15											
Sr. No.	Name of District	Name of SRO/JSRO	No. of Sale Deeds	Mortgage Deeds	Power of Attorney	Wills	Others	Total	Total Registries Excluding Mortgages	Registries per year (Including Land, Marriage and Rent, excluding Mortgage Deeds)	Registries per day (Assumed 200 Working days in a Year)
A	B	C	D	E	F	G	H	I	J	K	L
		Banur	3,219	221	587	866	869	5,762	5,541	9,143	46
		Zirakpur	2,864	6	177	94	181	3,322	3,316	5,471	27
14	Ferozepur	Zira	1,882	1,113	64	317	315	3,691	2,578	4,254	21
		Mamdot	471	364	5	68		908	544	898	4
		Guruharsahai	1,967	923	39	260	417	3,606	2,683	4,427	22
		Ferozepur	3,331	1,431	224	411	613	6,010	4,579	7,555	38
		Makhu	594	348	38	97	124	1,201	853	1,407	7
		Talwandi Bhai	634	329	40	156	136	1,295	966	1,594	8
15	Jalandhar	Jalandhar-1	8,896	179	2,792	1,416	460	13,743	13,564	22,381	112
		Adampur	1,105	142	163	205	231	1,846	1,704	2,812	14
		Jalandhar-2	6,737	196	1,453	559	39	8,984	8,788	14,500	73
		Bhogpur	1,394	331	117	221	70	2,133	1,802	2,973	15
		Kartarpur	748	211	109	177	21	1,266	1,055	1,741	9
		Phillour	1,519	263	258	320	210	2,570	2,307	3,807	19
		Noormahal	1,174	365	289	372	216	2,416	2,051	3,384	17
		Goraya	1,118	224	153	284	106	1,885	1,661	2,741	14
		Nakodar	1,469	305	314	353	260	2,701	2,396	3,953	20

Information regarding Registration of Documents in 2014-15											
Sr. No.	Name of District	Name of SRO/JSRO	No. of Sale Deeds	Mortgage Deeds	Power of Attorney	Wills	Others	Total	Total Registries Excluding Mortgages	Registries per year (Including Land, Marriage and Rent, excluding Mortgage Deeds)	Registries per day (Assumed 200 Working days in a Year)
A	B	C	D	E	F	G	H	I	J	K	L
		Mehatpur	425	236	71	74	69	875	639	1,054	5
		Shahkot	1,014	568	171	212	269	2,234	1,666	2,749	14
		Lohian	701	425	60	121	5	1,312	887	1,464	7
16	Barnala	Barnala	2,321	93	217	660	2,698	5,989	5,896	9,728	49
		Dhanaula	719	82	36	272	1,620	2,729	2,647	4,368	22
		Tapa	991	129	35	343	2,259	3,757	3,628	5,986	30
		Bhadaur	618	44	37	234	1,485	2,418	2,374	3,917	20
		Mehal Kalan	636	41	35	210	1,377	2,299	2,258	3,726	19
17	Sri Muktsar Sahib	Sri Muktsar Sahib	3,120	874	184	377	561	5,116	4,242	6,999	35
		Malout	3,016	2,002	126	298	233	5,675	3,673	6,060	30
		Gidderbaha	1,484	1,977	52	263	342	4,118	2,141	3,533	18
		Bariwala	319	232	8	59	99	717	485	800	4
		Lakhewali	189	286	4	27	57	563	277	457	2
		Lambi	832	871	25	182	256	2,166	1,295	2,137	11
		Doda	579	459	6	147	154	1,345	886	1,462	7
18		Fatehgarh Sahib	2,022	1,076	119	366	93	3,676	2,600	4,290	21

Information regarding Registration of Documents in 2014-15											
Sr. No.	Name of District	Name of SRO/JSRO	No. of Sale Deeds	Mortgage Deeds	Power of Attorney	Wills	Others	Total	Total Registries Excluding Mortgages	Registries per year (Including Land, Marriage and Rent, excluding Mortgage Deeds)	Registries per day (Assumed 200 Working days in a Year)
A	B	C	D	E	F	G	H	I	J	K	L
	Fatehgarh Sahib	Mandi Gobindgarh	1,111	438	91	174	74	1,888	1,450	2,393	12
		Bassi Pathana	989	1,401	49	181	39	2,659	1,258	2,076	10
		Amloh	775	1,109	46	137	234	2,301	1,192	1,967	10
		Khamano	876	1,200	70	199	189	2,534	1,334	2,201	11
19	Faridkot	Kotkapura	2,598	1,524	100	415	98	4,735	3,211	5,298	26
		Jaitu	2,298	1,409	76	309	-	4,092	2,683	4,427	22
		Faridkot	2,629	2,277	154	363	65	5,488	3,211	5,298	26
		Sadiq	784	1,418	9	123	14	2,348	930	1,535	8
20	Ludhiana	Ludhiana (east)	16,505	106	2,060	1,050	1,891	21,612	21,506	35,485	177
		Ludhiana (west)	11,389	153	1,558	1,092	393	14,585	14,432	23,813	119
		Ludhiana (central)	8,326	249	710	487	207	9,979	9,730	16,055	80
		Sahnewal	2,689	98	139	130	219	3,275	3,177	5,242	26
		Jagraon	2,528	2,211	243	629	623	6,234	4,023	6,638	33
		Samrala	1,284	750	91	302	280	2,707	1,957	3,229	16
		Khanna	2,506	1,087	181	350	438	4,562	3,475	5,734	29
		Payal	1,234	1,461	106	251	324	3,376	1,915	3,160	16
Raikot	2,009	781	177	471	576	4,014	3,233	5,334	27		

Information regarding Registration of Documents in 2014-15											
Sr. No.	Name of District	Name of SRO/JSRO	No. of Sale Deeds	Mortgage Deeds	Power of Attorney	Wills	Others	Total	Total Registries Excluding Mortgages	Registries per year (Including Land, Marriage and Rent, excluding Mortgage Deeds)	Registries per day (Assumed 200 Working days in a Year)
A	B	C	D	E	F	G	H	I	J	K	L
		Mullanpur	1,105	163	127	163	202	1,760	1,597	2,635	13
		Maloud	434	0	22	137	94	687	687	1,134	6
		Dehlon	1,032	0	33	99	174	1,338	1,338	2,208	11
		Machhiwara	840	3	54	137	654	1,688	1,685	2,780	14
		Sidwan Bet	629	402	62	89	13	1,195	793	1,308	7
		Koom Kalan	587	0	35	83	203	908	908	1,498	7
21	Hoshiarpur	Hoshiarpur	7,352	667	770	942	147	9,878	9,211	15,198	76
		Bhunga	1,508	313	100	248	299	2,468	2,155	3,556	18
		Dasuya	2,169	1,092	154	302	52	3,769	2,677	4,417	22
		Gardiwala	791	215	49	140	144	1,339	1,124	1,855	9
		Tanda	2,358	894	239	395	978	4,864	3,970	6,551	33
		Garshankar	3,547	2,867	212	463	5	7,094	4,227	6,975	35
		Mahilpur	1,242	336	148	319	11	2,056	1,720	2,838	14
		Mukerian	1,920	443	128	376	390	3,257	2,814	4,643	23
		Talwara	954	128	57	356	185	1,680	1,552	2,561	13
		Hajipur	421	94	14	85	19	633	539	889	4
22	SBS NAGAR	NAWANSHAHR	2,499	687	395	605	440	4,626	3,939	6,499	32

Information regarding Registration of Documents in 2014-15											
Sr. No.	Name of District	Name of SRO/JSRO	No. of Sale Deeds	Mortgage Deeds	Power of Attorney	Wills	Others	Total	Total Registries Excluding Mortgages	Registries per year (Including Land, Marriage and Rent, excluding Mortgage Deeds)	Registries per day (Assumed 200 Working days in a Year)
A	B	C	D	E	F	G	H	I	J	K	L
		BALACHAUR	2,053	909	153	317	391	3,823	2,914	4,808	24
		BANGA	1,367	143	259	464	427	2,660	2,517	4,153	21
Total			319,217	107,624	29,894	107,624	59,697	567,114	459,490	758,159	3,791
Assumed Transactions for Marriage and Rent Registrations (annually)								300,000			
Total Transactions for Land (i.e. Total Registries Excluding Mortgages), Marriage and Rent Registrations (annually)								758,159			
Division Factor used in column L (J175/K172)								1.65			

Table: Annual transactions and projected transactions for Registrations

4.22.3 List of Deeds

S. No.	Deed Name
1	Sale
2	Mortgage with Possession (Rehan)
3	Mortgage without Possession
4	Rehan Dar Rehan
5	Lease(Patta)
6	Hibba(Gift)
7	Tabadla
8	Bai-Haq-Murthin
9	Bai-Bekami-Rehan
10	Tabadla – 1
11	Agreement of Sale
12	Transfer of Property/Partition Tabdeel Malkiat
13	Conveyance Deed
14	Trust Deed (Trustee Nama)
15	Rollback Lease (Faq ul Patta)
16	Division/Partition (Takseem)
17	Rollback Lease (Faq ul Rehan)
18	Will (Virasat)
19	SPA
20	GPA
21	Cancellation of Will
22	Cancellation of GPA
23	Cancellation of SPA
24	Adoption
25	Agreement of any movable property
26	GPA To SPA
27	Administration Bond
28	Security Bond
29	Partnership Deed
30	Deed of Settlement

S. No.	Deed Name
31	Other Deeds Issued By Some Authority
32	Memorandum of Deposit of title deed
33	GPA – Section 33
34	Cancellation of GPA – Section 33
35	SPA – Section 33
36	Cancellation of SPA – Section 33
37	Custom Deed

Table: List of Deeds

4.22.4 Registration volume for last 5 years (2010-15)

S. No.	District	Year	Sale Deeds	Mortgage Deeds (With & Without Possession)	Power of Attorneys	Wills	Others	Total
1	Amritsar	2010-11	37961	8253	14994	5449	1417	68074
		2011-12	42522	10521	19706	6978	1722	81449
		2012-13	60467	8026	8072	4141	1107	81813
		2013-14	32057	10311	3246	4281	1857	51752
		2014-15	28,689	4,997	4,671	4,382	3,524	46,263
2	Barnala	2010-11	9480	4885	1053	1668	1948	19034
		2011-12	8902	5009	1053	1791	1843	18598
		2012-13	6976	5782	898	1526	2160	17342
		2013-14	24081	9869	1028	7523	24745	67246
		2014-15	5,285	389	360	1,719	9,439	17,192
3	Bhatinda	2010-11	19191	10224	1262	3234	1252	35163
		2011-12	23490	12916	1247	3078	2236	42967
		2012-13	17879	15484	910	3417	3072	40762
		2013-14	15855	16262	506	3146	2445	38214
		2014-15	14,432	8,108	577	2,915	3,331	29,363
4	Fatehgarh Sahib	2010-11	11416	5032	1036	1020	416	18920
		2011-12	13660	5153	929	1057	413	21212

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

S. No.	District	Year	Sale Deeds	Mortgage Deeds (With & Without Possession)	Power of Attorneys	Wills	Others	Total
		2012-13	9793	5442	456	1122	796	17609
		2013-14	5879	6532	357	1088	1048	14904
		2014-15	5,773	5,224	375	1,057	629	13,058
5	Faridkot	2010-11	8047	5736	472	1111	179	15545
		2011-12	11151	4935	440	1185	218	17929
		2012-13	8876	6373	418	1380	368	17415
		2013-14	8325	8838	392	1505	651	19711
		2014-15	8,309	6,628	339	1,210	177	16,663
6	Fazilka	2010-11	12784	9885	734	1315	1397	26115
		2011-12	17669	8695	709	1389	1226	29688
		2012-13	13473	10826	527	1495	1360	27681
		2013-14	12720	11141	348	1507	1263	26979
		2014-15	9,723	4,222	322	1,366	1,712	17,345
7	Ferozepur	2010-11	14049	9879	1286	1161	570	26945
		2011-12	14291	10673	1290	1209	611	28074
		2012-13	11586	10371	888	1173	763	24781
		2013-14	10219	11585	392	1348	392	23936
		2014-15	8,879	4,508	410	1,309	1,605	16,711
8	Gurdaspur	2010-11	19585	11517	1674	1953	982	35711

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

S. No.	District	Year	Sale Deeds	Mortgage Deeds (With & Without Possession)	Power of Attorneys	Wills	Others	Total
		2011-12	21008	11994	1622	2090	886	37600
		2012-13	21859	10677	1156	2453	2763	38908
		2013-14	16139	10984	668	2186	2319	32296
		2014-15	15,165	4,551	614	2,215	3,068	25,613
9	Hoshiarpur	2010-11	24616	7280	3209	3445	1074	39624
		2011-12	22944	6512	2846	3132	1252	36686
		2012-13	20855	6681	2164	3619	1358	34677
		2013-14	21059	8485	1853	3555	1408	36360
		2014-15	22,262	7,049	1,871	3,626	1,630	36,438
10	Jalandhar	2010-11	32134	7106	17608	6730	1495	65073
		2011-12	35412	7205	16628	4825	1784	65854
		2012-13	45418	7714	10934	4925	1303	70294
		2013-14	27192	7568	6408	4822	1996	47986
		2014-15	26,300	3,445	5,950	4,314	1,956	41,965
11	Kapurthala	2010-11	12347	4809	3732	1955	1358	24201
		2011-12	12370	4556	3491	1704	1305	23426
		2012-13	13569	4699	2654	1946	1552	24420
		2013-14	10441	5257	1716	1971	1409	20794
		2014-15	10,322	2,079	1,588	1,831	1,377	17,197

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

S. No.	District	Year	Sale Deeds	Mortgage Deeds (With & Without Possession)	Power of Attorneys	Wills	Others	Total
12	Ludhiana	2010-11	72874	15271	12367	5311	4211	110034
		2011-12	93814	15868	18583	5716	5129	139110
		2012-13	87755	14865	11788	5871	5305	125584
		2013-14	64269	16247	6008	6220	6016	98760
		2014-15	53,097	7,464	5,598	5,470	6,291	77,920
13	Moga	2010-11	12965	7583	924	1890	1624	24986
		2011-12	17149	8215	963	2064	1739	30130
		2012-13	13695	9269	897	2237	1872	27970
		2013-14	11202	9690	765	2008	1999	25664
		2014-15	9,541	2,318	693	1,896	3,022	17,470
14	Mansa	2010-11	13075	6461	511	2019	2141	24207
		2011-12	13844	6509	493	2231	2773	25850
		2012-13	11155	7906	391	2635	2780	24867
		2013-14	8252	9745	139	2290	2054	22480
		2014-15	7,523	8,024	163	2,038	2,890	20,638
15	Muktsar	2010-11	10237	7184	815	1284	1419	20939
		2011-12	12309	7279	835	1400	1373	23196
		2012-13	11234	8429	704	1538	1706	23611
		2013-14	11275	11681	403	1613	1670	26642

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

S. No.	District	Year	Sale Deeds	Mortgage Deeds (With & Without Possession)	Power of Attorneys	Wills	Others	Total
		2014-15	6,523	4,699	279	1,055	1,469	14,025
16	Patiala	2010-11	33575	16134	6376	2824	2382	61291
		2011-12	43774	18154	7354	2863	2964	75109
		2012-13	29488	15530	2821	3073	2985	53897
		2013-14	17488	15422	1302	3175	2930	40317
		2014-15	15,763	12,869	1,328	2,912	5,960	38,832
17	Pathankot	2010-11	0	0	0	0	0	0
		2011-12	7896	1704	806	587	111	11104
		2012-13	8628	1632	665	659	145	11729
		2013-14	7075	1524	351	644	253	9847
		2014-15	6,934	1,142	416	651	5	9,148
18	Ropar	2010-11	10901	3742	1245	1389	551	17828
		2011-12	12376	4027	1397	1507	631	19938
		2012-13	11135	4330	853	1358	1080	18756
		2013-14	7588	4670	364	1406	861	14889
		2014-15	7,012	3,627	547	1,213	1,530	13,929
19	Sangrur	2010-11	21203	13904	997	3980	1739	41823
		2011-12	24918	17209	1188	4261	2310	49886
		2012-13	19425	17958	917	4535	2338	45173

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

S. No.	District	Year	Sale Deeds	Mortgage Deeds (With & Without Possession)	Power of Attorneys	Wills	Others	Total
		2013-14	21193	31091	937	5787	3170	62178
		2014-15	14,104	9,134	535	3,910	3,560	31,243
20	S.A.S. Nagar	2010-11	37791	3228	7613	3053	1852	53537
		2011-12	43529	3382	6649	3046	1520	58126
		2012-13	34320	3820	1634	2273	1954	44001
		2013-14	20286	4317	1787	1915	1854	30159
		2014-15	23,973	1,700	1,934	2,068	2,749	32,424
21	S.B.S.Nagar	2010-11	9420	4117	1362	1361	419	16679
		2011-12	10109	4320	1195	1388	505	17517
		2012-13	10181	4584	1122	1518	225	17630
		2013-14	6517	4579	748	1454	655	13953
		2014-15	5,919	1,739	807	1,386	1,258	11,109
22	Tarn Taran	2010-11	13307	9005	851	1844	653	25660
		2011-12	15238	8811	779	1750	754	27332
		2012-13	15112	9707	486	2038	845	28188
		2013-14	12287	9826	353	1740	693	24899
		2014-15	10,673	4,723	391	1,841	1,682	19,310
Total		2010-11	436958	171235	80121	53996	29079	771389

S. No.	District	Year	Sale Deeds	Mortgage Deeds (With & Without Possession)	Power of Attorneys	Wills	Others	Total
		2011-12	518375	183647	90203	55251	33305	880781
		2012-13	482879	190105	51355	54932	37837	817108
		2013-14	371399	225624	30071	61184	61688	749966
		2014-15	316201	108639	29768	50384	58864	563856

Table: Registration volume for 3 years

4.22.5 Cadastral maps (Musavis) Status

Name of the Districts	Name of Tehsil/Sub-Tehsil	No. of Villages	No. of Musavi Sheets	Total No. of damaged / Missing Musavi sheets	No. of Available Musavi Sheets	No. of Musavi Sheets Updated	No. of balance Sheets to be updated out of available sheets
Jalandhar	Phillour	242	1099	730	369	75	294
	Nakodar	147	815	24	791	490	301
	Shahkot	183	360	188	172	22	150
	Jalandhar I & II	433	3264	50	3214	122	3092
	Total	1005	5538	992	4546	709	3837
Kapurthala	Kapurthala	263	1325	21	1304	0	1304
	Phagwara	116	600	7	593	0	593

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Name of the Districts	Name of Tehsil/Sub-Tehsil	No. of Villages	No. of Musavi Sheets	Total No. of damaged / Missing Musavi sheets	No. of Available Musavi Sheets	No. of Musavi Sheets Updated	No. of balance Sheets to be updated out of available sheets
	Sultanpur Lodhi	215	833	59	774	0	774
	Bholath	107	508	6	502	0	502
	Total	701	3266	93	3173	0	3173
SBS Nagar	Balachour	186	1153	181	972	921	51
	Nawanshahr	288	1327	6	1321	1321	0
	Total	474	2480	187	2293	2242	51
Amritsar	Amritsar I	149	1597	216	1381	0	1381
	Amritsar II	123	1998	123	1875	0	1875
	Baba Bakala	157	1067	86	981	0	981
	Ajnala	347	2095	137	1958	0	1958
	Total	776	6757	562	6195	0	6195
Gurdaspur	Pathankot	394	1609	75	1534	312	1222
	Dhar Kalan	27	688	55	633	300	333
	Batala	375	1817	480	1337	1061	276
	Gurdaspur	724	2143	410	1733	826	907
	Dera Baba Nanak	123	613	80	533	0	533
	Total	1643	6870	1100	5770	2499	3271

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Name of the Districts	Name of Tehsil/Sub-Tehsil	No. of Villages	No. of Musavi Sheets	Total No. of damaged / Missing Musavi sheets	No. of Available Musavi Sheets	No. of Musavi Sheets Updated	No. of balance Sheets to be updated out of available sheets
Taran Tarn	Patti	198	1811	52	1759	0	1759
	Tarn Taran	199	2123	0	2123	0	2123
	Khadoor Sahib	96	544	0	544	0	544
	Total	493	4478	52	4426	0	4426
Hoshiarpur	Hoshiarpur	429	2191	307	1884	1884	0
	Dasuya	404	2496	110	2386	42	2344
	Mukerian	314	1337	38	1299	1299	0
	Gar Shankar	302	1575	549	1026	670	356
	Total	493	7599	1004	6595	3895	2700
Muktsar	Malout	91	1279	13	1266	619	647
	Gidderbaha	48	818	2	816	273	543
	Muktsar	97	1060	9	1051	235	816
	Total	236	3157	24	3133	1127	2006
Bathinda	Bathinda	125	2119	102	2017	2017	0
	Rampura Phool	76	1167	16	1151	1151	0
	Talwandi Sabo	91	1349	0	1349	1349	0
	Total	292	4635	118	4517	4517	0
Patiala	Patiala	271	1365	162	1203	0	1203

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Name of the Districts	Name of Tehsil/Sub-Tehsil	No. of Villages	No. of Musavi Sheets	Total No. of damaged / Missing Musavi sheets	No. of Available Musavi Sheets	No. of Musavi Sheets Updated	No. of balance Sheets to be updated out of available sheets
	Dudhan Sadhan	96	480	231	249	0	249
	Nabha Bhadson	173	1165	231	934	0	934
	Rajpura	278	1185	203	982	0	982
	Patran	77	821	17	804	0	804
	Samana	65	527	8	519	0	519
	Total	960	5543	852	4691	0	4691
Barnala	Barnala	80	1154	277	877	238	639
	Tappa	50	780	37	743	104	639
	Total	130	1934	314	1620	342	1278
Ludhiana	Raikot	77	539	459	80	77	3
	Jagraon	141	1122	324	798	779	19
	Payal	14	803	299	504	493	11
	Samrala	202	1414	329	1085	1052	33
	Khanna	76	530	215	315	304	11
	Ludhiana East	210	1477	448	1029	1016	13
	Ludhiana West	149	1058	449	609	604	5
	Total	869	6943	2523	4420	4325	95
SAS Nagar	S.A.S Nagar	82	419	309	110	62	48

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Name of the Districts	Name of Tehsil/Sub-Tehsil	No. of Villages	No. of Musavi Sheets	Total No. of damaged / Missing Musavi sheets	No. of Available Musavi Sheets	No. of Musavi Sheets Updated	No. of balance Sheets to be updated out of available sheets
	Kharar	12	587	68	519	0	519
	Majri	88	439	67	372	0	372
	Dera Bassi	154	781	105	676	0	676
	Total	436	2226	549	1677	62	1615
Fatehgarh Sahib	Fatehgarh Sahib	176	817	0	817	817	0
	Bassi Pathana	100	359	0	359	0	359
	Amlah	103	551	0	551	0	551
	Khamano	76	93	0	93	0	93
	Total	455	1820	0	1820	817	1003
Moga	Moga	84	1161	179	982	802	180
	Dharamkot	150	1170	185	985	605	380
	Nihal Singh Wala	31	411	1	410	210	200
	Badhani Kalan	9	154	0	154	154	0
	Bagha Purana	56	813	19	794	310	484
	Total	330	3709	384	3325	2081	1244
	Roop Nagar	178	178	15	163	63	100

Selection of IA for Integrated Land Administration System (I-LAS) in Punjab

Name of the Districts	Name of Tehsil/Sub-Tehsil	No. of Villages	No. of Musavi Sheets	Total No. of damaged / Missing Musavi sheets	No. of Available Musavi Sheets	No. of Musavi Sheets Updated	No. of balance Sheets to be updated out of available sheets
Roop Nagar	Chamkaur Sahib	195	195	69	126	46	80
	Anandpur Sahib	169	169	39	130	18	112
	Nangal	81	81	39	42	0	42
	Total	623	623	162	461	127	334
Mansa	Mansa	69	1055	0	1055	529	568
	Bhikhi	16	232	0	232	232	0
	Budhlada	65	801	3	798	749	49
	Bareta	23	304	23	281	200	81
	Sardulgarh	42	604	0	604	275	329
	Jhunir	29	301	3	298	257	41
	Total	244	3297	29	3310	2242	1068
Faridkot	Faridkot	82	82	81	1	0	1
	Jaito	41	41	37	4	0	4
	Kotkapura	21	21	18	3	0	3
	Sadiq	27	27	27	0	0	0
	Total	171	171	163	8	0	8
Sangrur	Sangrur	68	68	37	31	0	31

Name of the Districts	Name of Tehsil/Sub-Tehsil	No. of Villages	No. of Musavi Sheets	Total No. of damaged / Missing Musavi sheets	No. of Available Musavi Sheets	No. of Musavi Sheets Updated	No. of balance Sheets to be updated out of available sheets
	Dhuri	63	63	34	29	0	29
	Malerkotla	118	118	47	71	0	71
	Sunam	47	47	23	24	0	24
	Lehragaga	15	15	6	9	0	9
	Moonak	26	26	14	12	0	12
	Longowal	17	17	7	10	0	10
	Ahmedgarh	54	54	26	28	0	28
	Dirba	45	45	18	27	0	27
	Khanauri	25	25	11	14	0	14
	Sherpur	35	35	18	17	0	17
	Amargarh	30	30	11	19	0	19
	Bhawanigarh	54	54	26	28	0	28
	Total	597	597	278	319	0	319
Ferozepur	Ferozepur	206	1985	364	1621	0	1621
	Talwandi Bhai	32	306	47	259	0	259
	Mamdot	112	570	21	549	335	214
	Zira	138	1602	127	1475	78	1397
	Makhu	87	983	308	675	117	558

Name of the Districts	Name of Tehsil/Sub-Tehsil	No. of Villages	No. of Musavi Sheets	Total No. of damaged / Missing Musavi sheets	No. of Available Musavi Sheets	No. of Musavi Sheets Updated	No. of balance Sheets to be updated out of available sheets
	Jalalabad	217	1235	225	1010	0	1010
	Fazilka	0	1277	226	1051	890	161
	Abohar	41	1126	454	672	210	462
	Others	57	1529	521	1008	395	613
	Total	890	10613	2293	8320	2025	6295

Table: Status of cadastral maps

4.22.6 Demarcation of Land transaction Status

S. No	Service	Total Transaction (Aug2012-Mar2013)
1.	Demarcation of Land	36,195

5 Service Level Agreement

5.1 Purpose

- 5.1.1 The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of service which shall be provided by the Implementation Agency ('IA') to the Purchaser for the duration of this contract.
- 5.1.2 The benefits of this SLA are to:
- a) Trigger a process that applies the attention of the Purchaser and the Management of IA to some aspect of performance when that aspect drops below the agreed upon threshold, or target;
 - b) Make explicit the expectations that Purchaser has for performance;
 - c) Help the Purchaser control the levels of performance of services to be provided by the IA.
- 5.1.3 This Service Level Agreement is between the Implementation Agency ('IA') and Purchaser
- 5.1.4 The Implementation Agency and Purchaser shall maintain a monthly contact to monitor the performance of the services being provided by the Bidder and the effectiveness of this SLA.
- 5.1.5 This project has been envisaged on the service levels of the services to be provided to the Citizen. Citizen services should not be affected due to any kind of issue. Please refer section 2.20 - Component O - Civil Infrastructure Requirement for SRO's under Indicative Counters and Infrastructure at category A, B and C.

5.2 Definitions

- 5.2.1 For purposes of this Service Level Agreement (SLA), the definitions and terms as specified in the contract along with the following terms shall have the meanings set forth below:
- 5.2.1.1 **"Availability"** shall mean the time for which the services and facilities offered by the IA are available for conducting operations.
- 5.2.1.2 **"Downtime"** is the time the services and facilities are not available. This excludes the scheduled outages planned in advance for the solution.
- 5.2.1.3 **"Helpdesk Support"** shall mean the IA's Helpdesk Centre which shall handle Fault reporting, Trouble Ticketing and related enquiries during this contract.
- 5.2.1.4 **"Incident"** refers to any event / abnormalities in the functioning of the solution / Services that may lead to disruption in normal operations.
- 5.2.1.5 **"Site Readiness"** shall mean readiness of SR offices, DC, NLDC and DR site with installation of required IT and Non-IT hardware, civil works, electricity, public health, networking, required application and software installations etc.
- 5.2.1.6 **"Severity for Problem Requests/Defect Fixes"**: The severity of a problem request or defects fixes would be based on the business impact of the problem. Severity is defined as follows:

Severity	Definition
Critical	For Live Operations: Showstoppers involving major functional failure in the application or equipment. There are no usable workarounds available to troubleshoot the problem.

Severity	Definition
	For UAT: Fatal Errors like General Protection Fault, System Hangs and Testing cannot proceed till error is fixed.
High	For Live Operations: Users face severe functional restrictions in the application irrespective of the cause. Workarounds are time consuming. For UAT: Serious program behaviour inconsistent to functional requirements, or data rendered inconsistent and testing cannot proceed in that area till error is fixed.
Medium	For Live Operations: Moderate functional restrictions in the application irrespective of the cause. Has a convenient and readily available workaround. Affects a few users. For UAT: Minor errors to be corrected, but testing can proceed with work around solutions.
Low	For Live Operations: Requiring cosmetic functional changes. Does not require any workaround. It may include user query / suggestions but has no business impact. For UAT: Suggestions/ Comments. Improves user-interface or functionality.

Table: Severity Definitions

5.3 Service Level Agreement and Types

18. This SLA section provides for minimum level of services required as per contractual obligations based on performance indicators and measurements thereof. The IA shall ensure provisioning of all required services while monitoring the performance of the same to effectively comply with the performance levels.
19. The Services Provided by IA shall be reviewed by the Purchaser as mentioned below:
 - a) Check performance of the IA against this SLA every month and consider any key issues of the past period's performance statistics including major incidents, service trends, etc.
 - b) Discuss escalated problems, new issues and matters still outstanding for resolution.
 - c) Review of statistics related to rectification of outstanding faults and agreed changes.
 - d) Obtain suggestions for changes to improve the service levels.
 - e) Penalties shall be imposed monthly on immediate next payment milestone
 - f) The withheld amount will be released to the IA after the successful completion of SLA for which amount has been on hold.
20. In case desired, Purchaser may initiate an interim review during a month to check the performance and the obligations of the IA.
21. The SLA has been logically segregated in the following categories:
 - a) O&M Phase
 - b) Performance of System
 - c) Quality of Services
 - d) Technical Support Services
 - e) Helpdesk
 - f) Compliance Procedures
 - g) Training Feedback
 - h) Data Entry & Scanning
 - i) General

22. Following measurements and targets shall be used to track and report performance on a regular basis. The targets shown in the following table are applicable for the duration of the contract.

Sr. No.	Category of service / phase	Baseline for calculating penalty against SLA breach
1.	O&M phase	Monthly Payment (Penalties shall be imposed monthly on immediate next payment milestone)
2.	Performance of System	
3.	Quality of Services	
4.	Technical Support Services	
5.	Helpdesk	
6.	Compliance to Procedures	
7.	Training Feedback	
8.	Data Digitisation	

Table: Category of Service

5.3.1 O&M Phase

1. **Penalty:** There will be escalating penalty for a period equal to period of delay after the start of a services:
 - a) At the rate of 5% on payment due for a site for a delayed services, for delays up to 30 days
 - b) At the rate of 10% for the entire period of delay if delay more than 30 days and less than 60 days
 - c) At the rate of 15% for the entire period of delay if delay is more than 60 days and less than 90 days
 - d) At the rate of 20% for the entire period of delay if delay is more than 90 days.
2. **Withheld:** In addition 10% of the total payment due on account of all services in the State will be withheld till any of the milestones is pending, anywhere in the State. No interest will be paid on withheld amount.

5.3.2 Performance of the System

1. The penalties on account of default in SLAs beyond the service level of 99.5%
 - a) Penalty Calculation Formula: $(5 * \text{Percentage default in SLA}) * \text{Payment Due}$
 - b) Payment due is monthly invoice (Month in which SLA default occurred)
 - c) The level of penalty will be double for the entire default if the compliance to SLA falls below 99%

Sr. No	Measurement	Definition
1.	Average time taken to opening Internet portal (Home page) from remote site at	Through a Leased line \leq Average daily 10 seconds= No Penalty

Sr. No	Measurement	Definition
	256 Kbps connectivity across the state of Punjab by the citizen/ applicant and the users of the Department	Script based checking every 10 minutes daily (8 am to 8 pm) Monthly average time from the log. Script based checking to be facilitated by Implementation Agency
2.	Average time for submission of forms / data by the Purchaser or IA Staff Average size of form as 100 KB and 256 Kbps connectivity	<= 5 seconds = No Penalty Random check (100 instances per month) would be conducted for determining average time.
3.	Average time for submission of forms/ data by citizens (Time between pressing the 'submit' button and generation of acknowledgement of successful or unsuccessful submission from the system)	< 1 minute = No Penalty Random check (100 instances per month) would be conducted, during peak hours, for determining average time.

Table2: Performance of the System-1

2. The penalties on account of default in SLAs beyond the service level of 99.75% for Availability of all online citizen services and software modules.
 - a) Penalty Calculation Formula: $(10 * \text{Percentage default in SLA}) * \text{Payment Due}$
 - b) Payment due is monthly invoice (Month in which SLA default occurred)
 - c) The level of penalty will be double for the entire default if the compliance to SLA falls below 99.7%

Sr. No.	Measurement	Definition
1.	Availability of all online citizen services	$\geq 99.75\%$ = No Penalty

Sr. No.	Measurement	Definition
	(From Data centre / disaster Recovery data centre on cloud as the case may be)	<p>Script based checking every 10 minutes daily (8 am to 8 pm)</p> <p>Monthly average time from the log.</p> <p>Script based checking to be facilitated by Implementation Agency.</p> <p>Non- availability of even one of the agreed services would amount to deviation for this purpose</p>

Table: Performance of the System-2

5.3.3 Quality of Services

1. The penalties on account of default in SLAs for issuing of all the non- encumbrance certificate, Nakals , registration (including rent & marriage) Beyond the service level of 99.5%
2. Penalty Calculation Formula: $(10 * \text{Percentage default in SLA}) * \text{Payment Due}$
3. Payment due will be calculated on Monthly basis separately for each site / office using Invoice and payment module as described in Scope of Work section
4. The level of penalty will be double for the entire default if the compliance to SLA falls below 99%

Sr. No.	Measurement	Definition
1.	Registration at SRO	<p>Average must be achieved with the Time Spent by 99.5% or more of the citizens being within 45 minutes (Acceptance Criteria must be 30 minutes if there is no queue)</p> <p>Average Time will be calculated by System based on transaction time stamp for token number generated at reception counter of SR office till Registered Document delivered at delivery counter.</p>
2.	a) Rent Registration b) Marriage Registration	<p>Average must be achieved with the Time Spent by 99.5% or more of the citizens being within 45 minutes (Acceptance Criteria must be 30 minutes if there is no queue)</p> <p>Average Time will be calculated by System based on transaction time stamp for token number generated at reception counter of SR office till Registered Document delivered at delivery counter.</p>
3.	a) Nakal Jamabandi b) Nakal Mutation c) Nakal Registration d) Nakal Map	<p>Average must be achieved with the Time Spent by 99.5% or more of the citizens being within 10 minutes (once a token number is displayed)</p> <p>Average Time Spent by citizen From Payment to Nakal and certificate print out from the system</p>

Sr. No.	Measurement	Definition
	e) Other Nakals (Khasra Girdawari, Shajra Nasb, Field Book, Rapat etc.)	
	f) Non - Encumbrance Certificate	

Table: Quality of Services

5.3.4 Technical Support Services

1. The penalties on account of default in SLAs for Response time (Only for problem request / defect fixes) beyond the service level of 99% of the calls within 60 minutes
2. Penalty Calculation Formula: $(5 * \text{Percentage default in SLA}) * \text{Payment Due}$
3. Payment due is monthly invoice (Month in which SLA default occurred)
4. The level of penalty will be double for the entire default if the compliance to SLA falls below 99%

S.No.	Measurement	Definition
1.	Response time (Only for problem request / defect fixes)	At least 99% of the calls within 60 minutes = No Penalty “Response Time” , means the time taken (after the request has been logged at the helpdesk and escalated to IA team) by the respective IA staff for responding to the call and updating the status of the call in the Help Desk system. The response time would include: <ul style="list-style-type: none"> • Call diagnosis • Categorization into problem request/change requests for defect fixes • Assign severity levels to PRs • Tentative timelines for further action.

Table: Technical Support Services-1

5. The penalties on account of default in SLAs for Resolution Time
6. Critical Services: At least 99% calls to be resolved within 2 Working hours
7. Penalty Calculation Formula for critical services: $(10 * \text{Percentage default in SLA}) * \text{Payment Due}$
8. High Services: At least 99% calls to be resolved within 4 Working hours
9. Medium Services: At least 99% calls to be resolved within 8 Working hours
10. Low Services: At least 99% calls to be resolved within 16 Working hours
11. Penalty Calculation Formula for High, Medium and low services: $(5 * \text{Percentage default in SLA}) * \text{Payment Due}$

12. The level of penalty will be double for the entire default if the compliance to SLA falls below 98%

Sr. No.	Measurement	Definition
1.	Resolution Time	“ Resolution Time ”, means the time taken by the IA staff to troubleshoot and fix the problem/defects from the time the call has been escalated to the IA team till the delivery of the solution to the Purchaser for UAT and subsequently updates the status of the call in the Help Desk system.

Table: Technical Support Services-1

5.3.5 Helpdesk

1. The penalties on account of default in SLAs for phone lines availability beyond the service level of 99% availability
2. Penalty Calculation Formula: $(5 * \text{Percentage default in SLA}) * \text{Payment Due}$
3. Payment due is monthly invoice (Month in which SLA default occurred)
4. The level of penalty will be double for the entire default if the compliance to SLA falls below 98%

5.3.6 Compliance Procedures

1. The penalties on account of default in SLAs for incident reporting and information security, beyond the service level of 100% incidents to be reported to the Purchaser within 1 hour with the cause and action for the incident
2. Penalty Calculation Formula: $(5 * \text{Percentage default in SLA}) * \text{Payment Due}$
3. Payment due is monthly invoice (Month in which SLA default occurred)
4. The level of penalty will be double for the entire default if the compliance to SLA falls below 99%

Sr. No.	Measurement	Definition
1.	Incident Reporting	Any failure/incident on any part of the solution shall be communicated immediately to the Purchaser as an exceptional report giving details of impact, if any.
2.	Information Security	Any failure/incident on any part of the information security breach shall be communicated immediately to the Purchaser as an exceptional report giving details of impact, if any.

Table: Compliance Procedures-1

5. The penalties on account of default in SLAs for change management, adherence to backup policy and DR Drill beyond the service level of 100% adherence to policy
6. Penalty Calculation Formula: $(1 * \text{Percentage default in SLA}) * \text{Payment Due}$
7. Payment due is monthly invoice (Month in which SLA default occurred)
8. The level of penalty will be double for the entire default if the compliance to SLA falls below 99%

Sr. No.	Measurement	Definition
1.	Change Management	Measurement of quality and timeliness of changes to the solution All changes should be implemented on time and as per schedule & without any disruption to business.
2.	Adherence to Backup Policy	The IA shall adhere to the Backup Policy developed in consultation with the Purchaser. 100% adherence to Backup policy
3.	DR Policy	The IA shall adhere to the DR Policy developed in consultation with the department. 100% of the time the drill should happen as per schedule mentioned in the DR policy

Table: Compliance Procedures-2

5.3.7 Training Feedback

Sr. No.	Measurement	Definition	Target	Penalty
	Training Content	Average of feedback from every participant of the training programme. Participants would be asked to provide feedback on the content of the training programme on the following scale: 5: Excellent 4: Good 3: Moderate 2: Needs Improvement 1: Unsatisfactory	5	No Penalty
			4	No Penalty
			3	No penalty
				Three successive 'moderate' ratings for the same training program would lead to penalty of 0.1% of the "Total CAPEX shared along with the Commercial"
			2	0.2% of the "Total CAPEX shared along with the Commercial"
			1	0.5% of the "Total CAPEX shared along with the Commercial"
	Training Impact	Average of feedback from every participant of the training	5	No Penalty
			4	No Penalty

Sr. No.	Measurement	Definition	Target	Penalty
		programme. Participants would be asked to provide feedback on the impact of the training programme on the following scale: 5: Excellent 4: Good 3: Moderate 2: Needs Improvement 1: Not Useful	3	No penalty
				Three successive 'moderate' ratings for the same training program would lead to penalty of 1% of "Total CAPEX shared along with the Commercial"
			2	2% of the "Total CAPEX shared along with the Commercial"
			1	5% of the "Total CAPEX shared along with the Commercial"

5.3.8 Data Entry & Scanning

Sr. No.	Measurement	Definition	Target	Penalty
1.	Data Entry & Scanning	Completion of Data Entry & Scanning as per the timelines	<= 6 Week to > 1 Week delay in Data Entry & Scanning	1 % every week delay of the "Total CAPEX shared along with the Commercial"
			> 6 Weeks delay in Data Entry & Scanning	Event of Default & Escalation to higher management
2.	Data Entry	Data Accuracy	100 percent accuracy	Rs. 10,000 per incorrect Record from the next billing cycle
3.	Data Scanning	Scanning Accuracy	100 percent accuracy	Rs. 10,000 per incorrect scanned document from next month billing cycle
4.	Data Migration	Migration Accuracy	100 percent accuracy	Rs. 10,000 per incorrect Record from the next month billing cycle

5.3.9 General

Sr. No.	Measurement	Definition	Target	Penalty
1.	House Keeping/ Cleanliness	Feedback from citizen	<= 2 hours	No penalty
			> 2 hours < 72 hours delay in resolution	Rs. 1000 per hour
			> 72 hours delay in resolution	Event of default and escalation to higher management
2.	Behaviour of Staff	Feedback from citizen	More than 1 complaints	Rs. 5000 per complaint
			> 5 complaints	Rs. 10000 per complaint + terminate the staff and provide the replacement within same day
3.	Availability of Staff	Feedback from citizen	Less than 10 minutes	No penalty
			>10minutes < 1 hours delay in availability	Rs. 1000 per 10 minutes
			>1 hours delay in availability	Rs. 10,000 per day including event of default

5.4 Issue Management Procedures

5.4.1. General

1. Issue Management process provides for an appropriate management structure towards orderly consideration and resolution of business and operational issues in the event of a quick consensus not reached between Purchaser and IA.
2. Implementing such a process at the commencement of services shall significantly improve the probability of successful issue resolution. It is expected that this pre-defined process will only be used on an exception basis if issues are not resolved at operational levels.

5.4.2. Issue Management Procedures

1. Either Purchaser or IA may raise an issue by documenting the business or technical problem, which presents a reasonably objective summary of both points of view and identifies specific points of disagreement with possible solutions.
2. The Purchaser and the IA will determine which Committee or Executive/ Management/ Authority level should logically be involved in resolution.
3. A meeting or conference call will be conducted to resolve the issue in a timely manner. The documented issues will be distributed to the participants at least 24 hours prior to the discussion, if the issue is not an emergency requiring immediate attention.
4. The Purchaser and the IA shall develop an interim solution, if required, and subsequently the permanent solution for the problem at hand. The IA will then communicate the resolution to all interested parties.
5. In case the issue is still unresolved, the arbitration procedures described (Clause) in the contract will be applicable.

5.5 SLA Change Control

5.5.1. General

1. It is acknowledged that this SLA may change as Purchaser's business needs evolve over the course of the contract period. This document also defines the following management procedures:
 - a) A process for negotiating changes to the SLA.
 - b) An issue management process for documenting and resolving difficult issues.
 - c) Purchaser and IA management escalation process to be used in the event that an issue is not being resolved in a timely manner by the lowest possible level of management.
2. Any changes to the levels of service provided during the term of this Agreement will be requested, documented and negotiated in good faith by both parties. Either party can request a change. Changes will be documented as an addendum to this SLA and subsequently to the contract.
3. If there is any confusion or conflict between this document and the contract, the Tender and its addenda, the Contract will supersede.

5.5.2. SLA Change Process

1. The parties may amend this SLA by mutual agreement in accordance with terms of this contract. Changes can be proposed by either party. The IA can initiate an SLA review with the Purchaser. Normally, the forum for negotiating SLA changes will be Purchaser's monthly meetings. Unresolved issues will be addressed using the issue management process described in this section.
2. The IA shall maintain and distribute current copies of the SLA document as directed by Purchaser. Additional copies of the current SLA will be made available at all times to authorized parties.

5.5.3. Version Control

1. All negotiated SLA changes will require changing the version control number. As appropriate, minor changes may be accumulated for periodic release (e.g. every quarter) or for release when a critical threshold of change has occurred.

5.6 Responsibilities of the Parties

Please refer responsibility matrix at section 4.3.2.5 of this document.

5.7 Management Escalation Procedures & Contact Map

5.7.1 The purpose of this escalation process is to provide a quick and orderly method of notifying both parties that an issue is not being successfully resolved at the lowest possible management level. Implementing this procedure would mean that Purchaser and IA's management are communicating at the appropriate levels.

5.7.2 Escalation Procedure

- Escalation should take place on an exception basis and only if successful issue resolution cannot be achieved in a reasonable time frame.
- Either Purchaser or IA can initiate the procedure
- The “moving party” should promptly notify the other party that management escalation will be initiated
- Management escalation will be defined as shown in the contact map below
- Escalation will be one level at a time and concurrently
- Contact Map

Abbreviations & Full Forms

Sr. No.	Abbreviations	Full Form
1.	AC	Air Conditioner
2.	AMC	Annual Maintenance Contract
3.	ASM	Assistant System Manager
4.	BCP	Business Continuity Plan
5.	BG	Bank Guarantee
6.	BOO	Build Own Operate
7.	BPR	Business Process Re-engineering
8.	BSNL	Bharat Sanchar Nigam Limited
9.	CB & CM	Capacity Building and Change Management
10.	CBDT	Central Board of Direct Taxes
11.	CD	Compact Disk
12.	CGO	Central Government Offices
13.	CLR	Computerization of Land Records
14.	CORS	Continuously Operating Reference Station
15.	CPU	Computer Processing Unit
16.	CRO	Circle Revenue Officer
17.	CSC	Citizen Service Centre
18.	DB	Database
19.	DC	Deputy Commissioner
20.	DC, DDP & DR	Data centre, Data dump centre and Disaster Recovery
21.	DEO	Data Entry Operator
22.	DGPS	Differential Global Positioning System
23.	DILRMP	Digital India Land Record Modernization Programme

Sr. No.	Abbreviations	Full Form
24.	DIT/ DoIT	Directorate of Information Technology
25.	DMG	Directorate of Mines and Geology
26.	DMS	Document Management System
27.	DoLR	Department of Land Resources
28.	DPR	Detailed Project Report
29.	DR	Disaster Recovery
30.	DSM	District System Manager
31.	DVD	Digital Video Disk
32.	EMD	Earnest Money Deposit
33.	EMS	Enterprise Management System
34.	ETS	Electronic Total Station
35.	ETL	Extract-Transfer-Load
36.	FAQ	Frequently Asked Questions
37.	FC	Fibre Channel
38.	FCR	Financial Commissioner of Revenue
39.	FRS	Functional Requirement Specifications
40.	FTP	File Transfer Protocol
41.	GB	Giga Byte
42.	GIS	Geospatial Information System
43.	GOI	Government of India
44.	GoP	Government of Punjab
45.	GPA	General Power of Attorney
46.	GPR	Government Process Re-engineering
47.	GSM	Grams Per Square Metre
48.	GUI	Graphical User Interface

Sr. No.	Abbreviations	Full Form
49.	I/O	Input Output
50.	IA	Implementation Agency
51.	ICT	Information and Communication Technology
52.	ID	Identification
53.	IEC	Information, education and communication
54.	IGR	Inspector General of Registration
55.	ILMS	Integrated Land Management System
56.	IP	Internet Protocol
57.	IT	Information Technology
58.	KVM	Keyboard, Video, Mouse
59.	LAN	Local Area Network
60.	LMS	Learning Management System
61.	LR	Land Records
62.	Mbps	Megabytes Per Second
63.	MFP	Multifunctional Printer
64.	MGSIPA NOC	– Mahatma Gandhi State Institute of Public Administration - Network Operation Centre
65.	MIS	Management Information System
66.	MMP	Mission Mode Project
67.	MS	Microsoft
68.	NA	Not Available / Applicable
69.	NDC	Near Data Centre
70.	NEC	Non-Encumbrance Certificate
71.	NICSI	National Informatics Centre Services Inc.
72.	NLRMP	National Land Records Modernization Programme
73.	NOC	Network Operation Centre

Sr. No.	Abbreviations	Full Form
74.	OEM	Original Equipment Manufacturer
75.	OS	Operating System
76.	OTP	One Time Password
77.	PAWAN	Punjab Wide Area Network
78.	PBG	Performance Bank Guarantee
79.	PC	Personal Computer
80.	PDF	Portable Document Format
81.	PeMT	Project e-Mission Team
82.	PLRS	Punjab Land Records Society
83.	PMU	Program Management Unit
84.	POP	Point of Presence
85.	Prefab	Pre-Fabricated
86.	QA	Quality Analysis
87.	QC	Quality Check
88.	QoS	Quality of Service
89.	RCC	Reinforced Cement Concrete
90.	RDBMS	Relational Database Management System
91.	RFP	Request for Proposal
92.	RG	Registration System
93.	ROD	Registration of Deed/Documents
94.	RoR	Record of Rights
95.	RTI	Right to Information
96.	RTK	Real time Kinematic
97.	SAN	Storage Area Network
98.	SCA	Service Centre Agency

Sr. No.	Abbreviations	Full Form
99.	SDC	State Data Centre
100.	SDM	Sub-Divisional Magistrate
101.	SLA	Service Level Agreement
102.	SMS	Short Message Service
103.	SNC	State Network Centre
104.	SOI	Survey of India
105.	SPA	Special Power of Attorney
106.	SPF	State Portal Framework
107.	SQL	Structured Query Language
108.	SR	Sub-Registrar
109.	SRO	Sub-Registrar Office
110.	SSDG	State Service Delivery Gateway
111.	SUWIDHA	Single User-friendly Window Help Line for Applicants
112.	SWAN	State Wide Area Networks
113.	TRN	Transaction Reference Number
114.	TS	Total Station
115.	UAT	User Acceptance Testing
116.	UPIN	Unique property identification number
117.	UPS	Uninterruptible Power Supply
118.	USDC	Unified Service Delivery Centre
119.	UT	Union Territory
120.	VPN	Virtual Private Network