### Delhi Development Authority (Systems Department) Vikas Sadan, INA, New Delhi 110023

No. F3(52	)/2019/Sys	Serial No.
M/s	Dated:	
Subjec	et: E-Tender for "Selection of Agency for Portal to display about 900 Maps after and Superimposition of Layout Plans, with related Land and Property Information Bid Systems (Pre-Qualification (PQ), T	r Digitization, Ground Truthing Zonal Plans etc, and integrating mation System of DDA" - Three
Enclosure	es:	
1.	Scope of work	Annexure -1
2.	Eligibility and Evaluation Criteria	Annexure -2
3.	Detailed Project (Deliverables) Timelines	Annexure-3
	DDA CMS RFP Compliance (GIS Interventions)	
5.	Formats for Technical and Financial Proposal	Annexure-5
	a. General Information of the Firm	Form 5A
	b. Financials – Annual Turnover	Form 5B
	<ul><li>c. Bidder Experience/Project Undertaken</li><li>d. Project Resources (Personnel) CV Format</li></ul>	Form 5C
	e. Description of Approach, Methodology	Form 5E
	and Work Plan	TOIM 3E
	f. Financial Proposal Format	Form 5F
6.	Project Undertaking	Annexure-6
7.	Draft Indemnity Bond	Annexure-7
8.	General Instruction to Bidder	Annexure-8
9.	Instructions for online Bid submission	Annexure-9
10.	Draft Integrity Pact	Annexure-10
	Draft Tender Acceptance Letter	Annexure-11
	Draft Covering Letter for Proposal	Annexure-12
	DarftUndertaking on Total Responsibility	Annexure-13
	Performance Bank Guarantee for EMD	Annexure-14
15.	Role and Responsibilities of each bidder	Annexure-15
	Copies of Work Order	Annexure-16
	Undertaking for Blacklisting	Annexure-17
	Chartered Account Certificate for Net Wort	h Annexure-18
19.	Draft Agreement	Annexure-19
	Power of Attorney for signing RFP Docume	ent Annexure-20
	Service level Agreements	Annexure-21
	Draft Server Hardware Specifications	Annexure-22
	Certification and Credentials	Annexure-23
	Empanelment Credentials	Anneyure-24

25. Interface with Land and Property Information System Annexure-25

#### **IMPORTANT DATES:**

Date	Time
08.03.2019	3:30 PM
22.03.2019	3:30 PM
29.03.2019	
12.04.2019	3:30 PM
15.04.2019	3:30 PM
	08.03.2019 22.03.2019 29.03.2019 12.04.2019

E-tenders are invited for the "Selection of Agency for Development and operationalisation of Web based Portal to display about 900 Maps after Digitization, Ground Truthing and Superimposition of Layout Plans, Zonal Plans etc.and integrating with related Land and Property Information System of DDA, for facilitating Ease of Doing Business" at <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>, as per the requirements described in Scope of work given in Annexure-I.

### **General Instructions and Terms & Conditions**

The General Instructions and Terms of Reference to the Tenderers shall be as under:-

- 1. Tenderers are required to deposit E-Tender Annual Charges Rs. **20,000** and EMD amounting INR **9,00,000** (INR Nine Lakhs only) through separate transactions with RTGS/NEFT in the account of Sr. A.O. Cash Main, D.D.A having account No. 1014042405 with Central Bank of India, Vikas Sadan,I.N.A. branch, New Delhi (IFSC Code CBIN0282695). The unique transaction reference of RTGS/NEFT shall have to be uploaded by the prescribed date. The Dy. Director (Systems) will get EMD verified from Sr. A.O Cash Main on the unique transaction reference number against each RTGS/NEFT payment before the tenders are opened. Tenders not accompanied with EMD shall not be considered.
- 2. The unique transaction reference on RTGS/NEFT against EMD, E-Tender Annual Charges shall be placed online at specified location for Tender for "Selection of Agency for Development and operationalisation of Web based Portal to display about 900 Maps after Digitization, Ground Truthing and Superimposition of Layout Plans, Zonal Plans etc., and integrating with related Land and Property Information System of DDAfor facilitating Ease of Doing Business".
- 3. Tenderers must read complete tender document before filling bids.
- 4. Tenderers who are desirous of bidding, may seek further clarification during pre-bid meeting.
- 5. The bid shall remain valid for <u>180 days</u> from the opening of tender (Technical Bid).

### **Preparation and Submission of Proposal**

6. The information on the outer sealed envelope should clearly mention; "Selection of Agency for Development and operationalisation of Web based Portal to display about 900 Maps after Digitization, Ground Truthing and Superimposition of Layout Plans, Zonal Plans etc., and integrating with

# related Land and Property Information System of DDAfor facilitating Ease of Doing Business".

7. <u>3 Inner envelopes</u> should clearly mention:

The tender shall be submitted online <u>in three parts</u>, viz., Pre-Qualification (PQ) Bid, Technical Bid and Financial Bid. The offers should be made strictly as per the formats enclosed.

- 8. **Both PQ and Technical Bids shall be opened online**in the presence of a Committee or their representatives by authorized bid openers. Technical Bid of only those who qualify the PQ Criteria, shall be opened. Financial Bids of only those tenderers shall be opened whose technical bids qualify, at a time and place of which notice will be given. The Tenderer technically qualified will be at liberty to be present either in person or through an authorized representative at the time of opening of the Financial Bids with the Bid Acknowledgement Receipt or they can view the bid opening event online at their remote end.
- 9. The Tenderer's Earnest Money, deposited in the form of NEFT/RTGS, will be retained by DDA as part of security deposit, in case tender is accepted, **otherwise it will be refunded after the Award of work**. However, no interest shall be payable on the Earnest Money.
- 10. Modification and Withdrawal of Bids: No bid may be altered/modified after submission to the Purchaser. In case, the tenderer does not submit the Offer as per terms and conditions, and / or modifies and / or withdraws offer, the entire amount of Earnest Money would liable to be forfeited.
- 11. No Conditional Tender shall be accepted and is liable to be rejected.
- 12. Unsolicited Correspondences from Bidder, after submission of the Bid will not be considered.
- 13. The Tenderers shall be free to discuss the issues, if any, in the Pre-bid meeting.
- 14. The Tenderers should bear all the costs associated with the preparation and submission of its proposal and DDA will in no case be responsible or liable for these costs, regardless of the conduct or outcome of bidding process.
- 15. The Tenderers are expected to examine all instructions, forms, terms and conditions and technical specifications in the bidding documents.
- 16. Submissions with insufficient information and which do not strictly comply with the stipulations given above, are liable for rejection.
- 17. At any time, prior to the deadline of submission of proposals, DDA may modify the document/issue addenda. These addenda/Corrigendum shall be posted at the website of DDA and shall be treated as a part of the Tender documents.
- 18. DDA may, at its discretion, extend the deadline for submission of proposals.
- 19. DDA may, at its discretion, abandon the process of selection associated with this document anytime.

#### Code of Ethics

- 20. DDA requires that bidders under this contract observe the highest standard of ethics. In pursuance of this policy, DDA defines, for the purpose of these provisions, the terms set forth below as follows:
  - i. "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public servant; and

- ii. "Fraudulent practice" means a misrepresentation of facts in order to influence the decision to award the consultancy contract to the detriment of DDA and targeted stake holders and includes collusive practice among bidders (prior to or after the proposal submission) designed to establish bid prices at artificial non-competitive level and to deprive DDA and targeted stake holders of the benefits of free and open competition.
- iii. DDA will reject a proposal for award of work if it is determined that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question or in concealment of material or fact.
- iv. DDA will declare a bidder ineligible, either indefinitely or for a stated period of time, to be awarded a contract/contracts, if it at any time determines that the bidder has engaged in corrupt or fraudulent practices in competing for, or in executing the consultancy contract.
- v. The bidder should not have been declared 'bankrupt' by any court of law.
- vi. The bidder should not be blacklisted by Central/ State Government Department/ PSU/Government Company/Local Bodies. Bidder also should not be under any legal action for indulging in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice with any Indian Central/ State Government Department/ PSU/Government Company/Local Bodies etc.
- VII. The seat of arbitration/disputes resolution/settlement shall be at New Delhi Arbitration clause will be the part of consultancy agreement to be signed between DDA and the selected firm.

### Security Deposit and Performance Bank Gaurantee

- 21. The successful Bidder, for due and faithful performance of its obligations and as a pre-condition for signing of Advisory Agreement with DDA, shall be required to submit a demand draft of the amount equivalent to 5% of the tendered cost of the work (Total Fee as given in Financial Bid) as **Security Deposit** after adjusting the earnest money and shall also furnish a Bank Guarantee of the amount equivalent to 10% of the tendered cost of the work (Total Fee as given in Financial Bid)as Performance Bank Guarantee.
- 22. Security Deposit and Performance Bank Guarantee shall be retained for 180 days after completion of the project or 2 years, whichever is later.

#### **Pre-Qualification Bid – Compliance Sheet**

23. The Tenderers shall furnish all the required documents as given the Compliance Sheet (**Annexure-2**).

#### **Technical Bid**

- 24. The Tenderers shallfurnish following documents in Technical Bid:
  - i) Scanned Copy of Memorandum & Article of Association of the Company.
  - ii) Scanned Copy of ISO ISO -9001-2015 and CMMi-3 certification (or above).
  - iii) Scanned Copy of Proforma of firm's / Co's Description (Annexure-5: Form-5A).
  - iv) Scanned Copy of Details of the firm's / Company's experience in Application Software (including GIS Application) solution development and maintenance (Annexure-5: Form-C).
  - v) Scanned Copy of details of the CVs of the Officers / Officials who may be deputed for the Project (Annexure-5: Form-5D).
  - vi) Scanned Copy of Audited Balance sheets for preceding <u>3 years</u> preferably showing the revenue earned from software development, system integration, and total solution provider for ICT services (Annexure-5: Form-5B)

- vii) Scanned copy of the certificates for satisfactory services from the Government Organizations, Public Sector Undertakings, reputed Private Companieswhere the work of software development and digitization etc., has been carried out, in last three years with name, designation and telephone numbers of the contact person.
- viii) Scanned Copy of reference of RTGS/NEFT(Registration Fee& EMD)
- ix) Scanned Copy of Tender Acceptance Letter (Annexure-11).
- x) Scanned Copy of GST Registration Certificate
- 25. Any tender found lacking with respect to the necessary information and /or documents and/or Earnest Money with the Technical bid, will not be considered.
- **26. Scope of Work** (Annexure-1) is about the details of the application softwares developed and implemented with details of the environment for which the Facility Maintenance and Management Services are required.

#### Financial Bid

27. Schedule of price bid in the form of BoQ\_XXXXX.xls

The Tenderers shall submit the financial bid as provided in BoQ\_XXXXX.xls along with this tender document. Bidders are advised to download and quote rates and upload in the site at the respective location. Quoted rates must be inclusive of GST, all taxes and duties applicable, and any other charges (if any). However, all applicable deductions on account of taxes and duties etc., shall be made by DDA.

28. Tenderers are requested to quote in Annexure-5: Form-5F.

#### Technical Evaluation and Financial Evaluation

- 29. On the basis of Pre-qualification (PQ) evaluation of technical bids, the Committee constituted for the purpose of evaluation of the tenders, may find it necessary to visit the organizations where similar jobs done by tenderer and/or may confirm on phone the quality of performance and/or may visit tenderer's client premises/service Centre, where the such services are being provided by the Tenderer. The Committee will short list the bids according to capabilities and skills of the tenderers as per Technical Evaluation Criteria and open the financial bids of only the short-listed tenderers who are found technically suitable.
- 30. For Tender Evaluation, both Soft copy uploaded in the eTender Portal and Hard copy of the tender bids will be used. Purchaser may seek any clarifications or additional documents, during Tender Evaluation Process, as considered necessary.
- 31. The decision arrived at for finally short-listing the tenderers by the Technical Evaluation Committee (TEC) and the Principal Commissioner (Systems) shall be final and binding upon all the Tenderers.
- 32. Vice Chairman (VC), DDA shall have the right to reject all or any of the bids including the financially lowest bid, without assigning any reason whatsoever.

#### Post Tender Evaluation

- 33. Once the quotation of the Tenderer is accepted and the acceptance is communicated to the Tenderer, the Tenderer shall present itself in the office of the DDA and shall execute an agreement within 7 days, as per Annexure-19(Draft of Agreement)appended herewith, and shall furnish a **demand draft** of the amount equivalent to 5% of the tendered cost of the work (Total Fee Financial Bid) as Security Deposit after adjusting the earnest money and shall also furnish a Bank Guarantee of the amount equivalent to 10% of the tendered cost of the work (Total fee Financial Bid) as Performance Bank Guarantee.
- 34. <u>Security Deposit and Performance Bank Guarantee shall be retained for 180 days</u> after completion of the project or 2 years, whichever is later.
- 35. The Performance Bank Guarantee (PBG) will be invoked by DDA, in case the performance of the vendor is not found satisfactory during the period of Work.
- 36. If the tenderer, whose tender is accepted, does not furnish the Security Deposit and Performance Bank Guarantee and does not execute the agreement within the prescribed time limit, **the entire earnest money shall stand forfeited**.
- 37. The tenderer shall be provided with adequate office space with electricity and air conditioning with minimal furniture for its operations. All the officials deputed by the vendor shall be paid the salaries, travel allowances etc. by the tenderer and the officials shall continue to be employees of the tenderer even after expiry of the assignment and DDA shall have no liability whatsoever, in this regards.
- 38. The material, if any, is required to be brought to or removed from DDA premises by the tenderer shall be brought/removed only on working days as per DDA's calendar. A list of the material brought/removed shall be provided to the Dy. Director System coordinating the operations of the tenderer and the gate pass shall be issued by him for removal.

### **Project Duration and Extension of Service thereafter**

- 39. The contract will initially be <u>for a period of 1 year</u>, excluding O&M, after which the contract may be renewed in the form of annual O&M contracts based on satisfactory performance, at the discretion of DDA, at the same rate and same terms and condition.
- 40. However, the assignment may be terminated any time at the discretion of DDA without assigning any reason thereof if the services are not found satisfactory or service/services are not required by DDA after certain period.

### Capacity building of DDA officials

41. The Bidder will be responsible to conduct workshops and other training, handholding activities for the DDA personnel, as well as providing on-the-job training in data entry and verification, preparation of reports, system maintenance and upgrading, etc.

#### **Grievance Redressal**

- 42. If the Tenderer finds any hindrance in the start of the services resulting in and necessitating an extension of time allowed in the tender, the tenderer shall apply in writing to VC, DDA or Nodal Officer authorized by VC, DDA, for grant of extension of time.
- 43. The extension can be granted by the VC, DDA or Nodal Officer authorized by VC, DDA, in their absolute discretion and if the cause shown is genuine and sufficient.

#### Validity of Rates/Offer

44. The rates/offer shall be valid for <u>the period of 180 days</u> from the date of opening of tender(Technical Proposal).

### **Payment Terms**

- **45.** The payment to the Bidder shall be made for 2 heads i.e. Development Fees and Annual O&M:
  - **i. Development Fee**: will be a lump sum fee to be paid as per payment milestones set out given in Table-1 below.
  - ii. Digitization Fee:Will be payable on completion of digitisation of a LOP in all respects. The bidder can raise bills in batches of 50 LOP's
  - iii. Annual O&M Fee: will be a lump sum fee to be charged for every 12-month period from the Development Phase Exit, up to a maximum period of 1 year. Fees for the last Quarter of O&M will be paid on a prorata basis for the total number of months. Payment of O&M fee will be as given in Table-1.
  - iv. Payment of Fee for Milestones (2-5) of Development Fees will be done after successful completion of precedingmilestone only.
  - v. The Mobilisation Advance (as an Option) will attract 10 % simple Interest which will be calculated from the date of Payment to the date of recovery. The recovery of this advance will commence after 10% of Work is completed and the entire amount together with interest shall be recovered by the time 80% of the work is completed (source 32.5 of CPWD Works Manual 2014):
    - 1. Mobilisation Advance (as an Option) with Advance Bank Guarantee (ABG) for 110 % the Value (Mobilisation Advance) as specified in DDA-CMS project.
    - 2. Recovery: Recovery for Advance will start from Payment 2 Stage to Payment 4 Stage, proportionately.
    - 3. ABG will be released, when complete recovery of Mobilisation Advance and 10% Interest is done.

**Table-1: Payment Milestone** 

Payment Milestone	Percentage of total professional fee	Tentative timelines
DEVELOPMENT FEES		
1. Signing of Consultancy	10 % of Development	ED
agreement between DDA and	Fees as Mobilisation	
Bidder	Advance – Optional	
2. SRS, SDD and FRS Sign off	10% of Development	ED + 5 weeks
and Plan Review Sign off	Fees	
3. GIS Portal Development	45% of Development	ED + 26 Weeks
Application Design and	Fees	
Development, and UAT		
Approval by DDA		
4. Go-Live Acceptance: Launch	40% of Development	ED + 51 weeks
of GIS Portal after Technical	Fees	
and User testing		
5. Development Phase Exit	5% of Development	ED + 53 weeks
	Fees	

O&M FEES		
<b>6.</b> Payment of O&M fees	25% of Annual O&M	Every 3-month period after
	fees	Development Phase Exit
	(after review of	(i.e. ED+ 52 Weeks).
	Monthly MIS Reports	
	and QPR)	

- vi. All applicable statutory deductions such as GST, Income Tax, Cess etc shall be made from the bill. Rates are inclusive of all taxes/duties and any other charges. However, GST tax amount included, should be mentioned in the bill.
- vii. No extra payment shall be made on any account including for visits to various offices of DDA.
- 46. The decision of the Vice Chairman (VC), DDA or Nodal Officer authorized by VC, DDA with respect to any of the matters pertaining to the tender or the agreement or arising therefrom **shall be finaland binding**, and shall not be called in question in any proceedings or at any forum whatsoever.

### Forfeit of Security Deposit

47. The tenderer will not sub-let / sub-contract in part, or in full after getting the Assignment / Award of Work. In the event of tenderer sub-letting the work / sub-contracting in part or full after the Award of the Work, the tenderer shall be considered to have thereby committed a breach of agreement and <a href="DDA shall">DDA shall</a> forfeit the Security Deposit. The tenderer shall have no claim, whatsoever, for any compensation or any loss on this account.

#### **Termination of Contract**

- 48. The Contract to be executed with the tenderer (selected agency) may be terminated by DDA for non-performance of any of the clauses of the contract and/or for violation for any terms and conditions of the contract by the tenderer, after serving a prior **notice of one month** on the registered address of the tenderer and also through registered email address of the tenderer.
- 49. If the DDA,for any reason, whatsoever decides to terminate the contract, <u>a</u> written notice of termination to the Bidder shall be given with a notice period of 3 months as per provision of Tender and Fees for the work done approved till the time of termination, shall be made as mutually decided between DDA and the Bidder.
- 50. If the contract is terminated due to non-submission of deliverables within prescribed time schedule, inferior quality of reports, non-compliance to instructions, fraudulent practices, corrupt practices and misrepresentation, then fee for that work will not be paid and the Security Deposit & Performance Security (PBG) deposited by Bidder will be forfeited.

## Signing of Contract

51. Subsequent to receipt of valid Performance Guarantee from the successful Bidder, the parties shall enter into a contract, incorporating all clauses, pre-bid clarifications and the Proposal of the Bidder, between the Purchaser and the successful Bidder. In case of exigency / non-performance / default, if Purchaser

gets the work done from elsewhere, the difference in the cost of getting the work done will be borne by the successful Bidder.

## Failure to Agree with the Terms and Conditions of the Tender

52. Failure of the successful Bidder to agree with the Draft Legal Agreement and Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event Purchaser may award the contract to the next best value Bidder or call for new proposals from the interested Bidders. In such a case, the Purchaser shall invoke the PBG of the successful Bidder.

## **Intellectual Property Rights**

- 53. In case of **Bespoke development of the application**: The Bidder 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 Bidder solely during the performance of Services and for the purposes of inter-alia use or sub-license of such Services under this Contract.
- 54. 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 Bidder solely during the performance of 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 Bidder shall be property of the Purchaser. The Bidder should create a repository of such resources and provide access to Purchaser. The Bidder 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: -
  - Bidder shall not only support Purchaser with the proposed COTS during the
    contract period, but also, confirm that after the expiration / termination of the
    initial contract, continued support will be provided by the Bidder to the
    Purchaser, in case Purchaser chooses to maintain / upgrade the COTS
    proposed, either directly or through third party agency(ies);
  - Continued support to the Purchaser will be subject to the purchase of support by the Purchaser post termination / expiry of contract;
  - The customized source code with its full rights shall be handed over to the Purchaser.
- 55. If Purchaser desires, the Bidder 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 Bidder, and which may be assigned

- by the Purchaser to the Bidder for the purpose of execution of any of its obligations under the terms of the Bid, Tender or this Contract , shall be acquired in the name of the Purchaser, prior to termination of this Contract However, subsequent to the term of this Contract, such approvals, registrations, licenses, permits and rights etc. shall endure to the exclusive benefit of the Purchaser.
- 56. The Bidder / Bidder's Team shall ensure that while it uses any software, processes, document or material in the course of performing the Services, it does not infringe the Intellectual Property Rights of any person and the Bidder 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 Bidder or the Bidder's Team during the course of performance of the Services. In case of any infringement by the Bidder / Bidder's Team, Bidder shall have sole control of the defense and all related settlement negotiations.

## **Exemption for Micro, Small & Medium Enterprises**

- 57. If a bidder falls under the Micro, Small & Medium Enterprises Development Act, 2006, then a copy of the registration certificate must be provided to Purchaser. Further, the bidder must keep the Purchaser informed of any change in the status of the company.
- 58. Following facilities have been extended to the SSI units registered with NSIC:
  - a. Issue of tender sets free of cost.
  - b. Exemption from payment of Earnest Money to the extent of 50 per Cent (50%) of the EMD asked for.

# **Limitation of Liability**

- 59. Limitation of Liability is as follows: -
  - Neither the Party shall be liable to the other Party for any indirect or consequential loss or damage (including loss of revenue and profits) arising out of or relating to the Contract.
  - 2. Except in the case of Gross Negligence or Wilful Misconduct on the part of the Selected Agency or on the part of any person acting on behalf of the Selected Agency executing the work or in carrying out the Services, the Selected Agency, with respect to damage caused by the Selected Agency including to property and/or assets of Purchaser or its clients shall regardless of anything contained herein, not be liable for any direct loss or damage that exceeds (A) the Contract Value or (B) the proceeds the Selected Agency may be entitled to receive from any insurance maintained by the Selected Agency to cover such a liability, whichever of (A) or (B) is higher. For the purposes of this Clause, "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, Gross Negligence shall not include any

action taken in good faith for the safeguard of life or property. "Wilf 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, 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.

3. This limitation of liability slated in this Clause, shall not affect the Selected Agency's liability, if any, for direct damage by Selected Agency to a Third Party's real property, tangible personal property or bodily injury or death caused by the Selected Agency or any person acting on behalf of the Selected Agency in executing the work or in carrying out the Services.

### **INDEMNITY**

60. The empanelled vendor must indemnify the Purchaser against all third party claims of infringement of patent, trademark/copyright or industrial design rights arising from the use of the supplied software/ hardware/manpower etc and related services or any part thereof. Purchaser stand indemnified from any claims that the hired manpower / selected bidder's manpower may opt to have towards the discharge of their duties in the fulfilment of the purchase orders. Purchaser also stand indemnified from any compensation arising out of accidental loss of life or injury sustained by the hired manpower / empanelled vendor's manpower while discharging their duty towards fulfilment of the purchase orders (Annexure-7).

### **Termination for Insolvency**

61. Purchaser may, at any time, terminate the purchase order by giving **four weeks written notice** to the selected Bidder, without any compensation to the Bidder, if the Bidder becomes bankrupt or otherwise insolvent.

# Force Majeure

If at any time, during the continuance of the Contract, the performance in whole 62. or in part by either party of any obligation under the Contract is prevented or delayed by reasons of any war, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics guarantine restrictions, strikes, lockouts or acts of God (hereinafter referred to as "events"), provided notice of happenings of any such event is duly endorsed by the appropriate authorities/chamber of commerce in the country of the party giving notice, is given by party seeking concession to the other as soon as practicable, but within 21 days from the date of occurrence and termination thereof and satisfies the party adequately of the measures taken by it, neither party shall, by reason of such event, be entitled to terminate the contract, nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist and the decision of the purchaser as to whether the deliveries have so resumed or not, shall be final and conclusive, provided further, that if the performance in whole or in part or any obligation under the contract is prevented or delayed by reason of any such event for a period exceeding 60 days, the purchaser may, at his option, terminate the Contract...

#### **Termination for Default**

- 63. Default is said to have occurred
  - i. If the selected Bidder fails to accept the Purchase Orders
  - ii. If the selected Bidder fails to deliver any or all of the services within the time period(s) specified in the purchase order or during any extension thereof granted by the Purchaser.
  - iii. If the selected Bidder fails to perform any other material obligation(s) under the contract
- 64. If the selected Bidder defaults in the above circumstances, a cure period of 30 days will be given to the selected Bidder to rectify the default, failing which the selection against this tender will be cancelled and 8.5% of the Work order value will be levied as cancellation charges. Purchaser can get the work done through alternate sources with the difference in the cost of getting the work done to be borne by the successful bidder with capping of maximum 10% of the value of the goods/services for which alternative option is sorted to. In case of any Termination, the Purchaser shall be liable to pay the selected bidder for all the goods and services accepted till the effective date of termination.

### **Penalty**

- 65. In case the Bidder fails to adhere to the time frame for starting the work as per the schedule, or any unjustified and unacceptable delay beyond the delivery, installation and commissioning schedule as per contract, will render the bidder liable for penalty or liquidity damages as per the rate as mentioned in the "Annexure-21: Service Level Agreement". Measurement of Service Level Agreement (SLA)
  - i) The SLA metrics provided specifies performance parameters as baseline performance, lower performance and breach. All SLA calculations will be done on quarterly basis. The SLA also specifies the liquidated damages for lower performance and breach conditions.
  - ii) Payment to the Successful Bidder is linked to the compliance with the SLA metrics.
  - iii) The metrics specifies three levels of performance, namely,
    - The Agency will get 100% of the Contracted value if all the baseline performance metrics are compiled and the cumulative credit points are 100;
    - The Agency will get lesser payment in case of the lower performance. (For e.g. if SLA point score is 80, then the SI will get 20% less on the quarterly payment);
    - If the performance of the Agency in respect of any parameter falls below the prescribed lower performance limit, debit points are imposed for the breach.
    - The credit (+) points earned during the quarter will be considered for computing penalty. The quarterly payment shall

be made after deducting the liquidated damages as mentioned above.

- iv) The aforementioned SLA parameters shall be measured per the individual SLA parameter requirements and measurement methods, through appropriate SLA Measurement tools to be provided by the SI and audited by the Purchaser or its appointed Consultant for accuracy and reliability.
- v) Purchaser shall also have the right to conduct, either itself or through any other agency as it may deem fit, an audit / revision of the SLA parameters. The SLAs defined, shall be reviewed by the Authority on an annual basis after consulting the Selected Bidder and other experts. All the changes would be made by the Purchaser after consultation with the Selected Bidder and might include some corrections to reduce undue relaxation in Service levels or some corrections to avoid unrealistic imposition of liquidated damages, which are noticed after project has gone live.
- vi) Total liquidated damages to be levied on the Selected Bidder shall be capped at 10% of the total contract value. However, Authority would have right to invoke termination of the contract in case the overall liquidated damages equals 10% of total contract value.
- vii) Liquidated damages to be levied during Post Implementation period shall be capped at 15% of the O & M contract value. Authority would also have right to invoke termination of contract in case cumulative debit point (breach points) are above 30 in 2 consecutive quarters.
- 66. Under The Service Level Agreements (SLAs):
  - i) The Selected Bidder shall accomplish the scope of work under this Agreement as per the Timelines and as per the Service Level Agreements. If the Selected Bidder fails to achieve the Timelines due to reasons attributable to it, or if it fails to achieve the Service Levels (in the SLAs) for any reason whatsoever, the Systems Integrator shall be liable to pay penalty/liquidated damages as mentioned in the tender.
  - ii) In case the Selected Bidder is not solely liable for the breach of Timelines, amount of liquidated damages shall be deducted on proportionate / pro rata basis depending upon the Systems Integrator's extent of fault in such breach of Timelines.
  - iii) Authority shall have the right to determine such extent of fault and liquidated damages in consultation with Selected Bidder. Payment of liquidated damages shall not be the sole and exclusive remedies available to Authority and the Selected Bidder shall not be relieved from any obligations by virtue of payment of such liquidated damages. The liquidated damages will be capped as mentioned in Tender.

### **Liquidity Damages**

#### 67. In the event that

- i) The Selected Bidder does not provide or procure fulfilment of any or all of the conditions precedent set forth in the tender, and
- ii) the delay has not occurred as a result of breach of this Contract by the Authority or due to Force Majeure,

the Selected bidder shall pay to the Authority, damages in an amount calculated at the rate of 0.5% (zero point five per cent) of the PerformanceBank Guarantee (the 10% of the Quoted Price Bid amount) for each week (part of a week being treated as a full week) of delay, up to a maximum deduction of 10% (Ten percent) of the total contract price until the fulfilment of such conditions precedent.

## **Applicable Law**

- 68. The Applicable Law are as follows:
  - i) The selected Bidder shall be governed by the laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such commercial dealings/processing.
  - ii) All disputes in this connection shall be settled in Delhi jurisdiction only.
  - iii) Purchaser reserves the right to cancel this tender or modify the requirement at any stage of Tender process cycle without assigning any reasons. Purchaser will not be under obligation to give clarifications for doing the aforementioned.
  - iv) Purchaser also reserves the right to modify/relax any of the terms & conditions of the tender by declaring / publishing such amendments in a manner that all prospective bidders / parties to be kept informed about it.
  - v) Purchaser, without assigning any further reason, can reject any tender(s), in which any prescribed condition(s) is/are found incomplete in any respect and at any processing state.
  - vi) All procedure for the purchase of stores laid down in GFR shall be adheredto strictly by the Purchaser and Bidders are bound to respect the same.
  - vii) Any functionality which is neither in the tender document nor explicitly specified as mentioned above, either by accident or by design, will be considered to be a breach of contract, such that the bidder must be liable for legal actions and be charged for damages.

# **Resolution of Disputes & Arbitration**

69. The Authority and the selected bidder shall make every effort to resolve amicably, by direct formal negotiation, any disagreement or dispute arising between them under or in connection with the Contract. If, after 30 (thirty) days from the commencement of such formal negotiations/Claims (through written communications), including the final bill for payment, to the Project-In-Charge, the Authority and the selected bidder are unable to resolve amicably such dispute, the matter will be referred to the Vice-Chairman of the Authority, for his/her opinion.

- 70. If the selected bidder doesn't agree with the opinion of the Vice-Chairman of the Authority, the matter shall be referred to a panel of three Arbitrators: one Arbitrator to be nominated by Authority, the other one to be nominated by the selected bidder and a third arbitrator to be appointed by the two arbitrators jointly. The award of the Arbitrators shall be final and binding on the parties. Proceedings under this clause shall be subject to applicable law of the Arbitration and Reconciliation Act, 1996 and the venue of such arbitration shall be Delhi. Cost of arbitration shall be borne by each party proportionately, as per the Schedule IV of theArbitration and Reconciliation (Amendment)Act, 2015. However, expenses incurred by each party in connection with the preparation, presentation shall be borne by the party itself. The provisions of this clause shall survive termination of this Agreement.
- 71. The Arbitrators, if warranted, shall be deemed to have entered on to the reference on the date the notice was issued to both parties, through authorised and working official email addresses, calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the Arbitrators in their sole discretion. The fees, if any, of the Arbitrators, shall be paid only after the Award is made. Arbitration process shall also make use of Internet for interaction between Arbitrators and Purchaser and the selected Bidder, and shall end within 30 working days of first notification issued to both Purchaser and the selected Bidder. Any award submitted after the Arbitration Period (i.e. 30 working days), is debarred.
- 72. The cost of the Reference and of the Award shall be in the discretion of the Arbitrators. However, the fee for the Arbitrator shall not exceed INR 2500 per working hour plus Taxi bill within Delhi as per actual.
- 73. If the contractor does not make any demand for reconciliation in respect of any claim, in writing, within 30 days of receiving the intimation from the Officer-in-Charge that "final bill is ready for the payment", the claim of the contractor shall be deemed to have been **waived and absolutely barred** and the Purchaser shall be discharged and released of all liabilities under the contract in respect of such claim.

### **Risk Purchase**

- 74. In the event selected bidder fails to execute the project as stipulated in the delivery schedule, or to the satisfaction of the Authority or fails to perform its obligations (or any part thereof) under this Agreement or if the Agreement is terminated by the Authority due to breach of any obligations of the selected bidder under this Agreement, Authority reserves the right to procure similar or equivalent Services/Deliverables from the next eligible Bidder or from another alternate source at the risk, cost and responsibility of the Selected bidder.
- 75. Any incremental cost borne by the Authority in procuring such Services/
  Deliverables shall be borne by the selected bidder. Any such incremental cost incurred in the procurement of such Services/ Deliverables from alternative source will be recovered from the undisputed pending due and payable payments, Security Deposit/Bank Guarantee provided by the Selected Bidder under this Agreement, and if the value of the Services/Deliverables under risk purchase exceeds the amount of Security Deposit/Bank Guarantee, the same may be recovered if necessary by due legal process. Before taking such

a decision under this Clause, Authority shall serve a notice period of 1(one) month to the Selected bidder.

#### Warranties for Software

- 76. The Selected Bidder represents warrants and covenants that on the acceptance date and for the Warranty Period, the Software will be free of material programming errors and will operate and conform to the respective Software's Documentation including, inter alia, SRS (System Requirement Specification) and other manuals. The Selected Bidder also represents warrants and covenants that the medium on which the Software is contained when delivered to Authority, will be free from defects in material or workmanship, and shall be free from any viruses, bugs etc.
- 77. The Selected Bidder represents warrants and covenants that the Technical Documentation delivered to Authority for the system developed and operationalised will be sufficient to allow a reasonably knowledgeable information technology professional to maintain and support such Software. The System Integrator represents warrants and covenants that the User Documentation for the System developed and operationalised will accurately describe in terms understandable by a typical end user the functions and features of the System and the Procedures for exercising such functions and features.

### Procurement and Ownership of Hardware and Software Tools

78. Hardware & Software tools (including Open Technology RDBMS, Open GIS Tools, etc., and their licenses if any), paid for by DDA, shall remain the property of DDA and in its custody after conclusion of the project.". These items will be procured by DDA, based on the improved specifications (over provided in Annexure-22), to be given by the selected Bidder meeting the SLA criteria. During procurement of these items, the selected bidder will provide handholding with DDA.

## **Security Audit of Software and Website**

79. The selected Bidder shall undertake appropriate Cyber Security Audit of the Portal/Website and the associated application software through the empaneled agencies of CERT-IN of the Government of India, before "go-live" stage, and shall ensure that all uploaded digitized Layout Plans / Zonal Plans are not replacable with other Layout Plans / Zonal Plans respectively.

# Web Site Development and Quality Certification

80. Development, Deployment and Maintenance of Web-portal (Internet and Intranet) which provides both informational and transactional facilities to Customers, meeting the Guidelines of Indian Government Websites (<a href="http://web.guidelines.gov.in">http://web.guidelines.gov.in</a>), including Website Quality Certification by STQC of Government of India.

# **Publicity**

81. Except as required by law, Selected Bidder shall publish or permit to be published either alone or in conjunction with any other person any press release,

information, article, photograph, illustration or any other material of whatever kind relating to this Agreement, the SLA without the explicit written permission of the Authority.

### Other Terms and Conditions

- 82. During the O&M period, the Bidder will have the total responsibility for operating, managing, and updating of all the systems that have been developed, installed and commissioned. During this period, any modifications/alterations in Software shall be carried out free of cost by the Bidder.
- 83. The Bidder will ensure that all works envisaged under the assignment are carried out in discussion with and to the satisfaction of DDA, and will submit **interim monthly progress reports** during the development period, and fortnightly status reports during the entire operations period.
- 84. Bidders shall, under no circumstances, share any data/information provided by DDA, with any individual/agency.

#### **IMPORTANT NOTE**

- 85. Tender documents may be downloaded from Central Public Procurement Portal <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>. Aspiring Tenderers who have not enrolled/registered in e-procurement should enroll/register before participating through the website <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>. The portal enrollment is free of cost. Tenderers are advised to go through instructions provided at **Annexure-10 regarding 'Instructions for online Bid Submission** '.
- 86. Tenderers can access tender documents on the website, fill them with all relevant information and submit the completed tender document into electronic tender on the website <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>.
- 87. Tenders and supporting documents should be uploaded through e-procurement. In addition, **Hard copy of the tender bids also need to be submitted** to Deputy Director (Systems), DDA.

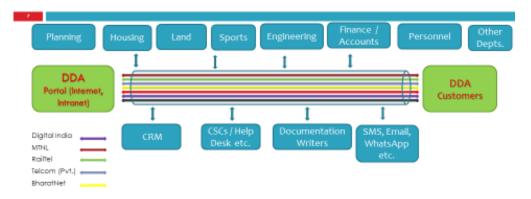
Dy. Director(Systems)

# **Scope of Work**

Development and operationalisation of Web based Portal to display and locationwsie Search criteria for about 900 Maps through Digitization, Ground Truthing and Superimposition of Layout Plans, Zonal Plans etc., for facilitating Ease of Doing Business

1. To meet the need of various administrative operations such as infrastructure planning and management, allotment and regulation of the properties, establishing new Areas at various locations, and as well to facilitate Investors to get glimpse of the near real-time property/plot availability and status, DDA wants to adopt the Geo Spatial Technology as their key solution. It will cover spatial dimension which facilitates to visualize outlook of Zones at dynamic geographical scale. Integration of domain Knowledge with Geo-spatial datasets and technology will lead to successful implementation of the System. This System will provide the capability to process and render "enterprise level decisions" and also aid to plan, regulate and control land use.DDA desires to usher in Digital Service based on the Services Architecture depicted in the Diagram given below.

# DDA Digital Services Architecture



DDA has about 10 Lakhs Customers owning DDA Land and Properties and about 14000 Employees

- 2. In addition, DDA has also embarked upon developing aSpatial Data Management Platform Project (Delhi Land Pooling Policy) facilitating:
  - Integration of Single Window System with GIS-based seamless revenue and land mapping database developed by DDA;
  - ii. Interactive map-based online facility for providing sector identification and other relevant information to applicants;
  - iii. Regular updating of GIS based seamless revenue map with data regarding land parcels that have been pooled, based on applications received:
  - iv. Verification of total pooled area in each planning sector through the integrated GIS application;
  - v. Infographics and generation of maps based on pooling data; and

vi. Geo-referencing of Land Parcels and associates Attribute Data Sets for enriching GIS-based Revenue and Land Mapping Database of DDA.

<u>Note:</u> Lay Out Plans (LOPs) and database developed through Land Pooling Policy Applications will be required to be integrated to this proposed System at a later stage.

- 3. DDA intends, through this Tender, to implement aWeb based Portal to display about 900 Maps after Digitization, Ground Truthing and Superimposition of Layout Plans, Zonal Plans etc.— a Decision Support System, for efficient and transparent working for facilitating Ease of Doing Business in DDA. With this initiative, DDA wants to appoint a suitable IT firm for design, development and implementation of various softwares as an integrated system with the following features:
  - (a) Digitization & Geo-referencing of DDA's Property/Land spread in an area of about 400 SQ.KM & display on GIS System;
  - (b) Digitization of about 900 Layout Pland and Zonal plans, undertaking ground truthing and super Imposition of Layour plans and Zonal plans etc., over GIS Mapping;
  - (c) Provide centralized GIS based Property & Land Management System with Web Portal & Mobile Application for citizen services for enhancing the Ease of Doing Business (EoDB) and improvement of investment climate;
  - (d) Realize the desired functionalities such as area, property mapping with details and allotment or property availability status (PLOTS and Vacant Land etc. throughout NCT of Delhi), which are multi-stories as well; The various properties are spread over more than 900 Layout Plans and Zonal Plans;
  - (e) Link GIS System with Land and Property Information System; Integration with existing Bhoomi&Awaas and Land Management System(LMIS) System or any other systems working in Planning Department of DDA;
  - (f) Migration of existing and other related data to new System of DDA as and when required.
  - (g) The configuration so done should be such that expected functionalities and optimum performance is achieved.
- 4. Apart from the land falling in the LOPs, the Bidder will also be required to digitize, georeference and integrate into the proposed System, the other plots (not falling in the LOPs), that are in the ownership/possession/custody of DDA.

# **Functional Requirement**

- 5. The Proposed System must cover the following features:
  - a. Coordinate Collection, Digitization and Geo referencing of Layout and Zonal Plans (Maps): Bidder will do the DGPS Coordinate collection from ground control point (GCP) for Image Georeferencing. The layers of Plot and Infrastructure will be digitized and georeferenced based on the coordinate collections. The following activities will be done under Coordinate Collection, Digitization and Geo referencing of Maps: -
    - DGPS Coordinate collection from ground control point (GCP) for Image Georeferencing
    - Digitization of Drawings
    - Data Cleaning of Maps
    - Geo reference of drawings
    - · Generation of shape files
    - Creation of Geo reference maps

- SOP/ Guidelines for Survey team for collection of DGPS Coordinates Critical Settings for DGPS Coordinates
  - Position Mode: Recommended manual 3D mode (requires minimum satellites)
  - Four Elevation Mask: It is recommended that a mask of 15 degrees be applied (It may be appropriate to increase the Elevation Mask when collecting data in valleys or urban areas)
  - Signal to Noise Ratio (SNR) Mask: As per manufacturers recommendation
  - Position Dilution of Precision (PDOP): Stop data collection when PDOP is greater than 6
  - **Logging interval**: Collection rate should be equal to or a multiple of the sampling rate of the base station use in post-differential correction e.g., 1, 5, 10, 15, or 30 seconds
  - **Minimum Positions**: For Point data set, the default data collection rate to one second and the minimum number of positions to 30.
  - **Carrier Mode**: Allows a receiver to collect carrier phase data used for surveying Shut Carrier Mode Off.
- c. Implementation of GIS: After Geo Referencing and Shape file generation, Bidder will do the GIS mapping of Boundaries, Property layer, infrastructure layers on GIS System. Zone/Ward information along with Land Use details provided by DDA will be mapped on GIS System. The following activities will be done under GIS implementation: -
  - Mapping of State Boundary
  - Mapping of Districts Boundary
  - Mapping of Zone Boundary
  - Mapping of Ward Boundary
  - Mapping of Property Layer
  - Prepare of GIS Database
  - Preparation of Land Use Database

(To draw inputs from DSSDI Data Sets, as M/s Geospatial Delhi Limited (GSDL) is a provider of Information Technology Enabled Services (ITES) and solutions for Govt. Departments in Utilities, Social, Environment, Land &Property, Demographic, Emergency and Transport segments for better g-governance: <a href="http://gsdl.org.in">http://gsdl.org.in</a>)

### d. Searching features facility based on

- District
- Zone
- Allotted Property
- Vacant Property
- Allottee Name
- Property Availability

### e. Other GIS Features

- Separate layouts for location maps
- Display of Land details on GIS
- Mapping of plots/Properties
- Availability of property information on click of mouse
- Display of allotment status of plots/properties
- Searching facility for different parameters
- Finding of particular property within buffer zone
- Query builder for MIS reports on the basis of Property type, Property area etc.

- On click of features information retrieving facility
- Land details are displayed on GIS
- Color coding schemes can be used for differentiating the attributes.
- Attractive themes for all layers in accordance with categories
- Tool tip information for layers and attributes information
- Zoom, Pan functionality
- Distance Calculation functionality
- Layer on/Off Features
- Change of Base Map Features etc.

# f. **System Integration:** System should have the capability to integrate with following:

- Integration with Land and Property Information System
- Integration with Online Payment System
- Integration with Grievance Redressal System
- Integration with Feedback module
- Integration with Citizen Services with geo tagged features
- Provision to make property preference and can apply for property
- Integration with Interactive Disposal of Land Information System (IDLI System)
- Integration with Online Booking of DDA Open Spaces/Community Halls/Parks
- Integration with Encroachment Complaint Registration System

# Other Functional Requirements

- User Interface to be simple and easy to understand and use.
- Software to provide good graphical interface for the user, so as to operate on the system, performing the required task such as viewing the details of the DDA Property, and to allow user to view quick reports like Vacant Property, Allotted Property etc., for selected Zones/Wards:
- Error Handling: GIS system shall handle expected and non-expected errors in ways that prevent loss in information and long downtime period.
- Performance Requirements: System shall facilitate "net neutrality" to accommodate high number of Properties and Users, without any performance degradation so as to facilitate service delivery in time.

### Approach, Methodology and Deliverables

6. The Bidder will adopt methodology which will be capable to converge and extract datasets from the given data warehouse. Real time Decisions can be taken by implementing GIS engine which considers spatial dimension. The system provides aid to plan to regulate and control land use in the vicinity of the sector providing vacant

areas around the Areas. Decision makers can recommend land use controls around the Areas for controlling and minimizing adverse environmental impacts, recommending necessary effluent treatment and waste disposal facilities and other needed abatement infrastructures needed to be commonly used by all households, Monitoring of the various planning, allotment details of the aspect etc.

- 7. Spatial database creation will be a vital step where interactive decisions are required like finding the associatively of property, buffer analysis and hence propose site suitability based on custom criteria. Spatial entities will be digitized by collecting DGPS coordinates and for some locations using the Ground control points are used for creating base maps. Allotment data will be linked with the spatial database to make a dynamic seamless information matrix. Spatial dataset like Location of Property, Layout of Zones/Wards, Property wise-wise details like Vacant, Allotted etc., Color coding schema will be incorporated to distinguish various property types. Layout of basic Infrastructure facilities and amenities like road connectivity, Water Supply System, Power Supply, sewerage systems, Drainage etc. will be derived.
- 8. GIS Portal will be implemented in eight steps as given below:
  - DGPS Coordinate Collections from ground control point (GCP) for Image Georeferencing
  - Layout and Zonal Plan Digitization & Cleaning
  - Geo Referencing of Layout & Zonal Plan
  - GIS Mapping
  - Data Integration
  - Testing and Acceptance & Training
  - Documentation
  - Go-Live

### 9. DGPS Coordinate Collections from ground control point (GCP)Methodlogy

Based on the Layout plan provided by DDA team, Bidder will mobilize the team into the field to take ground control point (GCP) for Image Georeferencing, in static mode based and observation time should be based on the below table. Always start with known point (Better to have SoI Ground control point as Known Control point) and close the network with the Known control point (Better to have SoI Ground control point as Known Control point).

Known Base to observation point[km]	Observation time [min]
1	20-35
5	25-45
10	35-60
20	55-90

Bidder will use DGPS sets of leading manufacturers capable of verifying coordinates from satellites. As per the best practice for accuracy, coordinates will be captured only when minimum four Satellites were available. Bidder will capture coordinates to capture Layout Plan boundaries apart from infrastructure depending upon the requirement at various Layout Plans. Necessary guidelines and method for

use of DGPS set will be made available to each team before deployment to field for proper capturing of DGPS coordinates.

### **Quality Requirements: GPS Observations**

- Ground control points should be well-identifiable on photograph as well as ground.
- Sharp intersections/ corners of features should be selected for planimetric control. (e.g. sharp corner of road/track/field bund junctions should be selected instead of centre of road intersection.)
- Well identifiable points on flat surface and preferably at ground level should be selected as Vertical Control. (Features above ground level where small errors in GCP measurements can lead to substantial errors in height, such as parapet walls, boundary walls, bund junctions, distance stones etc. should not be used as height points.)
- The points which are to act as PH (planimetry as well as height) control should be so selected that they are suitable for planimetry as well as height. If unavoidable, separate Plan and Height control may be provided at nearby locations.
- GDOPs should not exceed five in any case. Normally this condition is achieved when 5(five) or more satellites above 20° (in some cases above 15°) of altitude are available. GPS observation schedule should be prepared by proper Mission Planning accordingly.
- Clear visibility of sky above 20° (in some cases above 15°) of altitude all around the site.
- No planimetric point should be selected near high tension power lines.
- Multi-path to be avoided. Multipath is the effect of unwanted reflected satellite signals that are received by the antenna. This problem is most severe when the antenna is placed near a chain link fence or another metal structure or a nearby parked vehicle.
- Table given below is suggested as a general guide to plan the session length when four to six good satellites are available and the ionospheric conditions are normal.
- The standard error of each the vector component should not be more than 10 mm.

### 10. Layoutand Zonal Plan Digitization & Cleaning

After collection of DGPS coordinates, updated Layoutand Zonal plans shall be digitized.

### 11. Geo Referencing of Maps

Geo referencing was done by back end team on these digitized drawings based on the captured DGPS coordinates. Shape file were generated for GIS display with the help of DGPS coordinates with due diligence and cleaning of drawings.

### 12. GIS Mapping

GIS mapping will be done for the Zones/wards and infrastructure with layer on/off features will be provided on GIS.

### 13. Integration with Allotment System

The GIS web Interface will be bridging between spatial and a spatial information has lead to an enterprise level solution by facilitating certain tools like near real time property Status on each Zones/Wards, current occupancy and property availability, Property details, Daily land data Status, MIS report generation, updation of transactions to central database server etc.

### 14. Testing and Acceptance:

Upon successful completion of the deployment the successful bidder shall demonstrate the functionality of the core applications as per the mutually agreed acceptance test procedure for <a href="two-weeks">two-weeks</a>. Any gaps & vulnerabilities notices during testing shall immediately be rectified before handing over to DDA.

### 15. **Trainings:**

Bidder will organize training of <u>7 Days</u> to the core Group of DDA at Vikas sadan..

#### 16. **Go-Live:**

DDA will declare Go-Live of the site after above UAT & Data Integration.

### 17. Others releated Requirements

- A. Software Project Management Plan
  - IT Architecture, Resource Acquisition, Procurement and Deployment
  - Quality Assurance, Verification/Validation
  - Configuration/Change Management
  - Risk management
  - Disaster Recovery Planning
  - Weekly project status report including server utilisation, Issue resolution
- B. Software Requirement Specifications
- C. Software Design Description
- D. Source code
- E. Test cases/Reports
- F. Security Audit Clearances
- G. GIGW Compliance Certificate
- H. User Documentation
- I. Upgrades and Release Notes
- J. Website policies as per GIGW

### 18. Responsibility Matrix

Sr.	Descriptions	Responsibility
No.		
1	Layoutand Zonal Plan (Soft Copy)	DDA
2	DGPS Coordinates Collection	Bidder & DDA
4	Maps Digitization & Cleaning	Bidder
5	Geo Referencing of Maps	Bidder
6	GIS Data	DDA

7	GIS System Implementation	Bidder
8	UAT, Training &Go live	Bidder & DDA

### 19. <u>Detailed Project Timelines</u>

The Tenderer shall provide detailed Project (deliverables) Timelines in Annexure-3.

### 20. Technology Platforms

The GIS system will be used in this system is an Open Technology GIS Tools and low cost. The MAPs will be created using tools like AutoCAD, QGIS (www.qgis.org), MapWindow GIS (www.mapwindow.org), SAGA GIS (www.sagagis.org) and others. To achieve high accuracy, raster data are georeferenced to assign the real world coordinates to each pixel of the raster.

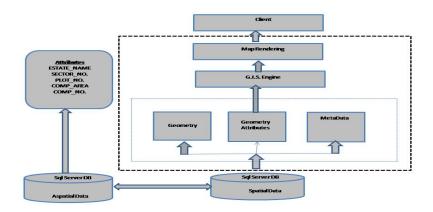


Fig: 1 A synoptic view of DDA GIS System

### 21. Responsibilities

### **DDA**

- 1. DDAwill provide the Soft as well as hardcopy of required Layoutand Zonal plan.
- 2. DDAwill assign the Zone wise/Ward Wise dedicated resource at the time of Coordinate collection &Georeferencing.
- 3. DDAwill provide the infrastructure details.
- 4. DDAwill procure the domain name for GIS System.
- 5. DDAwill provide the dedicated server for Open Technology GIS system as per Hardware Specification given by the Selected Bidder.
- 6. DDAwill provide the required data related to all types of Property/plots on real time
- 7. DDAwill provide the list of dedicated resources for UAT and Training.
- 8. DDA would identify dedicated system administrator responsible for performing system administration activities.

#### **General Conditions**

- 9. All functionalities other than those identified in the functional scope above are excluded from the scope of the project.
- 10. Change Management initiative and readiness for change shall be ensured by the business team and process owners during the project and specifically before the Go-Live.
- 11. Changes to the "Project Scope" will be processed in accordance with the "Request for Change" procedure. The investigation and the implementation of scope changes may result in modifications to the Estimated Schedule, Charges, and other terms of these services;
- 12. Data to be given in the specific format (shared by the Bidder) by DDA.

### **Bidder Responsibilities**

- Bidder will provide improved specifications (Annexure-22), for Computer hardware system (with required Open Technology Systems Tools including GIS Tools) and meet the relevant SLAs (Annexure-21): During procurement, the Bidder will provide handholding with DDA.
- 2. The Bidder will supply the Web-based GIS System and Portal;
- 3. This Portal will follow GOI Guidelines (ISRO/DST for GIS Portal and Meity for Web Portal), if any.
- 4. Bidder will do the georeferencing of DDA Layout plan as per Scope of Work and submit the georeferenced Drawing;
- 5. Bidder will have the responsibility to map zone wise/ward wise infrastructures provided by DDA;
- 6. Bidder will have the responsibility to display the data received from Allottee software on GIS system;
- 7. The Bidder shall organize UAT and training of 7 days to the core Group of DDA at Vikas Sadan;

#### M&O

8. The Bidder shall ensure support and maintenance services of proposed system for  $\underline{\mathbf{1}}$  Year.

# 22. Technology Platform

The geo database of DDA Land Bank and Property Management System will be warehoused in Open source RDBMS software and solution is developed in Dot Net Platform. The MAPs will be created using open source tools like AutoCAD, QGIS, (www.qgis.org), MapWindow GIS (www.mapwindow.org), SAGA GIS (www.saga-gis.org) and others. To achieve high accuracy, raster data will be georeferenced to assign the real-world coordinates to each pixel of the raster.

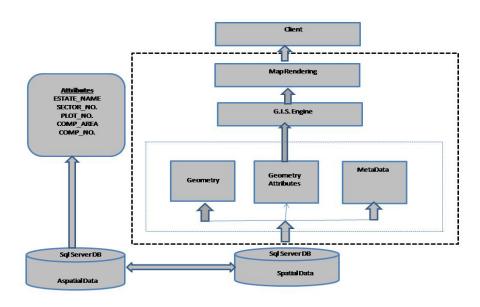
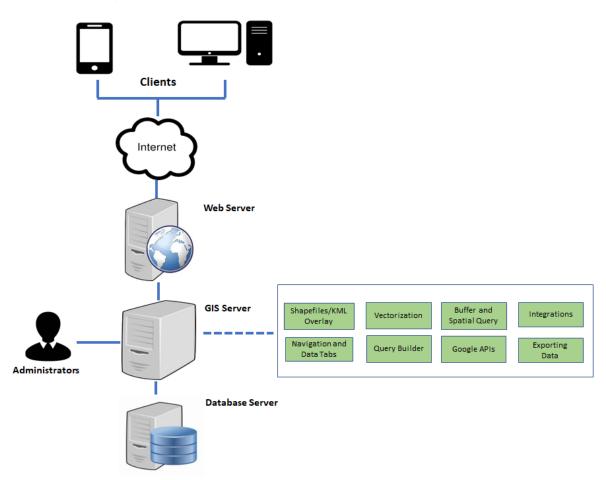


Fig: 1 A synoptic view of DDA GIS System

# **System Architecture**



### **DDA CMS RFP Compliance (GIS Interventions)**

23. Bidder shall submit their GIS Interventions to comply with DDA CMS REF GIS Interventions in the format given in Annexure-4.

### **Resource Deployment Plan**

- 24. The Tenderer shall deploy sufficient staff of skilled professionals and supporting staff for undertaking the project. To meet the urgent requirement of DDA, Bidder will deploy 24X7 manpower in three shifts for back office operation. Resources will be mix of Onsite & Offsite and core Project Management team will work with System department of DDA & Users' community for day to day coordination and implementation of System.
  - i. Development stage: The team should be comprised of <u>adequate number</u> of experts for development of software, web design, testing, security systems, data management etc., as provided in Annexure-5 (Form-5F). The team should also include sufficient support staff comprised of coders, database designers, user interface designers, and professionals trained in GIS, to undertake development work.
  - ii. O&M stage: The Tenderer should provide all necessary staff for managing the systems and operations, and **should quote** and provide the following staff:
    - Operations Head (Overall coordinator for O&M Phase)
    - One Software Engineers/Coders (required for application maintenance and modification) - Any additional personnel required for managing the operations (as directed by DDA) shall be provided by the Tenderer at the same cost as indicated in their financial quote.
    - One MIS/data managers Any additional personnel required for managing the operations (as directed by DDA) shall be provided by the Tenderer at the same cost as indicated in their financial quote.
    - One GIS assistants Any additional personnel required for managing the operations (as directed by DDA) shall be provided by the Tenderer at the same cost as indicated in their financial quote.
    - o Supporting office staff.
    - Helpdesk staff (for user queries and other helpdesk support)
  - iii. The Tenderer shall provide Resources Details (Manpower and Rate/Cost) in the Financial Bid (Annexure-5).

### **Project Resources Deployment Plan (Annexure-5)**

Sr. No.	Work Description	Man Months	Manpower Rate (Rs.) per Month	Manpower Cost (Rs.)
1	Collection & Verification of Maps, Collection of Groun	d Control Poi	nts (GCP)	
1.1	Collection & Verification of Maps Provided by DDA			
1.2	DGPS Coordinate collection from ground control point (GCP) for Image Geo-referencing			
1.3	Verification of Ground Control Point (GCP)			
	Sub Total(1)			
2	Digitization, Cleaning, Geo-referencing and Generation	n of Shape File	es	

2.1	Digitization of Layout Plan		
2.2	Data Cleaning of Layout Plan		
2.3	Geo-referencing of Layout Plans		
2.4	Generation of shape files		
2.5	Data Quality Analysis (QA)/Quality Check (QC)		
2.6	Generation of CAD Drawing		
	Sub Total(2)		
3	GIS System Implementation		
3.1	Verification of GIS Layers		
3.2	Implementation of GIS Layers		
3.3	Other Features like Query Builder, Base Maps, Distance Measurement Tool, Buffer Analysis, Export to Excel		
3.4	Quality Analysis (QA)/Quality Check (QC) of GIS Layers		
	Sub Total(3)		
4	Data Integration		
4.1	Verification of Data provided by DDA		
7.1			
4.2	Integration with Land and Property Information		
4.3	Data integration with GIS		
	Sub Total(4)		
5	Infrastructure Layer Mapping & Ground Truthing		
		1	
5.1	Infrastructure Layer Mapping		
5.2	Verification of Zone wise Infrastructure Layer		
5.3	Ground Truthing		
	Sub Total(5)		
6	Project Management		
6.1	Project Manager		
6.2	Project Coordinator		
6.3	Team Lead		
6.4	System Admin		
6.5	Business Analyst		
6.6	Domain Expert		
6.7	Application Testers		
6.8	Integration Expert		
6.9	Configuration Manager		
6.1	D . E .		
	Document Expert		
6.11	ISO Expert		
6.12	ISO Expert Security Expert		
6.12 6.13	ISO Expert Security Expert Data Analysts		
6.12 6.13 6.14	ISO Expert Security Expert Data Analysts Database Experts		
6.12 6.13 6.14 6.15	ISO Expert Security Expert Data Analysts Database Experts DBA		
6.12 6.13 6.14	ISO Expert Security Expert Data Analysts Database Experts		

6.18	Network Expert			
	Si	ub Total(6)	_ =	
7	UAT, Training & Go Live	·		
7.1	UAT			
7.2	UAT Bug Fixing			
7.3	Training (1week Training at each Zone)			
7.4	Go Live			
	Sı	ub Total(7)		

# **Timelines and Deliverables**

25. The Tenderer will complete all responsibilities as per the schedule given below:

G	D.P. 11	G 14
S.	Deliverables	Completion
No.		timeline (in
A	D. '. A D A' I D ' DI '. A DI	weeks)
	Project Preparation and Business Blueprint Phase	ED . 1 W . 1
1.	Detailed Project Plan	ED + 1 Week
2.	Resource Deployment Plan	<u> </u>
3.	Roles and Responsibilities of DDA and Bidder	
4.	Submission of System Requirement Specification (SRS)	ED + 3 Weeks
5.	Submission of Solution Design Report including User and	
	System Interfaces	
6.	Submission of Training Strategy and Plan	
7.	Software Requirement Specifications (SRS), Solution	ED + 4 Weeks
	Design Document (SDD) and Functional requirement	
	Specifications (FRS) – Sign Off	
8.	Plan Review and Sign Off	
В.	GIS Portal Development	
1.	• DGPS Coordinate Collection from Ground Control Points	ED + 25 Weeks
	(GCPs)and Ground Truthing for image Georeferencing.	
	<ul> <li>Collection, Verification, Digitization, Cleaning and Geo</li> </ul>	
	referencing of Maps/Drawings/Layout Plans/Layout	
	Plans/Zonal Plans etc.	
	<ul> <li>Creation of Generation of Shape files.</li> </ul>	
	<ul> <li>Creation of Georeferenced Maps.</li> </ul>	
2.	GIS Implementaion	ED + 30 Weeks
3.	Infrastructure Layers Mapping	
4.	Preparation of GIS based Land Bank and Property Data Base	
C.	System Integration - Application Design and Development bas	sed on COTS
	Product (Software As A Service) or Bespoke Model	
1.	Software Applications Design and Development	ED + 30 Weeks

	2.	Integration with	
		Land Bank and Property Information System	
		Online Payment System	
		Grievances Redressal System	
		Feedback System	
		Citizen Service with geotagged features	
		<ul> <li>Provision to make property preference and apply for</li> </ul>	- 25 W
		property	ED + 35 Weeks
		<ul> <li>Interactive of Disposal of Land Information System</li> </ul>	
		(IDLI System)	
		<ul> <li>Online Booking of DDA Open Spaces/Community</li> </ul>	
		Halls/Parks	
		Encroachment Complaint Registration System	
	3.	$\mathcal{L}$	
		Users Group	
		• Testing (including system test, unit test, integration test	ED + 38 Weeks
		cases) and Verification	
	-	Submission of Testing Report along with UAT	
1	D.	System Acceptance and Operationalisation	ED . 40W 1
1		• Go-Live	ED + 40Weeks
2		<ul> <li>Competency Development/ Capacity Building/Training ofDDA Personnel &amp; DDA Stakeholders</li> </ul>	ED + 45 Weeks
3		<ul> <li>Application Software System Documentation &amp; User</li> </ul>	ED + 48 Weeks
		Operations Manual	
		Go-Live Acceptance	ED + 50 Weeks
	E.	Development Phase Exit	
	_	Development Phase Exit	ED + 52 Weeks
	F.	O&M Phase (Post Go-Live ) – 1 Year	
1		Operations and Maintenance (after Go-live) including	Submission of
		submission of various reports	MIS Reports –
			every month
			Submission of
			QPRs every 3
			months
1			

<sup>\*</sup> ED – Effective Date i.e. the date of signing of contract by both parties

### **Project Financials and Payment Milestones**

- **26.** The Bidder shall indicate the cost of undertaking the project under three (3) separate heads in Financial Bid:
  - **Development Fee**: will be a lump sum fee based on Resources Development Plan (Annexure-5: Form-5F) as spelt out at Clause 23: (iii) as above;
  - **Digitization** Fee: will be for per Sq.KM of Layout Plan/Zonal Plan/ Area digitized for Database Creation through digitization, Ground Truthing and Super Imposition of about 900 Layout Plans/Zonal Plans in the proposed GIS System, for display and interactive access and management, through various key words searches on line;

- **Annual O&M Fee**: will be a lump sum fee to be charged for every 3 month period from the date of launch of application window, up to a maximum period of 1 year from the start of the contract. Fees for the last QUARTER of O&M will be paid on a pro-rata basis for the total number of months;
- **Payment Milestones**: as per payment milestones set out in Clause 45: (Table-1) of General Instructions and Terms & Conditions of this Tender.

# 2: Eligibilityand Evaluation Criteria

# 2.1. Pre-Qualification (PQ) Eligibility Criteria

# **Pre-Qualification Bid - Compliance Sheet**

Sr. No	Qualification Criteria	Documents/Information to be provided in the submitted proposal	Compliance	Reference &Page Number
1	Covering Letter for Technical Proposal and undertaking on total responsibility	As per Annexure-12 and Annexure- 13	Yes/No	
2	The responding firm / agency (a) should have made a payment of Tender Annual Charge, (b) should have submitted a EMD of amount., and (c) should have signed an MOU/Agreement in case of Consortium.	(a) DD/Online payment for Tender Annual Charge (b) The original Bank Guarantee for EMD must be furnished in the format prescribed in Annexure-14 (c) In case of Consortium of Members, the MoU/Agreement, on an appropriate Non-Judicial Stamp Paper, purchased by the Lead Partner/Member, between the Lead Partner/Member and his Consortium Member/Partner(s), as per the format given clearly depicting the roles and Responsibilities of each member(at Annexure – 15).	Yes/No	
3	Legal Entity:  The Tenderer  (a) should be registered legal entity in India, under the Indian Companies Act, 1956 / The Partnership Act 1932 / Limited Liability Partnership Act, 2008.  (b) should have been in existence for at least five years as on 31 March 2018.  (c) should be registered with the relevant Service Tax Authorities.	<ul> <li>a) Certificate of Incorporation</li> <li>b) Registration Certificate</li> <li>c) Goods and Service Tax (GST) and other Taxes, if any, Registration</li> <li>d) Valid PAN, EPF and ESI Registration</li> </ul>	Yes/No	

	The Tenderer should be in			
	the business of <b>Design</b> ,			
	Development and			
	implementation of GIS			
	System: Software			
	Digitization, Ground			
	Truthing and			
	Superimposition of	Annexure-16 - Details of		
	Layout plans, Zonal	Responding Firm &		
4	Plans etc." (implementation	Memorandum & Articles of	Yes/No	
	of GIS based & Integrated	Association should be attached,	1 007 1 10	
	Property and Land Parcel based	and Work orders confirming		
	Management System, completed	year and Area of activity		
	and operational) and should			
	have executed /			
	operationalised relevant			
	projects in last 5 Years, as of			
	31st March 2018 (FY 17-18,			
	FY 16-17, FY 15-16, FY 14-			
	15, FY 13-14).			
	The Tenderer shall not be			
	banned/ debarred/blacklisted			
	by any State or Central	Individual self-certified letter		
5	Government/any other	by the designated official of the	Yes/No	
	Government	bidder per <b>Annexure-17</b>	1 55, 115	
	institution/Local Bodies in	0.0.00.   po. 1.1.1.0.0.0.0		
	India, as on the last date of			
	submission of the Bid.  Net worth of the Bidder			
	Company must be <b>Positive</b>	Chartered Accountant Certificate by each member as per <b>Annexure-18</b>	Yes/No	
	in last three years (Fy 2017-			
	18, 2016-17 and Fy 2015-16)			
	as per the audited Balance			
	Sheet.			
	For the purposes of this RFP,			
	"Net Worth" mean the			
	aggregate value of the paid-			
	up share capital and all			
	reserves created out of the			
6	profits and securities			
U	premium account, after			
	deducting the aggregate			
	value of the accumulated			
	losses, deferred expenditure			
	and miscellaneous			
	expenditure not written off,			
	as per the audited standalone			
	balance sheet, but does not include reserves created out			
	of revaluation of assets,			
	write-back of depreciation			
	and amalgamation.			
	The Tenderer must possess			
7	valid ISO 9001:2015 or latest			
	as on last date of bid	Copy of Certification to be	Yes/No	
	submission.	attached	7 007 140	
<u></u>		<u> </u>	l .	

8	The Tenderer should have valid CMMi Level 3 or above, on the date of Bid submission.	Copy of Certification to be attached.	Yes/No	
9	The Tenderer shall furnish documentary proof of their technical capability to undertake job of application software development and digitization etc., in Client-Server as well as Web based environment.	Copy of Certification to be attached.	Yes/No	
10	Average Annual Turnover of the Tenderer / All the Consortium Members taken together - from ICT Services (ICT/GIS System Integration projects, Total Solution Provider, ICT Systems Development projects, GIS Systems Development Projects, Map Digitization, and their Implementation Work),during the last three (3) financial years (FY 17-18, FY 16-17and FY 15-16) as per the last published balance sheets - shall be greater than or equal to INR 2 Crore(Rupees Two Crore only).	Extracts from the audited Balance sheet and Profit & Loss; OR Certificate from Statutory Auditor or Chartered Accountant; OR Copies of Work Orders with Annexure-16 OR In case the bidder submits an audited financial result, a copy of the "Limited Review report" of financial results, prepared by the statutory auditor of the firm shall also be submitted.	Yes/No	
11	The Tenderer shall have experience of executing Turnkey GIS based IT Projectover multiple location in India for Government or its Autonomous / PSU/Subordinate organisation/ Local Bodies etc.)as System Integrator - Total Solution provider - for Design, Development and implementation of GIS System: Software Digitization, Ground Truthing and Superimposition of Layout plans, Zonal Plans etc." (implementation of GIS based & Integrated Property and Land Parcel based Management System, completed and operational)and should have executed / operationalised relevant projects in last 5 Years (FY	Completed <u>Annexure 16</u> supported with Work Order and Proof of Go-live/ Successful Implementation	Yes/No	

	17-18, FY 16-17, FY 15-16, FY 14-15 and FY 13-14)): -			
	(a) One Project of Value >=			
	INR 3.5 Crore Or (b)Two Projects of Value			
	each >= INR 2 Crore Or (c)Three Projects of value each >= INR 1.5 Crore.			
12	Power of Attorney/ Letter of Authority 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 RFP.	Power of Attorney (Annexure- 20)	Yes/No	
13	Local Presence – The Tenderer should have its own Service Support Centres in Delhi / NCR or to give an undertaking of opening a local service support Centre after Award of the Work/Contract.	Relevant Documents or Undertaking signed by the Authorized Signatory with List of office (s) and support Centres in Delhi /NCR	Yes/No	
14	The Tenderer must have minimum 25 Technically Qualified Human Resources in GIS Technology and at least at least 200 full time resources on our permanent pay roll in India as on 31st March for this project"	Relevant Documents or Undertaking signed by the Authorized Signatory	Yes/No	
	Appropriate Certifications are necessary for the top Ten Resources handling different Areas of Projects.			

## 2.2. <u>Technical Qualification and Evaluation Criteria</u>

i. Only those Tenderers who qualify Pre-Qualification Stage (Clause 3.1) will be considered for opening of their Technical Bids. Any bid not meeting the above criteria (Clause 3.1) will be summarily rejected.

- ii. **Method of selection of Preferred Bidder:** Technical Qualification and Shortlisting of applicants followed by selection on the basis of Least Cost (L1 Method).
- iii. Technical evaluation of bids will be based on the criteria given in Clause 3.2.iv below. The bid proposal should strictly be in line with the formats provided in Chapter 5. The applicant must respond to all the technical evaluation criteria, and obtain a minimum of 80 marks (or above) to qualify for financial bid opening.

## iv. Criteria for Technical Evaluation

## **Technical Evaluation Marking**

(Bidder has to score 60% or above in each Categories A., B., and C., and final score (Categories A., B., C., and D.) shall be >= 80 Marks out of 100 to qualify for Financial bid opening. Even if one Resource Person's Profile (provided) does not meet the specified Profile Requirements, the Bidder will not be considered for Financial Bid Opening.)

SI.No	Criteria	Basis for Valuation	Max Marks	Supporting Documents (Forms to be used)	Ref.No.
	A. Bidder's Profile (25)			1	
1.	Average Annual turnover from IT/ITES Business [ICT/GIS System Integration projects, ICT Systems Development projects, GIS Systems Development Projects, Digitisationand their Implementation Work] in last 3 Financial Years (Turnover in Rs. Crores).  (Rs. 2 Crore – Eligibility Criteria)	<ol> <li>Greater than or equal to Rs. 10 Crores: 10 marks</li> <li>Between Rs.10 Crores and greater than or equal to Rs. 8 Crores: 8 marks</li> <li>Between Rs. 8 Crores and greater than or equal to Rs. 5 Crores: 5 marks</li> <li>Between Rs. 5 Crores and Rs. 2 Crores: 3 marks</li> <li>Equal to Rs. 2 Crores: 1 marks</li> </ol>	10	Annexure - 5: Form 5 B  (Extracts from the audited Balance sheet and Profit & Loss; OR Certificate from the statutory auditor)	
2.	Net Worth  Net Worth of Bidder  Company must be more than  Positive in last three years as per the audited Balance Sheet.	The marks would be based on the following:  1. >= Rs. 1 Crore: 5 Marks  2. >= Rs. 50 Lakhs but < Rs. 1 Crore: 4 Marks  3. >= Rs.25 Lakhs but < Rs. 50 Lakhs: 3 Marks  4. >= Rs.10 Lakhs but < Rs. 25 Lakhs: 2 Marks  5. > 0 (Positive) but < Rs. 10 Lakhs: 1 Mark	5	Annexure - 18  (Certificate from the statutory auditor)	
3.	Certification and Credentials (valid on the date of submission of bid) ISO 9001: 2015 or latest; and SEI-CMMiL3 Certification or above	ISO9001:2015& SEI- CMMiL5: <b>5 Marks</b> ISO9001:2015&SEI-CMMiL3 : <b>2Marks</b>	5	Annexure -23 (Supported by documentary evidence.)	

4.	Empanelment	Empanelled- 5 marks	5	Annexure-24	
	Bidder having empanelled with			(Empanelled	
	any one State/Central			certificate to be	
	government agencies for			submitted)	
	GIS/Survey scope of Works				
	(valid as on date of Bid				
	submission)				
	B. Relevant Strengths (25)		·		
5.	Prior experience in	Projects undertaken in	10	Annexure 16 &	
J.	Development	India, of each value >= INR 50	10	Annexure- 5 :	
	Authority/Housing Board /	Lakhs.		Form 5C	
	Urban Local Bodies /	Lanis.		I UIIII JC	
	Municipalities/Government for	1. >=3 Projects : <b>10 Marks</b> ;		(Supported by	
		2. 2 Projects: <b>5 Marks</b> ;			
	layout superimposition, ground	3. 1 Project: 3 Marks;		documentary	
	truthing and Digitisation on	3. Trioject. 3 Ividi k3,		evidence.)	
	Basemap, in India completed				
	in past				
	5 financial years.	Dool at a seed out the seed of	10	A	
6.	Prior experience in execution of	Projects undertaken in	10	Annexure 16&	
	single project with digitisation	India		Annexure- 5 :	
	of more than 500 layouts or 500	1 Cinale anniest 1000 levent		Form 5C	
	Sq.KM of area in one Indian	1. Single project >1000 layout		(C. us a such a al la	
	city completed in past 5	plans or > 1200 Sq.KM: <b>10</b>		(Supported by	
	financial years.	Marks		documentary	
		2. Single project >700 layout		evidence.)	
		plans or > 800 Sq.KM: <b>8</b>			
		Marks			
		3. Single project >500 layout			
		Plans or > 500 Sq.KM: <b>5</b>			
		Marks			
7.	Past Experience in	Projects undertaken in India,	5	Annexure 16&	
	implementation of GIS based &	with project value greater than		Annexure- 5 :	
	Integrated Property and Land	Rs. 1 Crore:		Form 5C	
	Parcel based Management				
	System, completed and	(Maximum 5 Projects – each		(supported by	
	operational during the last 5	project will carry 1 Marks)		documentary	
	financial yearsfor Government	project viii sarry r iviario)		evidence.)	
	or its Autonomous /				
	PSU/Subordinate				
	organisation/ Local Bodies etc.				
	C. Solution Proposed, Approac				
8.	Solution Proposed :	Qualitative assessment based	20	A Note to be	
	Demonstration of	on Demonstration of		attached	
	understanding of the	understanding of the			
	Department's requirements	Department's requirements			
		through providing:			
		<ol> <li>Solution proposed and its</li> </ol>			
		components (5)			
		<ol><li>Technologies used (3)</li></ol>			
		<ol><li>Scale of implementation</li></ol>			
		(2)			
		4. Learning on Issues (2)			
		5. Challenges (2)			
		6. Challenges likely to be			
		encountered (2)			
		7. Mitigation proposed (2)			
		8. Client references (2)			

9.	Approach and Methodology to perform the work in this assignment	Oualitative assessment based on     Understanding of the objectives of the assignment: The extent to which the Systems Implementer's approach and work plan respond to the objectives indicated in the Statement/Scope of Work (3)     Completeness and responsiveness: The extent to which the proposal responds exhaustively to all the requirements of all the Terms of Reference (2)	5	A Note to be attached
10.	Project work break down structure	Qualitative assessment based on timelines (1), resource assignment (2), dependencies (1), and milestones (1)	5	A Note to be attached
11.		<ul> <li>Quality of presentation and Clarity of Response (1)</li> <li>Approach adopted to provide DDA with the Roadmap and Strategy for making early inroads into MOH&amp;UA Smart City Initiatives /Ease of Doing Business (3)</li> <li>Senior Management Commitment demonstrated during the presentation (1)</li> </ul>	5	
	D. Resource Profile (15)			
12.	Resume of all key technical resources proposed for the assignment-  Project Manager- Min1 Nos Digitization Lead- Min 1 Nos Digitization executives- Min 8 Nos Survey resources- Min 5 Nos  All resources i) preferably be directly on bidder's payroll; ii) should be graduates B.E/B.Tech/B. Com/B. Sc etc.; and iii) should have Min 3 years' experience in maps/layouts digitisation with relevant project execution experience.  Note: Manpower proposed is only minimum resources required. Bidder to propose additional manpower as per requirement.  Resources cannot be changed	Relevant CVs =15: 8 Marks  Relevant CVs >15 but <= 25: 10 Marks  Relevant CVs > 25: 15 Marks.	15	CVs to be attached.

without written permission.			
	Total Marks (A. +B. + C.+ D.)	100	

- 1. For all the above, the Completion Certificate of the projects **completed** in the last 5 years (as on 31.3.2018) need to be provided which are issued to the responding firm by the respective customers.
- 2. The value of the projects considered in the above criterion would be based on the Purchase Order or the LOI issued to the responding firm. In absence of the supporting documents, the projects would not be considered for evaluation.
- v. The qualifying technical bids shall be ranked highest to lowestas per total technical score (St) obtained. The qualifying Bids shall be shortlisted as per Clause 3.2(iii)for financial evaluation in the second stage. All the qualifying Tenderersin the Technical Bid evaluation, will be invited for the financial evaluation in the second stage.

## 2.3. Financial Bid Evaluation

- i. The financial proposals of the firms which are not pre-qualified and shortlisted shall not be opened.
- ii. Applicants shall submit their financial quotes for the project as per the provisions of Clause 2.7 and in the format provided in Chapter 5 Form 5F. Applicants shall submit their quotes on 2 financial bid parameters:

Component	Head	Financial bid (INR)
A	Development Fee* (Design, Development and implementation of GIS System: Web Portal, Mobile Application, Software, Superimposition of digitised Layout Plans, Zonal Plans, Systme Integration etc. – Programme Components Deleiverables completed and operational) as per relevant components in Table -1 below)	(Lumpsum)
В	Digitization Fee per Sq.KM of Layout/Zonal Plan for Database Creation through Digitization, Ground Truthing and Geo-Referencing etc.	(per Sq.Km. of LOP/Area Digitized)
С	Annual O&M Fee* (After Development Phase Exit ) for 1 Year	(Lumpsum per Year)

<sup>\*</sup> All quotes shall be inclusive of all taxes

iii. The combined value of these bid parameters will be considered for financial bid evaluation. Thus, financial bid (F) of an applicant will be given as:

(F = A + 400\*B + 3\*C)Where 400 is 400 Sq.Kms and 3 is 3 Years.

# 2.4. Selection of Preferred Bidder

Selection of the final bidder for carrying out the assignment will be on a Least Cost (L1) Method. Technically qualified and shortlisted bidder with the lowest financial bid will be selected as the Preferred Bidder. If tie exists, then consideration for L1 shall be of 'highest marks gainer of tied bidders" in technically qualified phase.

# Annexure-3

# 3: Detailed Project (Deliverables) Timelines

Sr. No.	Work Descriptions			-	Fimeline	s in wee	ks		
31 . IVO.	o. Work Descriptions								
А	Project Preparation and Business Blueprint Phase:  1. 2. 3. 4. 5. 6. 7.								
2	GIS Portal Development and Digitisation of Layout/Zonal Plans : 1. 2. 3. 4.								
3	System Integration - Application Design and Development based on COTS Product (Software As A Service) or Bespoke Model  1. 2. 3.								
4	System Acceptance and Operationalisation  1. 2. 3. 4.								
5	Delevelopment Phase Exit								
6	O&M Phase						_		

# 4: DDA CMS RFP (GIS Interventions)Compliance sheet

S No	Department	Process/Activity	Proposed GIS intervention	Complied
				Yes/No
4	Land Disposal	Allotment of property as per policy	Integrate with LMIS application	
		Post allotment activities	Update the cadastral maps with relevant RoR information in real-time	
6	Housing	Floating of schemes for allotment of houses/flats	Integrated with LMIS for real-time update of ROR data	
		Disposal and provision of associated services for houses/flats constructed by DDA	Monitoring of the progress status and planning for disposal of properties	
		Provision of housing related services such as mutation, change of address etc.	Can be linked with property tax collection system in future	
		Citizen interface	The web-enabled GIS based system can be made accessible to the public for various purposes.	

# Compliance with DDA-GIS Functional requirement

#	Particulars	Complied (Yes/No)
Integration wit	h Business Applications / Modules (Embeddable Map or Portal Integration e	etc.)
GIS_1	System shall manage the land records data (currently available with DDA in terms of alpha-numeric data) including the geo-referenced maps;	
GIS_4	Shall facilitate carrying out Ground surveys using real-time devices with the reference data in the backdrop, and facilitate updating of the survey activity instantly, in the GIS System;	
GIS_9	Planning Department:	
	Process: Developing Master Plan / Zonal / Layout Plans	
	· Shall display 2D Layout Plans provided in CAD on GIS Map.	
	Shall provide read-only viewer in Layout maps to be displayed in CAD format;	
	<ul> <li>System Shall allow the user to view the map of the land acquired based on Land Parcel ID (PLG_2);</li> </ul>	
	<ul> <li>Link CAD map with property parcel (PLG_5);</li> </ul>	
	<ul> <li>Provide buffer search to assess impact on nearby properties / natural resources etc. (PLG_5);</li> </ul>	

System shall be able to view the land map and related land information (PLG_54):  GIS Based Planning  System shall be able to interface with GIS system for mapping land information (PLG-59):  System shall be able to show the details of the land on maps, layouts, Zonal Development Plan, Master Plan etc. (PLG_60):  System shall be able to classify different land zones and provide cadastral & ownership information on a map (PLG_61):  System shall have the provision of spatial reporting & search. (PLG_62):  System shall have the provision of spatial reporting & search. (PLG_62):  System shall be able to maintain general land parcel information & link it to asset management (PLG_63):  System shall be able to provide information on land ownership including historic information (PLG_64):  System should be able to link important documentation on regulations, planning and others with individual land records(PLG_65):  System shall have provisions for maintaining easement register for land. Web GIS platform shall display map data and required details as attribute/link related to provided land parcel information of land parcels (consolidation, sub division land revision) (PLG_67):  System shall have provisions to maintain complete information of land parcels (consolidation, sub division land revision) (PLG_68):  System shall have the provision of classification of various land uses as per the Master Plan Norms (PLG_71):  System shall be able to integrate the Projects i.e. existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72):  System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area.  Shortest Path Analysis: Provides the shortest route between two locations over the map interface.		
System shall be able to interface with GIS system for mapping land information (PLG-59):  System shall be able to show the details of the land on maps, layouts, Zonal Development Plan, Master Plan etc. (PLG_60):  System shall be able to classify different land zones and provide cadastral & ownership information on a map (PLG_61):  System shall have the provision of spatial reporting & search. (PLG_62):  System shall be able to maintain general land parcel information & link it to asset management (PLG_63):  System shall be able to provide information on land ownership including historic information (PLG_64):  System should be able to link important documentation on regulations, planning and others with individual land records(PLG_65):  System shall have provisions for maintaining easement register for land. Web GIS platform shall display map data and required details as attribute/link related to provided land parcel id (PLG_67):  System shall have provisions to maintain complete information of land parcels (consolidation, sub division land revision) (PLG_68):  System shall have the provision of classification of various land uses as per the Master Plan Norms (PLG_71):  System shall be able to integrate the Projects i.e., existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72):  System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below life and provide an option to visualize the facilities which will fall under a given area		
information (PLG- 59):  System shall be able to show the details of the land on maps, layouts, Zonal Development Plan, Master Plan etc. (PLG_60):  System shall be able to classify different land zones and provide cadastral & ownership information on a map (PLG_61):  System shall have the provision of spatial reporting & search. (PLG_62):  System shall be able to maintain general land parcel information & link it to asset management (PLG_63):  System shall be able to provide information on land ownership including historic information (PLG_64):  System should be able to link important documentation on regulations, planning and others with individual land records(PLG_65):  System shall have provisions for maintaining easement register for land. Web GIS platform shall display map data and required details as attribute/link related to provided land parcel (PCG_67):  System shall have provisions to maintain complete information of land parcels (consolidation, sub division land revision) (PLG_68):  System shall have the provision of classification of various land uses as per the Master Plan Norms (PLG_71):  System shall be able to integrate the Projects i.e., existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72):  System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below infrastructure including sewage and solid waste disposal with below	GIS Based Planning	
Zonal Development Plan, Master Plan etc. (PLG_60):  System shall be able to classify different land zones and provide cadastral & ownership information on a map (PLG_61):  System shall have the provision of spatial reporting & search. (PLG_62):  System shall be able to maintain general land parcel information & link it to asset management (PLG_63):  System shall be able to provide information on land ownership including historic information (PLG_64):  System shall be able to link important documentation on regulations, planning and others with individual land records(PLG_65):  System shall have provisions for maintaining easement register for land. Web GIS platform shall display map data and required details as attribute/link related to provided land parcel if (PLG_67):  System shall have provisions to maintain complete information of land parcels (consolidation, sub division land revision) (PLG_68):  System shall have the provision of classification of various land uses as per the Master Plan Norms (PLG_71):  System shall be able to integrate the Projects i.e., existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72):  System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area		
cadastral & ownership information on a map (PLG_61):  System shall have the provision of spatial reporting & search. (PLG_62):  System shall be able to maintain general land parcel information & link it to asset management (PLG_63):  System shall be able to provide information on land ownership including historic information (PLG_64):  System should be able to link important documentation on regulations, planning and others with individual land records(PLG_65):  System shall have provisions for maintaining easement register for land. Web GIS platform shall display map data and required details as attribute/link related to provided land parcel id (PLG_67):  System shall have provisions to maintain complete information of land parcels (consolidation, sub division land revision) (PLG_68):  System shall have the provision of classification of various land uses as per the Master Plan Norms (PLG_71);  System shall be able to integrate the Projects i.e., existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72);  System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposa		
(PLG_62):  System shall be able to maintain general land parcel information & link it to asset management (PLG_63):  System shall be able to provide information on land ownership including historic information (PLG_64):  System should be able to link important documentation on regulations, planning and others with individual land records(PLG_65):  System shall have provisions for maintaining easement register for land. Web GIS platform shall display map data and required details as attribute/link related to provided land parcel id (PLG_67):  System shall have provisions to maintain complete information of land parcels (consolidation, sub division land revision) (PLG_68):  System shall have the provision of classification of various land uses as per the Master Plan Norms (PLG_71):  System shall be able to integrate the Projects i.e., existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72):  System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):		
Ifink it to asset management (PLG_63):  System shall be able to provide information on land ownership including historic information (PLG_64):  System should be able to link important documentation on regulations, planning and others with individual land records(PLG_65):  System shall have provisions for maintaining easement register for land. Web GIS platform shall display map data and required details as attribute/link related to provided land parcel id (PLG_67):  System shall have provisions to maintain complete information of land parcels (consolidation, sub division land revision) (PLG_68);  System shall have the provision of classification of various land uses as per the Master Plan Norms (PLG_71):  System shall be able to integrate the Projects i.e., existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72);  System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  Shortest Path Analysis: Provides the shortest route between two locations over the map interface		
including historic information (PLG_64):  System should be able to link important documentation on regulations, planning and others with individual land records(PLG_65):  System shall have provisions for maintaining easement register for land. Web GIS platform shall display map data and required details as attribute/link related to provided land parcel id (PLG_67):  System shall have provisions to maintain complete information of land parcels (consolidation, sub division land revision) (PLG_68):  System shall have the provision of classification of various land uses as per the Master Plan Norms (PLG_71):  System shall be able to integrate the Projects i.e., existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72):  System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall facilitate the planning of physical and social infrastructure including sewage and soli		
regulations, planning and others with individual land records(PLG_65):  System shall have provisions for maintaining easement register for land. Web GIS platform shall display map data and required details as attribute/link related to provided land parcel id (PLG_67):  System shall have provisions to maintain complete information of land parcels (consolidation, sub division land revision) (PLG_68);  System shall have the provision of classification of various land uses as per the Master Plan Norms (PLG_71):  System shall be able to integrate the Projects i.e., existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72);  System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below	including historic information (PLG_64);	
land. Web GIS platform shall display map data and required details as attribute/link related to provided land parcel id (PLG_67);  • System shall have provisions to maintain complete information of land parcels (consolidation, sub division land revision) (PLG_68);  • System shall have the provision of classification of various land uses as per the Master Plan Norms (PLG_71);  • System shall be able to integrate the Projects i.e., existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72);  • System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  • Road Network Visualization: Visualization of Road Network  • Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  • Shortest Path Analysis: Provides the shortest route between two locations over the map interface  • System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):  • Road Network Visualization: Visualization of Road Network  • Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  • Shortest Path Analysis: Provides the shortest route between two locations over the map interface  • System shall facilitate the planning of physical and social infrastructure including sewage and soliid waste disposal with below	regulations, planning and others with individual land	
parcels (consolidation, sub division land revision) (PLG_68);  System shall have the provision of classification of various land uses as per the Master Plan Norms (PLG_71);  System shall be able to integrate the Projects i.e., existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72);  System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below	land. Web GIS platform shall display map data and required details as	
per the Master Plan Norms (PLG_71);  System shall be able to integrate the Projects i.e., existing and targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72);  System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):  Road Network Visualization: Visualization of Road Network  Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  Shortest Path Analysis: Provides the shortest route between two locations over the map interface  System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below		
targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project location on map (PLG_72);  • System shall enable the Planning of new Road Network by providing below services on GIS platform (PLG_73)  • Road Network Visualization: Visualization of Road Network  • Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  • Shortest Path Analysis: Provides the shortest route between two locations over the map interface  • System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):  • Road Network Visualization: Visualization of Road Network  • Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area  • Shortest Path Analysis: Provides the shortest route between two locations over the map interface  • System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below		
<ul> <li>below services on GIS platform (PLG_73)</li> <li>Road Network Visualization: Visualization of Road Network</li> <li>Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area</li> <li>Shortest Path Analysis: Provides the shortest route between two locations over the map interface</li> <li>System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):</li> <li>Road Network Visualization: Visualization of Road Network</li> <li>Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area</li> <li>Shortest Path Analysis: Provides the shortest route between two locations over the map interface</li> <li>System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below</li> </ul>	targeted by Delhi Development Authority, both in land use plan and policy proposals. GIS integration is limited to highlighting project	
<ul> <li>Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area</li> <li>Shortest Path Analysis: Provides the shortest route between two locations over the map interface</li> <li>System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):</li> <li>Road Network Visualization: Visualization of Road Network</li> <li>Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area</li> <li>Shortest Path Analysis: Provides the shortest route between two locations over the map interface</li> <li>System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below</li> </ul>		
<ul> <li>Shortest Path Analysis: Provides the shortest route between two locations over the map interface</li> <li>System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):</li> <li>Road Network Visualization: Visualization of Road Network</li> <li>Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area</li> <li>Shortest Path Analysis: Provides the shortest route between two locations over the map interface</li> <li>System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below</li> </ul>	Road Network Visualization: Visualization of Road Network	
<ul> <li>System shall enable transportation network analysis to facilitate efficient planning with below features on GIS platform (PLG_74):</li> <li>Road Network Visualization: Visualization of Road Network</li> <li>Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area</li> <li>Shortest Path Analysis: Provides the shortest route between two locations over the map interface</li> <li>System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below</li> </ul>		
efficient planning with below features on GIS platform (PLG_74):     Road Network Visualization: Visualization of Road Network     Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area      Shortest Path Analysis: Provides the shortest route between two locations over the map interface      System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below		
<ul> <li>Buffer Analysis: Buffer analysis will provide an option to visualize the facilities which will fall under a given area</li> <li>Shortest Path Analysis: Provides the shortest route between two locations over the map interface</li> <li>System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below</li> </ul>		
<ul> <li>facilities which will fall under a given area</li> <li>Shortest Path Analysis: Provides the shortest route between two locations over the map interface</li> <li>System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below</li> </ul>	Road Network Visualization: Visualization of Road Network	
<ul> <li>System shall facilitate the planning of physical and social infrastructure including sewage and solid waste disposal with below</li> </ul>		
infrastructure including sewage and solid waste disposal with below		
	infrastructure including sewage and solid waste disposal with below	

Sewerage Network Visualization: Visualization sewerage Network  Network Analysis with nearby search: Preconfigured tools to search nearby pump stations etc.  Link CAD map with property parcet:  rovide buffer search to assess impact on nearby properties / natural resources etc.:  Link CAD map with property parcet.  Link CAD map with property parcet.  Link CAD map with property parcet.  Provide buffer search to assess impact on nearby properties / natural resources etc.:  Architecture Department  Process: Development of Urban Design / Architectural Schemes  System shall be able to view the land map and its information on which the project is being developed (LND_5):  Engineering  Engineering  System shall able to maintain maps of the different scales and more depending on the requirements and as defined by the Appropriate Authority (ENG_1):  Land Management  Shall facilitate integration of LMIS with "RoR" information to obtain current ownership details, encumbrance history, tax status etc. of the land:  System shall allow web-based access to acquired and non-acquired land (LNM_34);  System shall be able to display maps of areas with the categories of unresolved cases in each, in different colour codes (LNM_46);  System shall be able to provide a layout wise and if required Khasra wise regularization status with colour codes (LNM_46);  System shall land low users to update various attributes related to land (LNM_68);  System shall allow asers to update various attributes related to land (LNM_68);  System shall allow asers to update various attributes related to land on Geo-referenced maps (LNM_75);  Land Disposal  Process: Allottment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall more status of land disposal at any given time;			
Asset Search based on parameters.		Sewerage Network Visualization: Visualization sewerage Network	
Link CAD map with property parcel:			
rovide buffer search to assess impact on nearby properties / natural resources etc.;		Asset Search based on parameters.	
resources etc.:  • Link CAD map with property parcel.  • Provide buffer search to assess impact on nearby properties / natural resources etc.  Architecture Department  Process: Development of Urban Design / Architectural Schemes  • System shall be able to view the land map and its information on which the project is being developed (LND_5):  Engineering  GIS_11  Process: Construction of Buildings and Roads, Quality Control, Design and Project Management  • System shall able to maintain maps of the different scales and more depending on the requirements and as defined by the Appropriate Authority (ENG_1):  Land Management  Process: Protection of the acquired land from encroachment  • Shall facilitate integration of LMIS with *RoR* information to obtain current ownership details, encumbrance history, tax status etc. of the land:  GIS_12  • System shall allow web-based access to acquired and non-acquired land (LNM_34):  • System shall be able to display maps of areas with the categories of unresolved cases in each, in different colour codes (LNM_46):  • System shall allow status with colour codes (LNM_46):  • System shall allow attachment of various attributes related to land (LNM_68):  • System shall allow attachment of various attributes related to land (LNM_68):  • System shall enable easy retrieval of required details/ documents / records from georeferenced maps (LNM_75):  Land Disposal  Process: Allotment of property as per policy  • Shall Integrate with LMIS application: Process: Post allotment activities  • Shall Import status of land disposal at any given time:  • Shall monitor status of land disposal at any given time:		Link CAD map with property parcel;	
Provide buffer search to assess impact on nearby properties / natural resources etc.  Architecture Department Process: Development of Urban Design / Architectural Schemes  • System shall be able to view the land map and its information on which the project is being developed (LND_5):  Engineering  Process: Construction of Buildings and Roads, Quality Control, Design and Project Management  • System shall able to maintain maps of the different scales and more depending on the requirements and as defined by the Appropriate Authority (ENG_1):  Land Management  Process: Protection of the acquired land from encroachment  • Shall facilitate integration of LMIS with "RoR" information to obtain current ownership details, encumbrance history, tax status etc. of the land:  and:  • System shall allow web-based access to acquired and non-acquired land (LNM_34):  • System shall be able to display maps of areas with the categories of unresolved cases in each, in different colour codes (LNM_46):  • System shall be able to provide a layout wise and if required Khasra wise regularization status with colour codes (LNM_53):  • System shall allow users to update various attributes related to land (LNM_68):  • System shall allow attachment of various attributes related to land (LNM_68):  • System shall allow attachment of various attributes related to land on Geo-referenced maps (LNM_74):  • System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75):  Land Disposal  Process: Allotment of property as per policy  • Shall Integrate with LMIS application: Process: Post allotment activities  • Shall update the Cadastral Maps with relevant RoR information in real-time: Process: Works related to mutation  • Shall monitor status of land disposal at any given time:			
Architecture Department		Link CAD map with property parcel.	
Process: Development of Urban Design / Architectural Schemes			
System shall be able to view the land map and its information on which the project is being developed (LND_5):    Engineering		Architecture Department	
### System shall allow web-based access to acquired and non-acquired land (LNM_46):    System shall allow to display maps of areas with the categories of unresolved cases in each, in different colour codes (LNM_46):   System shall allow users to update various attributes related to land (LNM_68):   System shall allow attachment of required details/ documents / records from georeferenced map (LNM_74);   System shall allow attachment of required details/ documents / records from georeferenced map (LNM_75);   Land Disposal   Process: Allotment of property as per policy	GIS_10	Process: Development of Urban Design / Architectural Schemes	
Process: Construction of Buildings and Roads, Quality Control, Design and Project Management  System shall able to maintain maps of the different scales and more depending on the requirements and as defined by the Appropriate Authority (ENG_1):  Land Management  Process: Protection of the acquired land from encroachment  Shall facilitate integration of LMIS with "RoR" information to obtain current ownership details, encumbrance history, tax status etc. of the land;  System shall allow web-based access to acquired and non-acquired land (LNM_34);  System shall be able to display maps of areas with the categories of unresolved cases in each, in different colour codes (LNM_46);  System shall be able to provide a layout wise and if required Khasra wise regularization status with colour codes (LNM_53);  System shall allow users to update various attributes related to land (LNM_68);  System shall allow attachment of various attributes related to land on Geo-referenced maps (LNM_74);  System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75);  Land Disposal  Process: Allotment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall monitor status of land disposal at any given time;			
Project Management  System shall able to maintain maps of the different scales and more depending on the requirements and as defined by the Appropriate Authority (ENG_1):  Land Management  Process: Protection of the acquired land from encroachment  Shall facilitate integration of LMIS with "RoR" information to obtain current ownership details, encumbrance history, tax status etc. of the land;  System shall allow web-based access to acquired and non-acquired land (LNM_34);  System shall be able to display maps of areas with the categories of unresolved cases in each, in different colour codes (LNM_46);  System shall be able to provide a layout wise and if required Khasra wise regularization status with colour codes (LNM_53);  System shall allow users to update various attributes related to land (LNM_68);  System shall allow attachment of various attributes related to land on Geo-referenced maps (LNM_74);  System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75);  Land Disposal  Process: Allotment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall monitor status of land disposal at any given time;		Engineering	
depending on the requirements and as defined by the Appropriate Authority (ENG_1):  Land Management  Process: Protection of the acquired land from encroachment  • Shall facilitate integration of LMIS with "RoR" information to obtain current ownership details, encumbrance history, tax status etc. of the land;  • System shall allow web-based access to acquired and non-acquired land (LNM_34);  • System shall be able to display maps of areas with the categories of unresolved cases in each, in different colour codes (LNM_46);  • System shall be able to provide a layout wise and if required Khasra wise regularization status with colour codes (LNM_53);  • System shall allow users to update various attributes related to land (LNM_68);  • System shall allow attachment of various attributes related to land on Geo-referenced maps (LNM_74);  • System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75);  Land Disposal  Process: Allotment of property as per policy  • Shall Integrate with LMIS application; Process: Post allotment activities  • Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  • Shall monitor status of land disposal at any given time;	GIS_11		
Process: Protection of the acquired land from encroachment  Shall facilitate integration of LMIS with "RoR" information to obtain current ownership details, encumbrance history, tax status etc. of the land;  System shall allow web-based access to acquired and non-acquired land (LNM_34);  System shall be able to display maps of areas with the categories of unresolved cases in each, in different colour codes (LNM_46);  System shall be able to provide a layout wise and if required Khasra wise regularization status with colour codes (LNM_53);  System shall allow users to update various attributes related to land (LNM_68);  System shall allow attachment of various attributes related to land on Geo-referenced maps (LNM_74);  System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75);  Land Disposal  Process: Allotment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall monitor status of land disposal at any given time;		depending on the requirements and as defined by the Appropriate	
Shall facilitate integration of LMIS with "RoR" information to obtain current ownership details, encumbrance history, tax status etc. of the land;  System shall allow web-based access to acquired and non-acquired land (LNM_34);  System shall be able to display maps of areas with the categories of unresolved cases in each, in different colour codes (LNM_46);  System shall be able to provide a layout wise and if required Khasra wise regularization status with colour codes (LNM_53);  System shall allow users to update various attributes related to land (LNM_68);  System shall allow attachment of various attributes related to land on Geo-referenced maps (LNM_74);  System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75);  Land Disposal  Process: Allotment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall monitor status of land disposal at any given time;  GIS_14		Land Management	
GIS_12  - System shall allow web-based access to acquired and non-acquired land (LNM_34); - System shall be able to display maps of areas with the categories of unresolved cases in each, in different colour codes (LNM_46); - System shall be able to provide a layout wise and if required Khasra wise regularization status with colour codes (LNM_53); - System shall allow users to update various attributes related to land (LNM_68); - System shall allow attachment of various attributes related to land on Geo-referenced maps (LNM_74); - System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75);  Land Disposal - Process: Allotment of property as per policy - Shall Integrate with LMIS application; Process: Post allotment activities - Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation - Shall monitor status of land disposal at any given time;  Finance  - GIS_14  - Finance		Process: Protection of the acquired land from encroachment	
Iand (LNM_34):  System shall be able to display maps of areas with the categories of unresolved cases in each, in different colour codes (LNM_46);  System shall be able to provide a layout wise and if required Khasra wise regularization status with colour codes (LNM_53);  System shall allow users to update various attributes related to land (LNM_68);  System shall allow attachment of various attributes related to land on Geo-referenced maps (LNM_74);  System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75);  Land Disposal  Process: Allotment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall monitor status of land disposal at any given time;  GIS_14  Finance		current ownership details, encumbrance history, tax status etc. of the	
unresolved cases in each, in different colour codes (LNM_46);  System shall be able to provide a layout wise and if required Khasra wise regularization status with colour codes (LNM_53);  System shall allow users to update various attributes related to land (LNM_68);  System shall allow attachment of various attributes related to land on Geo-referenced maps (LNM_74);  System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75);  Land Disposal  Process: Allotment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall monitor status of land disposal at any given time;  GIS_14  Finance	GIS_12		
wise regularization status with colour codes (LNM_53);  System shall allow users to update various attributes related to land (LNM_68);  System shall allow attachment of various attributes related to land on Geo-referenced maps (LNM_74);  System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75);  Land Disposal  Process: Allotment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall monitor status of land disposal at any given time;  Finance			
(LNM_68);  System shall allow attachment of various attributes related to land on Geo-referenced maps (LNM_74);  System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75);  Land Disposal  Process: Allotment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall monitor status of land disposal at any given time;  GIS_14  Finance		<ul> <li>System shall be able to provide a layout wise and if required Khasra wise regularization status with colour codes (LNM_53);</li> </ul>	
Geo-referenced maps (LNM_74);  System shall enable easy retrieval of required details/ documents / records from georeferenced map (LNM_75);  Land Disposal  Process: Allotment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall monitor status of land disposal at any given time;  GIS_14  Finance			
records from georeferenced map (LNM_75);  Land Disposal  Process: Allotment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall monitor status of land disposal at any given time;  GIS_14  Finance			
Process: Allotment of property as per policy  Shall Integrate with LMIS application; Process: Post allotment activities  Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation  Shall monitor status of land disposal at any given time;  GIS_14  Finance			
Shall Integrate with LMIS application; Process: Post allotment activities     Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation     Shall monitor status of land disposal at any given time;  GIS_14  Finance		Land Disposal	
Shall Integrate with LMIS application; Process: Post allotment activities     Shall Update the Cadastral Maps with relevant RoR information in real-time; Process: Works related to mutation     Shall monitor status of land disposal at any given time;  GIS_14  Finance	GIS_13	1 1 2 1 1 2	
real-time; Process: Works related to mutation  • Shall monitor status of land disposal at any given time;  GIS_14 Finance	-112.13	activities	
GIS_14 Finance			
013_14		Shall monitor status of land disposal at any given time;	
Process: Financial Planning	GIS_14		
		Process: Financial Planning	

	Housing	
	Process: Floating of schemes for allotment of houses/flats	
GIS_15	Shall provide GIS enabled Integration of LMIS for real-time update of R0R data; Process: Disposal and provision of associated services for houses/flats constructed by DDA	
	Shall provide GIS enabled Monitoring of the progress status and planning for disposal of properties;	
	Shall provide GIS enabled monitoring of status of housing schemes / allotments / conversion etc. at any given time;	
	Process: Conversion of flats from leasehold to freehold	
	Process: Provision of housing related services such as mutation, change of address etc.	
	Horticulture	
GIS_17	Process: Development and maintenance of greens	
0.0_17	<ul> <li>System shall be able to display development agency and users for plots in the layout with colour codes (HOR_42);</li> </ul>	
	<ul> <li>System shall have the provision to capture the change of users for a given land area and maintain the history of change of users (HOR_43);</li> </ul>	
GIS_21	Citizen Interface	
013_21	Shall provide web-enabled GIS system accessible to the Public for DDA related activities;	
GIS Data Mana	gement	
	System shall build a controlled Master GIS Data Repository of approved spatial Data;	
GIS_22	System shall establish a "Data Governance Process" as per the NSDI Guidelines of GOI/DDA etc., for data provided by agencies and other Departments before it gets uploaded in master directory; Version Management Support is needed where based on business need, required version of spatial data can be accessed by GIS Solution for DDA;	
	System shall establish GIS Governance Framework with good practices across domains and processes to ensure that the GIS platform supports DDA objectives;	
	System shall provide facilities to access and store in the GIS Repository, scanned Cadastral maps in ".gif" format and digitized Cadastral maps in "Autocad .dwg" format etc., for further utilization;	
	<ul> <li>System shall facilitate access to/ import of GSDL's data layers (through internet) of GNTCD, TCPO, NIC (Utility Mapping &amp; Multi-Layer GIS Layers), etc.;</li> </ul>	
Web GIS Porta	ıl	
GIS_23	System shall allow easy configuration to suit special interest group's applications without requiring any customisation or additional coding;	
GIS Data procu	urement and Management	
GIS_24	System shall manage the Land Records Data (currently available with the DDA in alpha-numeric data) including the geo-referenced maps;	

	System shall manage and integrate GIS Data;	
	DDA will undertake procurement of all GIS data, cleaning/ mosaicing/ vectorisation/ geo- referencing of all GIS data.	
Envisaged Too	ls & General Technical Specifications	
	To cater to above requirements, DDA envisages GIS Tools / platforms, as below: -	
	Web GIS Platform supporting fine grained security at record level;	
	Spatial Database with support for version management;	
	Additional Tools: Conversion of CAD to GIS format;	
	General Technical specifications	
	Support for OGC standards and Industry standards;	
	Support of 2D and 3D visualization;	
	Web Services based Architecture to ensure flexibility and scalability;	
	High Availability will be ensured by building redundancy at each tier;	
	XML/GML will be used as a mechanism for data transfer;	
	WCF will be used as a mechanism to create web services to ensure message and transport security;	
	Solution shall provide OGC compliant catalogue service and metadata harvester engine capable of providing various features;	
	Web GIS platform should be GIS Server agnostic to support different GIS technology;	

# **DDA-GIS Functional Specifications**

#	Particulars	Description	Complied Yes / No
1. Specific	cations for different parts of GIS	Solution.	
1	Architecture, Interoperability, and Integration	The GIS server should be based on a Services Oriented Architecture (SOA).	
2		Should support direct integration with other GIS web services (including OGC complied GIS Servers);	
3		Capability to serve and consume OGC complied web services like WMS,WFS and WCS and WFS (T).	
4		Should be based on 64-bit architecture.	
5		The application should be highly interoperable with the ability to import and export to a wide range of industry standard formats.	
6		Should support all multiple platforms like Linux and Windows.	
7		Should support unlimited number of Editing and viewing clients. It should also allow multiuser editing with Advanced Editing Functionalities.	
8		Should support standard Web server/application server;	

9	Should supports unlimited Desktop client	
	connection. Desktop GIS applications with the	
	capability to consume WMS/ WFS services should be able to connect and use data from the	
	server.	
10	GPS data/Personal Tracking/UAV integration capability with Synchronization from the field.	
11	Should support Industry leading RDBMS for	
10	database storage ;	
12	Should be capable of maintaining data history, version management and conflict detection /	
	resolution.	
13	Should support database check in – check out /	
	replication functionalities	
	hence maintaining the parent child relationship of Master Database.	
14	Should have open access to extensive GIS	
	capabilities so as to enable organizations to	
	publish and share geographic data(2D & 3D), maps, analysis tools, Manipulate data,3D models	
	etc.	
15	Should have browser-based access for viewing &	
	editing of Geo-Spatial Data.	
16	Should have Web Application Functionalities like	
	pan, zoom, identifying features on a map, feature based hyperlink, measure distance, map-tips,	
	interactive north arrow, magnification window,	
	overview window, find place, query attribute,	
17	search attribute, editing and geo processing task.  Should have Web Editing Application	
17	Functionalities like simultaneous Feature class	
	editing, isolated editing in separate versions,	
	Undo/Redo operations, conflict detection,	
	snapping by layer, snapping to new geometry, settable snapping, modify, merge, split features,	
	specify an Exact X,Y location, modify and create	
	attribute values, maintain attribute values	
	through defined rules (Domain), any custom component based Tool for editing.	
18	Should have geo-processing framework, geo-	
	processing tools, core analysis functionalities,	
19	spatial statistics analysis functionalities.  Should have centrally managed data, models,	
19	tools, maps and applications.	
20	Should have the capability to link documents like	
	Adobe pdf, MS word/power-point JPEG, GIF, PNG, DTED and TIFF files etc. to map features.	
24	·	
21	Server based GIS Software should offer server- based analysis and geo processing. This should	
	include vector, raster, scripts, and tools.	
22	Web application developers should be able to	
	build responsive, easy-to- use applications that leverage the latest AJAX and Web control	
	technologies.	
23	Server Based GIS should supports a series of	
	open APIs and standards that should allow	
	virtually any other client (e.g., CAD, GIS, image processing, and SQL-based applications) to	
	interact with and use the mapping, spatial	
	analysis, and data management services of GIS	
	Server.	

24		Should be able to support broad range of clients including browsers, desktops, Mobile Handsets.
25		The server should have inbuilt map caching capability.
26		Application Server must support Time aware data for Trends / Time Series Analysis.
27		Application Server must support network and perform Routing analysis etc.;
28		Should support for RSS (Real Simple Syndication) and KML/KMZ (Keyhole
		Markup Language)
29	Data store catalog connectors	Product and national libraries
		Map and chart libraries
		Target databases
		Geographic Information System (GIS) and feature databases
30	Image Server	Should support standard raster formats such as DTED, DEM, Jpeg2000, JPEG, TIF, BMP, Geo Tiff, ERDAS .IMG, Intergraph .COT, GIF,PNG, NITF, ESRI Grid, CADRG, MrSID etc.
31		It should simplify imagery management and assist in directly publishing large image collections without pre-processing in the form of Image Services.
32		It should dynamically mosaic images in different projections, formats, locations, and pixel sizes.
33		It should provide imagery access quickly after acquisition with dynamic mosaicing and on- the-fly processing.
34		It should provide fast, server-based processing, enabling on-the-fly creation of multiple image products from a single source.
35		It should enable effortless image dissemination, serving very large volumes and numbers of images to a large range of client applications including browser-based application.
36		It should be able to serve mosaic data sets that contain large collections of raster and imagery data
37		It should preferably function as an extension of the GIS Server.
38		It should provide important service and image level metadata.
39		It should minimize data duplication while maximizing the amount of imagery products that can be created because image processing and serving has been combined.
40	Web Portal & User Management	Should provide complete web-based single gateway portal as an organizational GIS platform to Create, Access, Analyze, Manage, and Share and disseminate geo-spatial content amongst users. In other words, it should provide a mapcentric web portal platform for managing the organization's geospatial content.

	Charlet have a facility of some many that
41	Should have a facility of user management to
	create an account, and grant/ revoke user rights
	for viewing, publishing or administrator rights to
42	any users across the network.  Portal administrator should be able to create and
42	
	manage groups to control access to the maps,
	applications, and other geographic information
	you have been stored. A group owner can decide
	who can find the group, if others can request to
	join, and who can contribute their content.
43	Should have a facility to share published GIS
	content with other users and only authorized
	users can view or modify the shared content.
44	It should provide a web publishing wizard so that
	registered users can publish websites without the
	need of programming.
45	Named users should be able to create various
	kinds of base maps and should have facility to
	select the desired base map. After selecting a base
	map, user should be able to search for GIS
	content and adds them as operational layers onto
	the base map.
46	Operational layers can be configured such as
	setting transparency and symbology and
	activating and customizing pop-ups and attribute
	tables. Users can also add and display their own
	data including those on Excel spreadsheet, CSV
	and shape files on the map
47	Users should be able to insert search tags to
	assist authorized users to search and locate
	geographic information, web maps, and web GIS
	applications create and shared by other users.
	The search results should be helpful to determine
	the usefulness of each item and find related items.
48	Administrators can customize and configure
10	
	many different properties of the website and
	many different properties of the website and determine which functionality should be available
	many different properties of the website and determine which functionality should be available to a specific user.
49	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the
	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings,
	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps
	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application
	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.
	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP
49	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or
50 Security	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.
49	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication
50 Security	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.
50 <b>Security</b> 51	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.
50 Security	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.  Should support SSL and signed certificates to
50 <b>Security</b> 51 52	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.  Should support SSL and signed certificates to ensure complete security from browser to server.
50 <b>Security</b> 51	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.  Should support SSL and signed certificates to ensure complete security from browser to server.  Should enable a secure, private sharing of
50 <b>Security</b> 51 52	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.  Should support SSL and signed certificates to ensure complete security from browser to server.  Should enable a secure, private sharing of confidential data that can be deployed on private
50 <b>Security</b> 51 52	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.  Should support SSL and signed certificates to ensure complete security from browser to server.  Should enable a secure, private sharing of confidential data that can be deployed on private network to promote collaboration on maps and
50 <b>Security</b> 51 52	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.  Should support SSL and signed certificates to ensure complete security from browser to server.  Should enable a secure, private sharing of confidential data that can be deployed on private
50 <b>Security</b> 51 52 53	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.  Should support SSL and signed certificates to ensure complete security from browser to server.  Should enable a secure, private sharing of confidential data that can be deployed on private network to promote collaboration on maps and applications within the organization.
50 <b>Security</b> 51 52	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.  Should support SSL and signed certificates to ensure complete security from browser to server.  Should enable a secure, private sharing of confidential data that can be deployed on private network to promote collaboration on maps and applications within the organization.  Connect securely
50 <b>Security</b> 51  52  53	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.  Should support SSL and signed certificates to ensure complete security from browser to server.  Should enable a secure, private sharing of confidential data that can be deployed on private network to promote collaboration on maps and applications within the organization.  Connect securely  Operate the GXP Xplorer Web application over
50 <b>Security</b> 51  52  53	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.  Should support SSL and signed certificates to ensure complete security from browser to server.  Should enable a secure, private sharing of confidential data that can be deployed on private network to promote collaboration on maps and applications within the organization.  Connect securely
50 <b>Security</b> 51 52 53	many different properties of the website and determine which functionality should be available to a specific user.  Administrator can change the look and feel of the website home page, change gallery page settings, set featured groups, define the base maps available in the map viewer, choose application templates and set utility services.  The application should support LDAP (Lightweight Directory Access Protocol) or Active directory based authentication.  Should support Single sign-on, authentication module.  Should support SSL and signed certificates to ensure complete security from browser to server.  Should enable a secure, private sharing of confidential data that can be deployed on private network to promote collaboration on maps and applications within the organization.  Connect securely  Operate the GXP Xplorer Web application over

		Connection. Employ secured certificate authentication.	
		Optional Lockdown mode to remove anonymous access and require all users to log in.	
		User roles are assigned to upload, make changes, or delete.	
		Manage user credentials in GXP Xplorer. Password policies are customizable.	
		Integrate with an organization's existing user authentication, such as Force No or Lightweight.	
55	Real-Time Processing Capability	Should connect to virtually any type of streaming data feed.	
56		Should have option to include connectors for common data streams including in-vehicle GPS Devices, mobile devices and social media providers.	
57		Process and Filter Real-Time Data using spatial or attribute conditions to focus on the most Interesting event data.	
58		Can track dynamic assets that are constantly changing location (such as vehicles), or stationary assets, such as weather and environmental monitoring stations.	
59		Should have capability to automatically and simultaneously send alerts	
60		Can easily interact with other Enterprise systems	
61		Geo Fence areas of interest using existing feature data to detect the spatial proximity of Events.	
62		Create Geo Fences on-the-fly without disconnecting from your real-time data stream.	
63		Should have options of sending Alerts across multiple channels such as e-mails, texts, and Instant messages.	
64		Should have capability for integrated real-time data with its geospatial infrastructure.	
65		Enrich incoming events with data from a secondary feature service or system file.	
66	Third-party mash-ups	News, Web feeds, Social Networking media, Blogs	
67	Structured and unstructured data types	Imagery	
	uata types	Terrain	
		LiDAR	
		Maps and charts	
		Raster-derived products	
		Vector-derived products	
		Shape files Video	
		Documents  Slides Spreadchests Custom types	
40	Change detection	Slides Spreadsheets Custom types	
68	Change detection	Listens for file system changes in all selected directories	

1		Discovers new files, deletions, and changes	
		Keeps catalog updated in near-real-time	
		Notifies and flags file duplicates	
69	Structured and Unstructured Data Searches	Search both structured and unstructured information within the data	
		Search by Product type Keywords Geospatial areas	
		Product attributes (e.g., Author, Cloud Cover, Target ID) Time and date ranges	
		Free-text search of all text in catalog	
		Grid overlay for systematic searches by grid cell	
		Results returned by relevance and proximity	
70	All source searches	Text search for words and strings with wildcards such as * and?	
		Boolean options such as AND, OR, NOT	
		Spelling corrections and similar words suggested for concept searches*	
		Filter, sort, and refine search results to find the right data.	
		View, print, export configurable list or table of products, attributes, and thumbnails	
		Optional mini-map shows location;	
71	Visualize results	Selectable map such as Google Maps, or any Web Map Service (WMS)	
		Cluster results for a condensed view of overall coverage	
		Break clusters into individual color-coded product markers or coverage footprints	
		Summary of results by type and quantity	
		Filter results hierarchically by type and sub-type	
		Time Slider filters map markers in real-time and groups products on the slider itself	
		Display reference data feed services to help make data selection decisions	
72	Data Processing	Convert data to selected formats before download	
		Chip an image into its native format or into PowerPoint® in JPEG format	
		Orthorectify imagery	
		Generate image RSETs	
		Triangulate images	
		Mosaic images and other data Clip video to area or event criteria	
		Batch operations act on multiple products	
73	Update	Update the attribute metadata for a product	

		Change or add geospatial footprints
		Perform batch updates
74	Annotation in a Web browser	View image as if it were locally on your system
		Displays the optimal presentation of the image automatically
		Dynamically adjust imagery brightness, contrast, and sharpness in the browser as desired
		Draw lines, polygons, circles, and buffers
		Insert icons in many shapes and sizes (e.g., tanks, planes, markers)
		Enter text annotations
		Measure geographic coordinates using sensor model geometry, not approximations  Underlying terrain used if available for geospatially correct measurements Measure
		distances and height calculations using sensor model
		Color-code every annotation and entry
		Overlay a Web Feature Service (WFS) on the image for additional detail
		Load shape files to burn into the image report
		Collaborate via chat and jointly edit products in real-time
75	Publish	Build the final brief in the Web browser
		Publish the annotated image product into PowerPoint, GeoPDF, PNG, and more
		Deliver via email and FTP
		Catalog the products in GXP Xplorer for subsequent use and availability.
76	Directory Access Protocol (LDAP)	More information on security features including software development is available upon request
		Access. Control user access to data by assigning roles within GXP Xplorer
		Hide data completely, prevent manipulation, or allow editing, based on
		role Compartmentalize data based on accessibility.
		Define which groups of users can view and access data through Discretionary Access Control (DAC).  Logging records all transactions including logins, searches, downloads, uploads, edits, and deletions.
77	Open Architecture	Extensible
		Flexible ingest services.
		Flat metadata model that can be extended by developers.
		Plug-in metadata extraction for custom data types. Plug-in data processing services.

		Plug-in data store connections. Customizable Web user interface. Supports multiple external interfaces. Scalable	
		Server virtualization Distributed processing capable Heterogeneous federation Open interfaces	
		REST/JSON/KML/RSS Web Services	
		Open Geospatial Consortium (OGC) Web Services	
		Geospatial Imagery Access Services (GIAS)	
		Use of metadata standards	
78	Mobile	GPS Support	
		Tablet PC	
		GIS Mobile Support	
		Multi User Geo database Editing	
		General Editing	
		Administration Geo Processing	
		Versioning Geo Processing	
		Short Transaction Editing	
		Multiuser Geo Database Archiving	
		Display and Query	
		Manage	
		Access your data on the go	
		Obtain up-to-date imagery and documents from a connected GXP Xplorer server on your device	
		Search your data by times and dates, keywords, types, and geospatial location.	
		Results focused around specific areas of interest. Chip and download tools ensure that complex data types can be simplified and kept on the device, even after going offline.	
79		Reporting back	
		Create reports while in the field.	
		Take a picture from the device, or use existing pictures in the gallery.	
		Enter a title and notes about the image.	
		Upload images with GPS location from the device to the GXP Xplorer server.	
		Keep everyone at site and in the field using the Mobile app up to date.	
		Reports created when not connected are uploaded when connection is restored* (i.e., when out of cell or Wi-Fi range or when in Airplane Mode.	
80	Mapping	a) Map Interaction	
		i. Map Navigation	
		ii. Queries	
		iii. Tables	
		iv. Graphs	
		v. Graph Types	
L	I	I .	l .

vi. Routing or Network Data Sets			
b) Map display			
i. General Mapping			
ii. Tabular Data			
iii. Vector Data Display			
iv. Thematic Vector Data Classification			
v. Symbol feature			
vi. Elevation surface display			
vii. Raster Data display			
viii. Raster Display : Gradual Color ramp			
data			
ix. Raster Panchromatic Sharpening			
x. Raster Display Statistics			
xi. Raster Display Resample Method			
xii. Raster Display classification Method			
xiii. Raster catalog footprint display			
xiv. Raster Tools			
xv. Time animation and temporal Data			
C. Page layout and printing			
i. Map elements			
ii. Export formats			
iii. Print with the following print drivers			
d. Publishing and sharing maps and data			
i. creating High-performance dynamic maps			
ii. Sharing maps, layers and data			
e. Publishing and sharing analysis sharing geo processing sharing geo			
coding			
f. Automating map workflows			
i. Using mapping module			
g. Map text			
i. Labels			
ii. annotation			
iii. Annotation editing			
iv. Annotation and dimensions management.			
h. advanced labelling			
i. advanced label placement rule set			
ii. Advanced cartography			
iii. cartographic editing tools			
iv. point geometric effects			
v. Polygon geometric effects			
vi. Interactive symbol editing			

		vii. Geo processing graphic quality
		viii. Geo processing masking tools
		ix. Geo processing representation management
		x. Geo processing symbolization refinement
81	GIS Analysis	Layer / Feature based Display
		Scale-Dependent Display
		CO-Ordinate Display
		GIS Queries
		Generation of buffer layers and queries on the buffer zone
		Spatial Analysis Network Analysis Co-Ordinate Display
82	Creating New Objects	Ability to add 2D, 3D and dynamic objects to the project editor.
		a. Labels
		i) Text
		ii) Image
		b. Objects
		i) Poly line
		ii) 2D Shape
		iii) 3D Model
		iv) Building
		v) 3D Shape
		vi) Route c. Dynamic Objects
		i) Ground Object
83	Application Frame Work	Application Customization
00	7.pp.noation Frame Tronk	i) Application Look and Feel
		ii) Customization
84	Data Automation	a) Data Editing
		i. General Editing
		ii. Snapping Type
		iii. Snapping to Topology Elements
		iv. Snapping Tolerance
		v. Geometry Construction option
		vi. Geometry creation tool
		vii. Feature manipulation task
		viii. Feature Editing tool
		ix. Attribute Editing
		x. Multipart Feature (Point, Line and Polygon)
		xi. Map Navigation while editing
		xii. Vector data transformation
		xiii. Generalization

		xiv. Coordinate Geometry	
		xv. Parcel Editing	
85		b) Raster Editing and Vectorization	
		i. Vectorize all Raster format	
		ii. Raster snapping Geometry	
		iii. Raster snapping environment	
		iv. Vectorization tracing	
		v. Automatic vectorization	
		vi. Vectorization parameters	
		vii. Vectorization preview	
		viii. Raster cell selection	
		ix. Raster cleanup environment	
		x. Raster cleanup painting tools	
		xi. Supports tools	
		c. Multiuser Geodatabase Editing	
		i. General Editing	
		ii. Administration Geo processing	
		iii. Versioning Geo processing	
		iv. Short Transaction Editing	
		d. Multiuser Geodatabase Archiving	
		i. Display and Query	
		ii. Manage	
		e. Distributed Geo database	
		i. Manage replicas	
		ii. Disconnected editing geo processing	
		iii. Distributed geo database geo processing	
		f. Spatial referencing image data (geo referencing)	
		i. Tools	
		ii. Transformation methods	
		iii. Spatial reference information	
86	3D Window Viewing Option	i. Terrain Opacity	
		ii. Hide Terrain	
		iii. Field of view	
		iv. Units light Source	
		v. Environmental effects	
		vi. IMGRS	
		vii. Direction, Tilt and Roll Angles	
		viii. Free flight	
		ix. 3D Display modes	
		x. Target Tool	
		xi. Shadow analysis	
		xii. Find objects (Text & co-ordinate)	
		xiii. Container setting(Both Map & Image)	

87	Catalog Tool	Provide a cataloguing tool for creation of catalog database locally or on Database like Oracle or MS SQL for efficient access, management and organization of raster, feature, projects and other geographic assets. In the cataloguing tool the user should be able to,
		i) Manage geographic data.
		ii) Catalog raster, feature, and project information
		iii) Maintain detailed information including type, dimension, dates, tags, metadata, and custom data.
		iv) Search and find the standard geographical data you require for a project, using various text and geographic properties.
		v) Work collaboratively, contributing all updates to a common repository.
		vi) Automatically scan and catalog entire folders.
		vii) Store connections to various data sources.
		viii) Catalog's data sources can be located on a local disk, on the network, on Oracle or on an SQL Server.
		ix) On the Client there should be an ability to connect (only) – Catalog layers should be located into the project.
		x) In the project editor and or all modifications to the project are to be automatically need to be updated in the catalog every time the project is saved.
		xi) Should have the facility of Activating/Deactivating User Authentication,
		Adding and Editing Users,
		xii) Permissions setting to view, modify, manage catalog.
		xiii) Activate or deactivate user authentication turn on or off user name and password authentication when connecting to the catalog.
		xiv) Manage catalog users- Add or delete users or assign different permissions
		xv) Add/Modify custom fields- Add custom filed to each layer's property sheet in the catalog for use later in the Query.
		xvi) Broken Links: Catalog should generate a list of all catalog layers whose link to the data source is broken. This happens when a data source is moved, renamed or deleted, or a network drive is inaccessible. If you know the new locations of the data source, you can repair the broken link.
		xvii) Catalog client service for the web(CSW)

		xviii) You can select multiple layers and multi edit their properties. This saved the time of editing each layer separately and ensures that all the layers have the required identical properties.	
		xix) Software should search the catalog by either or both the following:-	
		By Geographic region/Coordinates	
		By Search Query	
88	Queries	i) Attribute Query: user should be able to query based layer attribute. After query the result should be seen blinking. Facility to save query data to separate layer and also facility to export the query data.	
		ii) Spatial Query: - To query on two layers. Facility to draw buffer and do th query spatially.	
		iii) Advanced Spatial Query: Facility to do the query on multiple layers.	
		iv) Spatial query for inter distance b/w tow points: - Find out for each and every point in a first layer how many point are covering on second layer with particular distance.	
89	Analysis Tools	a. Should provide the following analysis tools,	
		i) Terrain Area	
		b. View shed Analysis along a Route	
		View shed capabilities should enable to determine enable to determine what areas are visible from any selected point along a route. The user can define viewer height and radius of view shed analysis. The calculated route view shed should be displayed as:	
		i) Individual view shed results for each selected point along the router	
		ii) A single composite view shed showing visible area from any of the router's waypoint	
		iii) A series of individual view shed results that display according to a set time span.	
90	Data Compatibility	i) Vector Flat Files	
		ii) Vector Databases & Services	
		iii) Raster Flat Files	
		iv) Raster database and services	
91	Data support and	a. Raster Data support	
	Interoperability	i) Direct Read of Raster Data	
		ii) Direct Read and Writer of Raster Data	
		iii) Geo database Raster Management	
		b. Document and Data support	
		i) Map and Symbology Files	
		ii) Direct Read of Vector and Raster Data	
		iii) Direct Editing of Vector Data	
		iv) Direct Read of Other data	
		v) Coordinate systems	
		c. CAD Support	

	İ	i) CAD File Support		
		ii) Direct Read of CAD data		
		iii) Editing with CAD Data		
		iv) Coordinate Systems		
		v) Geo processing		
92 Data Management and		a. Data Management		
	Validation	i) General		
		ii) Search for Maps, Data and Tools		
		iii) Manage Coverage Data		
		iv) Geo database and Database Administration		
		v) Geo database XML File Import/Export		
		b. Attribute Validation		
		i) Subtypes Geo processing		
		ii) Domains Geo processing		
		iii) Create and Edit Relationships for Features		
		iv) Geo database Relationships Behavior		
		v) Relationship Class Geo processing		
		c. Topology		
		i) Map display		
		ii) Editing		
		iii) Geo database Topology Rule Violation Fix operation		
		iv) Geo database Topology Management		
		v) Geo database Topology Rules		
		vi) Geo processing		
		d. Networks		
		i) Utility (geometric) network analysis		
		ii) Data management		
		iii) Geometric network connectivity rules		
		iv) Geometric network editing		
		e. Liner Referencing (routers)		
		i) Display		
		ii) Editing		
		iii) Geo processing\		
		f. Metadata		
		i) General		
		ii) Managing metadata using a variety of styles.		
		iii) Geo processing.		
93	Time span tool	Ability to have Time span tags to restrict the visibility of data to a specific period of time. Time spans are used for data sets that appear in multiple locations. The data associated with a time span is visible only when the time slider is showing the time interval defined in the time		
94	Publishing of the Projects	span tag. a. Publishing Data		
	g 2. 2	b. Publish Project as Local Kit		
		c. Publish Project as Internet Kit		

e. Publish Project a KMZ  f. Publish offline project in area-  Create a subset of an online project for offline use in disconnected environments, or for sharing	
Create a subset of an online project for offline use in disconnected environments, or for sharing	
in disconnected environments, or for sharing	
with external users. All project terrain, data, and objects are to be included in your mini-project so that you can view and display your "area of interest" comprehensively and accurately in a fraction of the time required to create and entire project:  i) Terrain in selection area is to be extracted and saved as local terrain database;	
ii) Each section of an imagery layer that intersects with the selected area is to be extracted area is retrieved from the data source and saved as local feature layer(like.shp);	
iii) All object within the selected area and any of their local or remote resources are to be downloaded and saved locally;	
iv) Option to accelerate the updating of exiting offline kits by skipping terrain and layer extraction for existing file.	
h. KML EXPORT	
i) Export 3D shapes as DAE models;	
ii) Export complex geometry objects (Multi polygons and multi polylines);	
iii) Textured polygons and imagery layers exported as KML ground overlay.	
I. Show Label Text on Hover	
Minimize the display of 3D scene by hiding label text until mouse hover.	
Pata Interoperability with Urban Information Development Organizations  Development Organizations  Data Interoperability with Urban Information Development Organisations such as TCPO, NDMC, MCDs, Delhi State Spatial Infrastructure (DSSDI)Project, Delhi Spatial Limited (DSDL), NCR Planning Board, MoH&UD etc.	
96 Data manipulation and analysis a. Coverage geo processing	
i) Application framework	
ii) Analysis	
iii) Conversion	
iv) Aggregation	
v) Composite features	
vi) Generalization	
vii) Table management	
viii) Projections	
ix) Topology Ye	S
x) General  60	

b.	Geo processing	
0	Environment	
0	Supported scripting environments	
0	General data management	
0	Data comparison	
0	Attachments	
0	Table managements	
0	Editing	
0	Field management	
0	Feature class management	
0	Feature management	
0	File geo database	
0	Generalization	
0	Projections and transformations	
0	Vector data projection	
0	Raster management	
0	Raster mosaics	
0	Raster conversion	
0	Raster transformation/projection	
0	LAS datasets	
0	Conversion	
0	Layers and table view	
0	Photos	
0	Core analysis	
0	Spatial statistics tools – analysing patterns	
0	Spatial statistics tools – mapping clusters	
0	Spatial statistics tools - measuring	
geo	ographic distributions	
	Spatial statistics tools – modelling spatial ationships	
0	Spatial statistics tools- rendering	
0	Spatial statistics tools- utilities	
0	Multidimensional tools	
0	Workspace management	
0	Geo database administration	
0	Geometric networks	
0	Table joins	
0	Data indexing	
0	Server management	

# 5: Formats for Technical and Financial Proposal

# Form 5 A General Information of the firm

(To be submitted on Tenderer Company/Firm's letter head)
[Using the format below, provide information about your firm]

### General Information Form

ner	al information Form
1.	Name of the company/Firm of the Tenderer:
2.	Legal status of the Company/Firm (Public Pvt. Ltd, etc):
3.	Date of Incorporation (dd/mm/yyyy format):
4.	ROC Reference No.
5.	Details of Company Registration:
6.	Details of Registration with appropriate authorities of GST etc.
7.	Whether company/firm has a valid CMMI-3 (or higher) certification for software development along with ISO -9001-2015 certification:
8.	Registered address, telephone, tele-fax in Delhi
9.	Contact person, Designation, Conatct No., Mobile no. and Address including email ID

Signature of the Consultant/Authorized representative

India as on 1st April 2018.

**Note:** The following supporting documents are required to be submitted with this form:

Certificate of Incorporation/Registration

- Valid CMMI-3 certification (or higher) for software development along with ISO 9001-2015 certification
- o Power of Attorney for Signing of the RFP document (Annexure-20)

# Form 5 B

<u>Financials – Annual turnover</u> (To be submitted on Auditor's letter head)

S.No.	Financial Year	Annual Turnover in INR (Crores)				
1	2015-16					
2	2016-17					
3	2017-18					
Certifi	Certificate from the Statutory Auditor					
This is to certify that						
Design						
Name of the firm:  (Signature of the Statutory Auditor)						
Seal of	Seal of the Firm					

# Form 5C Bidder's Experience

(To be submitted on firm's letter head)

[Using the format below, provide information on each assignment for which your firm, and each Affiliate for this assignment, was legally contracted either individually as a corporate entity or as one of the major companies within an JV for carrying out consulting services similar to the ones requested under this assignment.]

Assignment Name and Project cost	Approx. value of the contract (in INR in Lacs/Crore):			
Country:	Duration of assignment (months):			
Location within country:	, ,			
Name of Client	Total No. of staff-months of the assignment:			
Address	Approx. value of the services provided by your firm under the contract (in INR in Crore):			
Start Date (Month/Year)	No. of professional staff-months provided by associated consultants			
Completion Date (Month/Year)	27 0000010000 00110011100			
Name of Lead Partner	Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as			
Name of Associated Consultants, if any:  Project Director/Coordinator, Leader):				
Narrative description of the Project: (highlight project capital cost in the narration)				
Description of actual services provided by your staff within the assignment:				

Note: Project Datasheet will be considered for evaluation only if relevant work order/contract agreement and client certificate is submitted for the same.

Firm's Name:

**Authorized Signature:** 

Note: For the purpose of evaluation of Bidders INR 60.0 (INR Sixty Only) per USD shall be considered as the applicable currency conversion rate. In case of any other currency the same shall first be converted to USD as on the date 60 (Sixty) days prior to the proposal due date and the amount so derived in USD shall be converted in to INR at the aforesaid rate. The conversion rate of such currency shall be the daily representative exchange rates published by the IMF for the relevant date.

# Form 5D Project Resources (Personnel) CV Format (Please use separate forms for multiple CVs)

Name of the Resource	< <insert details="">&gt;</insert>
Proposed Position	< <insert details="">&gt;</insert>
Date of Birth	< <insert details="">&gt;</insert>
Qualification Details	< <insert college="" details="" details,="" graduated="" in,="" name,="" of="" pass,="" percentage="" place="" year="" –="">&gt;</insert>
Language known	< <insert details="">&gt;</insert>
No. of years of Experience (post qualification)	< <insert details="">&gt;</insert>
Project details	For each project < <insert &="" client="" details="" name,="" of="" project="" resource="" responsibilities="" roles="" the="" year,="" –="">&gt;</insert>

# Form 5E Description of Approach, Methodology and Work Plan

(To be submitted on firm's letter head)

# a) Technical Approach and Methodology:

In this chapter you should explain your understanding of the objectives of the assignment/job, approach to the assignment/job, understanding of the expected structure, design and outputs of the portal, methodology for carrying out the activities and obtaining the expected output. You should highlight the problems/project specific risks and their importance and explain the technical approach you would adopt to address them

## b) Work Plan: (Refer to Annexure-3)

The consultant should propose and justify the main activities of the assignment/job, their content and duration, phasing and interrelations, milestones (including online intimation), and issuing of licenses at different stages of pooling. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the scope of work and ability to translate them into a feasible working plan.

The work plan must also detail the plan for capacity building of DDA staff and proposed methodology for technical handover of the system to DDA.

# c) Organization and staffing:

The bidders should propose and justify the structure and composition of the proposed team structure, separately for the Development phase and O&M phases. Bidder shall list the main disciplines of the assignment, key personnel responsible and proposed support technical staff.

d) Bidders shall be required to make a presentation of their technical proposal as required by DDA.

# Form 5F Financial Proposal Format (Bidders's official letterhead)

1. Professional fee for providing procurement services to DDA under this assignment shall be as follows:

Component	Head	Financial bid (INR)
A	Development Fee* (Design, Development and implementation of GIS System: Web Portal, Mobile Application, Software, Superimposition of digitised Layout Plans, Zonal Plans, Systme Integration etc. – Programme Components Deleiverables completed and operational)as per relevant components in Table -1 below)	(Lumpsum)
В	Digitization Fee per Sq.KM of Layout/Zonal Plan for Database Creation through Digitization, Ground Truthing and Geo-Referencing etc.	(per Sq.Km. of LOP/Area Digitized)
С	Annual O&M Fee* (yearly from the date of Development Phase Exit: ED + 12 months)	(Lumpsum)

# The detailed break up of costs of **Development Works Components (Table-1)**

Sr. No.	Work Description	Man Months	Manpower Rate (Rs.) per Month	Manpower Cost (Rs.)
1	Collection & Verification of Maps, Collection of Ground Control Points (GCP)			
1.1	Collection & Verification of Maps Provided by DDA			
1.2	DGPS Coordinate collection from ground control point (GCP) for Image Geo-referencing			
1.3	Verification of Ground Control Point (GCP)			
	Sub Total(1)			
2	Digitization, Cleaning, Geo-referencing and Generatio	n of Shape File	es	
2.1	Digitization of Layout Plan			
2.2	Data Cleaning of Layout Plan			
2.3	3 Geo-referencing of Layout Plans			
2.4	Generation of shape files			
2.5	Data Quality Analysis (QA)/Quality Check (QC)			
2.6	2.6 Generation of CAD Drawing			
	Sub Total(2)			
3	GIS System Implementation			
3.1	Verification of GIS Layers			
3.2	Implementation of GIS Layers			
3.3	Other Features like Query Builder, Base Maps, Distance Measurement Tool, Buffer Analysis, Export to Excel			
3.4	.4 Quality Analysis (QA)/Quality Check (QC) of GIS Layers			
	Sub Total(3)			
4	Data Integration	<u>'</u>		
4.1	Verification of Data provided by DDA			
	I.			

4.2	Integration with Land and Property Information		
4.3	Data integration with GIS		
	Sub Total(4)		
5	Infrastructure Layer Mapping & Ground Truthing		
5.1	Infrastructure Layer Mapping		
5.2	Verification of Zone wise Infrastructure Layer		
5.3	Ground Truthing		
	Sub Total(5)		
6	Web Portal and Software Development Resources		
6.1	Project Manager		
6.2	Project Coordinator		
6.3	Team Lead		
6.4	System Admin		
6.5	Business Analyst		
6.6	Domain Expert		
6.7	Application Testers		
6.8	Integration Expert		
6.9	Configuration Manager		
6.1	Document Expert		
6.11	ISO Expert		
6.12	Security Expert		
6.13	Data Analysts		
6.14	Database Experts		
6.15	DBA		
6.16	Data Migration Expert		
6.17	Hardware Expert		
6.18	Network Expert		
	Sub Total(6)		
7	UAT, Training & Go Live		
7.1	UAT		
7.2	UAT Bug Fixing		
7.3	Training (1week Training at each Zone)		
7.4	Go Live		
	Sub Total(7)		

## Note:

- a. \*All quotes shall be inclusive of all statutorytaxes viz., GST and all taxes and duties applicable. In case of any statutory taxes/duties are levied after the award of work and during the period of contract, then it shall be payable by DDA. However all applicable deductions on account of taxes and duties etc shall be made by DDA.
- b. Bidders are requested to quote in BoQ1. Also man-months rates for technical persons are to be given in BoQ2.

- c. Any additional personnel required for managing the operations (as directed by DDA with due notice of 2 months) shall be provided at the same cost as indicated in this financial quote.
- 2. Our offer shall be valid up to 180 days from Date of Opening of Tender (Technical Proposal).
- 3. We understand that our fee will be paid in accordance the following milestones:

Payment Milestone	Percentage of total professional fee	Tentative timelines
DEVELOPMENT FEES	•	
Signing of Consultancy     agreement between DDA and     Bidder	10 % of Development Fees (Mobilisation Advance – Refer to Clause 45 (iv)) - Optional	ED
2. SRS, SDD and FRS Sign off and Plan Review Sign off	10% of Development Fees	ED + 5 weeks
3. GIS Portal Development, Application Design and Development, and UAT Approval by DDA	45% of Development Fees	ED + 26 Weeks
4. Go-Live Acceptance: Launch of GIS Portal after Technical and User testing	40% of Development Fees	ED + 51 Weeks
5. Development Phase Exit	5% of Development Fees	ED + 53 Weeks
O&M FEES		
<b>6.</b> Payment of O&M fees	25% of Annual O&M fees (after review of Monthly MIS Reports and QPR)	Every 3-month period after Development Phase Exit (i.e. ED+ 52Weeks).

(Name and Designation of the Person signing)
(Signature with Seal)

Date.

# **Project Undertaking**

# (In the Bidder's Company/Firm Letterhead)

I,	. son/daughter of Sh	r/o	working as .	in
M/s do her	eby solemnly affirm and o	declare as under:		
Pre-Qualific <b>Software D</b>	have submitte ation Eli <b>Design, Develo</b> igitization, Ground Tru	pment and implem	entation of G	IS System:
Zonal Plans	s etc."			

2) That M/s ..... fulfils all the Pre-Qualification Egibility Criteria mentioned in Tender Document **Pre-Qualification Bid – Compliance Sheet (**Annexure-2) which are as follows: -

Sr.	Sr.   Qualification Criteria   Decuments (Information to be provided   Compliance   Referen					
No		Documents/Information to be provided in the submitted proposal	Compilative	Reference &Page Number		
1	Covering Letter for Technical Proposal and undertaking on total responsibility	As per Annexure-12 and Annexure- 13	Yes/No			
2	The responding firm / agency (a) should have made a payment of Tender Annual Charge, (b) should have submitted a EMD of amount., and (c) should have signed an MOU/Agreement in case of Consortium.	(a) DD/Online payment for Tender Annual Charge (b) The original Bank Guarantee for EMD must be furnished in the format prescribed in Annexure-14 (c) In case of Consortium of Members, the MoU/Agreement, on an appropriate Non-Judicial Stamp Paper, purchased by the Lead Partner/Member, between the Lead Partner/Member and his Consortium Member/Partner(s), as per the format given clearly depicting the roles and Responsibilities of each member(at Annexure - 15).	Yes/No			
3	Legal Entity:  The Tenderer (d) should be registered legal entity in India, under the Indian Companies Act, 1956 / The Partnership Act 1932 / Limited Liability Partnership Act, 2008. (e) should have been in existence for at least five years as on 31 March 2018. (f) should be registered with the relevant Service Tax Authorities.	f) Certificate of Incorporation g) Registration Certificate h) Goods and Service Tax (GST) and other Taxes, if any, Registration i) PAN, EPF and ESI Registration.	Yes/No			

4	The Tenderer should be in the business of <b>Design, Development and implementation of GIS System: Software Digitization, Ground Truthing and Superimposition of Layout plans, Zonal Plans etc."</b> (implementation of GIS based & Integrated Property and Land Parcel based Management System, completed and operational) and should have executed / operationalised relevant projects in last 5 Years, as of 31st March 2018  (FY 17-18, FY 16-17, FY 15-16, FY 14-15, FY 13-14).	Annexure-16 - Details of Responding Firm & Memorandum & Articles of Association should be attached, and Work orders confirming year and Area of activity	Yes/No	
5	The Tenderer shall not be banned/ debarred/blacklisted by any State or Central Government/any other Government institution/Local Bodies in India, as on the last date of submission of the Bid.	Individual self-certified letter by the designated official of the bidder per Annexure-17	Yes/No	
6	Net worth of Lead Bidder Company must be Positive and Profit Making in last three years (Fy 2017-18, 2016-17 and Fy 2015- 16) as per the audited Balance Sheet. For the purposes of this RFP, "Net Worth" mean the aggregate value of the paid-up share capital and all reserves created out of the profits and securities premium account, after deducting the aggregate value of the accumulated losses, deferred expenditure and miscellaneous expenditure not written off, as per the audited	Chartered Accountant Certificate by each member as per <b>Annexure-18</b>	Yes/No	

	standalone balance sheet, but does not include reserves created out of revaluation of assets, write-back of depreciation and amalgamation.			
7	The Tenderer/ Lead Member must possess valid ISO 9001:2015 or latest as on last date of bid submission.	Copy of Certification to be attached	Yes/No	
8	The Tenderer should have valid CMMi Level 3 or above, on the date of Bid submission.	Copy of Certification to be attached.	Yes/No	
	The Tenderer shall furnish documentary proof of their technical capability to undertake job of application software development and digitization etc., in Client-Server as well as Web based environment.	Copy of Certification to be attached.	Yes/No	
9	Empanelment Bidder having empaneled with any one State/Central government agencies for GIS/Survey scope of Works (valid as on date of Bid submission)	Copy of Certification to be attached.		
10	Average Annual Turnover of the Tenderer / All the Consortium Members taken together - from ICT Services (ICT/GIS System Integration projects, Total Solution Provider, ICT Systems Development projects, GIS Systems Development Projects, Map Digitization, and their Implementation Work),during the last three (3) financial years (FY 17-18, FY 16- 17and FY 15-16) as per the last published balance sheets - shall be greater than or equal to INR 2 Crore(Rupees Two Crore only).	Extracts from the audited Balance sheet and Profit & Loss; OR Certificate from Statutory Auditor or Chartered Accountant; OR Copies of Work Orders with Form 5B and 5C OR In case the bidder submits an audited financial result, a copy of the "Limited Review report" of financial results, prepared by the statutory auditor of the firm shall also be submitted.	Yes/No	

_		T		
	The Tenderer shall have experience of			
	executing Turnkey GIS			
	based IT Projectover			
	multiple location in			
	India for Government or			
	its Autonomous /			
	PSU/Subordinate			
	organisation/ Local			
	Bodies etc.)as System			
	Integrator - Total			
	Solution provider - <b>for</b>			
	Design, Development			
	and implementation			
	of GIS System:			
	Software			
	Digitization, Ground	Completed Form 5B and 5C supported		
11	Truthing and	with Work Order and Proof of Go-live/	Yes/No	
	Superimposition of	Successful Implementation		
	Layout plans, Zonal			
	Plans etc." (implementation of GIS			
	based Integrated			
	Property and Land Bank			
	Management System,			
	completed and			
	operational)and should			
	have executed / operationalised relevant			
	projects in last 5 Years	ears		
	(FY 17-18, FY 16-17,			
	FY 15-16, FY 14-15			
	and FY 13-14)): -			
	One project of value			
	>= INR 1 Cr. of			
	estimated value. Power of Attorney/			
	Letter of Authority			
	executed by the Bidder			
	in favour of the			
	Principal Officer or the	D (A)		
12	duly Authorized	Power of Attorney (Annexure-20)	Yes/No	
	Representative,			
	certifying him as an authorized signatory			
	for the purpose of this			
	RFP.			
	Local Presence – The			
	Tenderer/ The Lead			
	Member of the	Delevent Desert		
	Consortium should	Relevant Documents or Undertaking		
13	have its own Service	signed by the Authorized Signatory with List of office (s) and support Centres in	Yes/No	
	Support Centres in Delhi / NCR or to give	Delhi /NCR		
	an undertaking of			
	opening a local service			
	support Centre after			
	1			

	Award of the Work/Contract.			
14	The Tenderer must have minimum 25 technically qualified human resources as on 31st March 2018 for this project.  Appropriate Certifications are necessary for the top Ten Resources handling different Areas of Projects.	Relevant Documents or Undertaking signed by the Authorized Signatory	Yes/No	

( r 1	Appropriate Certifications are necessary for the top Ten Resources nandling different Areas of Projects.	signed by the Authorized Signatory	163/140	
4) (P	document.  That I have been auth	pts unconditionally all the terms & connorized by M/s to sign this underta	ıking.	
Verifi	cation:			
	•	do hereby solemnly affirm and declare thating has been concealed there from.	t my above sta	atements
Place:	:			
Date:				
		Deponent		

# Annexure - 7

# **INDEMNITY BOND**

THIS BOND is made on this
WHEREAS has entered into an agreement executed on, 2018 with the Authority (hereinafter referred to as "The said Agreement") for the "Selection of Portal Development and Management Agency for DDA Land Pooling Policy (DDA-LPP)"
AND WHEREAS M/s has to indemnify the DDA against any loss or damage that DDA may sustain on account of any claims made by its employees for any loss / damage payment etc during performance of his duty in DDA or on any account as aforesaid.
Now therefore, in consideration of the said Agreement, the executant
Now, therefore, in witness thereof the executant Company has set its hand through its authorized representative on the day, month and the year first mentioned herein above.
EXECUTANT
For M/s Authorized representative (of Bidder or Lead Member in case of Consortium) Witness: 1. 2.

#### **General Instructions to bidder**

1. The Dy. Director (Systems) on behalf of Delhi Development Authority invites online tenders from firm/ contractor of repute in two bid system for the following work:

S.No.	REFERENC	Name of Work & Location	Earnest Money	Last Date & time of submission of on-line tender	Time & date of Opening of Technical bid
1	2	3	4	5	6
1	F10(40)2017/Sys	"Selection of Agency for Development of Web based Portal to display about 900 Maps after Digitization, Ground Truthing and Superimposition of Layout Plans, Zonal Plans etc, and integrating with related Land and Property Information System of DDA"	Rs. 9,00,000	3:30 PM on 12.04.2019	3:30 PM on Intimated later

2. The tender document consisting of eligibility criteria, scope of work, and other details to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen from website <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a> or www.dda.org.in free of cost.

Intending agencies/tenderers need to register themselves on the E-Tendering Website <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>. Aspiring Bidders/ Suppliers who have not enrolled/registered in e-procurement should enroll/register before participating. The portal enrollment is free of cost. Bidders are advised to go through instructions provided at Annexure-X regarding 'Instructions for online Bid Submission'. For any further clarification Contact on 24x7 Help Desk - Toll Free No. 1800 30702232or send a mail over to - <a href="mailto:cppp-nic@nic.in">cppp-nic@nic.in</a>.

If needed they can be imparted training on online tendering process as per details available on the website. The intending bidder must have valid class-II or class-III digital signature to submit the bid.

3. Bidders registered in Contractor's Registration Board(CRB) of DDA are required to pay the e-tendering annual charges as under :

S.No	Class of Contractor	Amount to be paid
		p.a.
1	Class-I	Rs. 20,000
2	Class-II	Rs. 16,000

77

3	Class-III	Rs. 14,000
4	Class-IV	Rs. 10,000
5	Class-V	Rs. 6,000

The bidders who are not registered in DDA and wish to bid in DDA tenders are required to pay annual charge of e-tendering of Rs. 20,000.

- 3 Proof of registration (if applicable) and the proof of payment i.e., RTGS/NEFT number and its scan copy is to be uploaded in the technical bid.
- 4 Bidders are to submit "Integrity Pacts" (Annexure-10) on Rs. 100 non-judicial stamp paper in two original copies.
- 5 Earnest money shall be deposited through RTGS/NEFT in the account of Sr. A.O. Cash Main, D.D.A having account No. 1014042405 with Central Bank of India, Vikas Sadan, I.N.A. Branch, New Delhi (IFSC Code CBIN0282695). The unique transaction reference of RTGS/NEFT shall have to be uploaded by the tenderer at Central Public Procurement Portal (http://eprocure.gov.in/eprocure/app) by the prescribed date. The Director (Systems) will get earnest money verified from Sr. A.O. Cash Main based on the unique transaction reference number against each RTGS/NEFT payment before the tenders are opened

Earnest money has to be deposited through transaction and the unique transaction reference of RTGS/NEFT against EMD shall be placed online at respective location before bid submission closing date & time.

Online tender documents submitted by intending bidders shall be opened only of those bidders, whose Earnest Money Deposit and other documents placed in the specified location are found in order.

# **Instructions for Online Bid Submission**

Instructions to the Bidders to submit the bids online through the Central Public Procurement Portal for e Procurement at <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>

- 1) Possession of valid Digital Signature Certificate (DSC) and enrollment/registration of the contractors/bidders on the e-Procurement/e-tender portal is a prerequisite for e-tendering.
- 2) Bidder should do the enrollment in the e-Procurement site using the "Online Bidder Enrollment" option available on the home page. Portal enrollment is generally free of charge. During enrollment/registration, the bidders should provide the correct/true information including valid email id. All the correspondence shall be made directly with the contractors/bidders through email id provided.
- 3) Bidder need to login to the site thro' their user ID/ password chosen during enrollment/registration.
- 4) Then the Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by SIFY/TCS/nCode/eMudra or any Certifying Authority recognized by CCA India on eToken/SmartCard, should be registered.
- 5) The DSC that is registered only should be used by the bidder and should ensure safety of the same.
- 6) Contractor/Bidder may go through the tenders published on the site and download the required tender documents/schedules for the tenders he/she is interested.
- 7) After downloading / getting the tender document/schedules, the Bidder should go through them carefully and then submit the documents as asked, otherwise bid will be rejected.
- 8) If there are any clarifications, this may be obtained through Help desk. Bidder should take into account the corrigendum published before submitting the bids online.
- 9) Bidder then logs in to the site through the secured log in by giving the user id/password chosen during enrolment/registration and then by giving the password of the e-Token/Smartcard to access DSC.
- 10) Bidder selects the tender which he/she is interested in by using the search option & then moves it to the 'my tenders' folder.
- 11) From my tender folder, he selects the tender to view all the details indicated.

- 12) It is construed that the bidder has read all the terms and conditions before submitting their offer. Bidder should go through the tender schedules carefully and upload the documents as asked; otherwise, the bid will be rejected.
- 13) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF/xls/rar formats. If there is more than one document, they can be clubbed together and can be provided in the requested format. Bidders Bid documents may be scanned with 100 dpi with black and white option. It is advisable that each document to be uploaded through online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced through rar and the same can be uploaded, if permitted. However of the file size is less than 1 MB the transaction uploading time will be very fast.
- 14) If there are any clarifications, this may be obtained through the site, or during the prebid meeting if any. Bidder should take into account the corrigendum published from time to time before submitting the online bids.
- 15) The Bidders can update well in advance, the documents such as certificates, annual report details etc., under My Space option and these can be selected as per tender requirements and then send along with bid documents during bid submission. This will facilitate the bid submission process faster by reducing upload time of bids.
- 16) Bidder should submit the EMD as specified in the tender. The original should be posted/couriered/given in person to the Tender Inviting Authority, within the bid submission due date & time for the tender or as indicated in the tender. Scanned copy of the instrument should be uploaded as part of the offer.
- 17) While submitting the bids online, the bidder reads the terms & conditions and accepts the same to proceed further to submit the bid packets.
- 18) The bidder has to select the payment option as offline to pay the EMD as applicable and enter details of the instruments.
- 19) The details of payments made through RTGS/NEFT should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise submitted bid will not be acceptable or liable for rejection.
- 20) The bidder has to digitally sign and upload the required bid documents one by one as indicated. Bidders to note that the very act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that they have read all sections and pages of the bid document including General conditions of contract without any exception and have understood the entire document and are clear about the requirements of the tender requirements.

- 21) The bidder has to upload the relevant files required as indicated in the cover content. In case of any irrelevant files, the bid will be rejected.
- 22) If the price bid format is provided in a spread sheet file like BoQ\_xxxx.xls, the rates offered should be entered in the allotted space only and uploaded after filling the relevant columns. The Priced-bid/BOQ template must not be modified / replaced by the bidder; else the bid submitted is liable to be rejected for this tender.
- 23) The bidders are requested to submit the bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission end date & time (as per Server System Clock). The TIA will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour.
- 24) After the bid submission (i.e. after Clicking "Freeze Bid Submission" in the portal), the acknowledgement number, given by the system should be printed by the bidder and kept as a record of evidence for online submission of bid for the particular tender and will also act as an entry pass to participate in the bid opening date.
- 25) The time settings fixed in the server side & displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system. The bidders should follow this time during bid submission.
- 26) All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not viewable by unauthorized persons during bid submission & not be viewable by any one until the time of bid opening.
- 27) Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers' public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 28) The confidentiality of the bids is maintained since the secured Socket Layer 128 bit encryption technology is used. Data storage encryption of sensitive fields is done.
- 29) The bidder should logout of the tendering system using the normal logout option available at the top right hand corner and not by selecting the (X) exit option in the browser.
- 30) For any queries regarding e-tendering process, the bidders are requested to contact as provided in the tender document. Parallely for any further queries, the bidders are asked to contact over phone: 1800 3070 2232 or send a mail over to cppp-nic@nic.in.

\*\*\*\*

# **INTEGRITY PACT**

То	
Sub:	RFP No for the Work
Dear S	Sir,
equity	It is here by declared that DDA is committed to follow the principle of transparency, and competitiveness in public procurement.
/ bid c	The subject Notice Inviting Tender (NIT) is an invitation to offer made on the ion that the Bidder will sign the integrity Agreement, which is an integral part of tender documents, failing which the tenderer / bidder will stand disqualified from the tendering and the bid of the bidder would be summarily rejected.
the sar DDA.	This declaration shall form part and parcel of the Integrity Agreement and signing of me shall be deemed as acceptance and signing of the integrity Agreement on behalf of the
Yours	faithfully
Direct	or (Systems)

To,	
	Director (Systems),
Sub:	Submission of Tender for the Work of
Dear S	ir,
	e acknowledge that DDA is committed to follow the principles there of a enumerated in egrity Agreement enclosed with the tender/bid document.
conditi	e agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the on that I / We will sign the enclosed integrity Agreement, which is an integral part of documents, failing which I / We will stand disqualified from the tendering process.
	e acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN INDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.
and fur from th DDA I	e confirm acceptance and compliance with the Integrity Agreement in letter and spirit of the agree that execution of the said Integrity Agreement shall be separate and distinct the main contract, which will come into existence when tender/bid is finally accepted by / We acknowledge and accept the duration of the Integrity Agreement, which shall be line with Article-1 to the enclosed Integrity Agreement.
Agreer unfette	e acknowledge that in the event of my/our failure to sign and accept the Integrity ment, while submitting the tender/bid, DDA shall have unqualified, absolute and ered right to disqualify the tenderer / bidder and reject the tender/bid is accordance erms and conditions of the tender/bid.
Yours	faithfully
(Duly	authorized signatory of the Bidder)

To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of DDA, in on Non-Judicial Stamp Paper (INR 100) purchased by Bidder/Lead Member in case of Consortium.

INTEGRITY	AGRE	EMENT					
This Integrity	Agree	ement is made at		on th	is	Day of	20
BETWEEN							
DETVVEEN							
Chairman DD	A repr	esented through Dire	ector (S	ystems),			
(Name of Divis	ion)						
DDA,						(H	ereinafter
referred as the							
(Address of Div	vision)						
'Principal / Ov	vner', v	which expression shal	l unless	s repugnant	to the mea	ning or cont	ext hereof
include its succ	essors	and permitted assign	ıs)			_	
AND							
(Name and Add	o asent	f the Individual / firr	n / Cor	npany)			
through						(Hereinat	fter
referred to as t	he						
		(Details of duly	authori	zed signatoı	^y)		
		" and which expression and which expression and permitted		•	gnant to th	ne meaning o	r context
Preamble							
WHEREAS No.	the	Principal /Owner	has	floated	the	Tender	(RFP

) (hereinafter referred to as "Tender / Bid") and intends to award, under laid down organizational procedure, contract for			
(Name of Work)			

Hereinafter referred to as the "Contract".

AND WHEREAS the Principal / Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender / Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

### Article 1: Commitment of the Principal / Owner

- (1) The Principal / Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - a) No employee of the Principal / Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - b) The Principal / Owner will, during the Tender process, treat all Bidder(s) with equality and reason. The Principal / Owner will, in particular, before and during and Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
  - c) The Principal / Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biases nature.
- (2) If the Principal / Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC) / Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned of if there be a substantive suspicion in this regard, the Principal / Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

### Article 2: commitment of the Bidder(s) / Contractor(s)

(1) It is required that each Bidder / Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has

knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.

- (2) The Bidder(s) / Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in Tender process and during the Contract execution.
  - a) The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal / Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he / she is not legally entitled to, in order to obtain in exchange any advantage to any kind whatsoever during the Tender process or during the execution of the Contract.
  - b) The Bidder(s) / Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
  - c) The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC / PC Act. Further the Bidder(s) / Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the principal / Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - d) The Bidder(s) / Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s) / Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents / representatives, if any. Either and Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent / parallel tender for the same item.
  - e) The Bidder(s) / Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- (3) The Bidder(s) / Contractors(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (4) The Bidder(s) / Contractor(s) will not directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake / forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interest.
- (5) The Bidder(s) / Contractors(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

### **Article3: Consequences of Breach**

Without prejudice to any rights that may be available to the principal / Owner under law or the Contract or its established policies and laid down procedures, the principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s) / Contractor(s) and the Bidder / Contractor accepts and undertakes to respect and uphold the Principal / Owner's absolute right:

- 1. If the Bidder(s) / Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal / Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s) / Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder / Contractor form future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal / Owner.
- 2. Forfeiture of EMD / Performance Guarantee / Security Deposit: If the Principal / Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated / determined the Contract or has accrued the right to terminate / determine the Contract according to Article 3(1), the Principal / Owner apart from exercising any legal rights that may have accrued to the Principal / Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee ad Security Deposit of the Bidder / contractor.
- 3. Criminal Liability: If the Principal / Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal / Owner has substantive suspicion in this regard, the Principal / Owner will inform the same to law enforcing agencies for further investigation.

# **Article 4: Previous Transgression**

- The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State government or any other Central / State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action cab be taken for banning of business dealings / holiday listing of the Bidder / Contractor as deemed fit by the Principal / Owner.
- 3. If the Bidder / Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal / Owner may, at its own discretion, revoke the exclusion prematurely.

### Article 5: Equal Treatment of all Bidders / Contractor / Subcontractors

1. The Bidder(s) / Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder / Contractor

- shall be responsible for any violation(s) of the principles laid down in this agreement / Pact by any of its Subcontractors/sub / vendors.
- 2. The Principal / Owner will enter into Pants on identical terms as this one with all Bidders and contractors.
- 3. The Principal / Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions any stage of the Tender process.

#### **Article 6 - Duration of the Pact**

This pact begins when both the parties have legally signed it. It expires for the Contractor / Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged determined by the Competent Authority, DDA.

## **Article 7 - Other Provisions**

- (1) This pact is subject to Indian Law, place of performance and jurisdiction is the Head Quarters of the Division of the Principal / Owner, who has floated the Tender.
- (2) Changes and supplements need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- (4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- (5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner / Principal in accordance with this Integrity Agreement / Pact or interpretation thereof shall not be subject to arbitration.

### **Article 8 - LEGAL AND PRIOR RIGHTS**

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the parties agree that this Integrity Pact will have precedence over the Tender / Contact documents with regard any of the provisions covered under this Integrity Pact.

place and date first above mentioned in the presence of following witnesses:
(For and on behalf of Bidder/Contractor [each Consortium Member, in case of Consortium])
(For and on behalf of Principal/Owner)
WITNESSES:
1
(Signature, name and address)
2
(Signature, name and address)
Place:
Dated:

Date:

# TENDER ACCEPTANCE LETTER (To be given on Company Letter Head of the Bidder)

To,
Sub: Acceptance of Terms & Conditions of Tender.
Tender Reference No:
Name of Tender / Work: -
Dear Sir,
1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:
as per your advertisement, given in the above mentioned website(s).
2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No to (including all documents like annexure(s), schedule(s), etc .,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
5. In case any provisions of this tender are found violated, then your department/organisation shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.
Yours Faithfully, (Signature of the Bidder, with Official Seal)

# **Annexure 12: Covering Letter for Proposal**

То:
<location, date=""></location,>
<name></name>
<designation></designation>
<address></address>
<phone nos.=""></phone>
<fax nos.=""></fax>
<email id=""></email>
Subject: Submission of the Technical bid for <name assignment="" implementation="" of="" systems="" the=""></name>
Dear Sir/Madam,
We, the undersigned, offer to provide Systems Implementation solutions to the DDA, Delhi on <name engagement="" implementation="" of="" systems="" the=""> with your Request for Proposal dated <insert date=""> and our Proposal. We are hereby submitting our Proposal, which includes this Technical bid and the Financial Bid sealed in a separate envelope.</insert></name>
We hereby declare that all the information and statements made in this Technical bid are true and accept that any misinterpretation contained in it may lead to our disqualification.
We undertake, if our Proposal is accepted, to initiate the Implementation services related to the assignment not later than the date indicated in Fact Sheet.
We agree to abide by all the terms and conditions of the RFP document. We would hold the terms of our bid valid for <180> days as stipulated in the RFP document.

We hereby declare that we are not insolvent, in receivership, bankrupt or being wound up, our affairs are not being administered by a court or a judicial officer, our business activities have not been suspended and we are not the subject of legal proceedings for any of the foregoing.

Yours sincerely,	
Authorized Signature [In full and initials]: _	
Name and Title of Signatory:	
Name of Firm:	
Address:	
Location:	

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

# **Annexure 13: Undertaking on Total Responsibility**

No. Date:	
То:	
Dear Sir,	
Sub: Self certif	icate regarding Total Responsibility
	fy that we undertake total responsibility for the successful and defect free operation of the proposed in, as per the requirements of the RFP for < <i>insert Name of the Systems Implementation assignment</i> for in this RFP.
Thanking you,	
Yours faithfull	у
(Signature of t	he Authorized signatory of the Bidding Organisation)
Name	:
Designation	;
Date	:
Time	:
Seal	:
Business Addr	ess:

# **Annexure 14: Bank Guarantee for Earnest Money Deposit**

Ιο,		
<name></name>		
<designation></designation>		
<address></address>		
<phone nos.=""></phone>		
<fax nos.=""></fax>		
<email id=""></email>		

Whereas < Name of the bidder > (hereinafter called 'the Bidder') has submitted the bid for Submission of RFP #<RFP Number > dated < Date > for < Name of the assignment > (hereinafter called "the Bid") to DDA, Delhi

Know all Men by these presents that we <> having our office at <Address> (hereinafter called "the Bank") are bound unto the DDA (hereinafter called "the Purchaser") in the sum of Rs. <Amount in figures> (Rupees<Amount in words> only) for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this <Date>

The conditions of this obligation are:

If the Bidder having its bid withdrawn during the period of bid validity specified by the Bidder on the Bid Form; or

If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of validity of bid

- (a) Withdraws his participation from the bid during the period of validity of bid document; or
- (b) Fails or refuses to participate in the subsequent Tender process after having been short listed;

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to <insert date> and including <extra time over and above mandated in the RFP> from the last date of submission and any demand in respect thereof should reach the Bank not later than the above date.

### NOTHWITHSTANDING ANYTHING CONTAINED HEREIN:

Our liability under this Bank Guarantee shall not exceed Rs. <Amount in figures> (Rupees <Amount in words> only)

This Bank Guarantee shall be valid up to <insert date>)

<insert date="">) failing which our liability under the guarantee will automatically cease.</insert>
(Authorized Signatory of the Bank)
Seal:
Date:

It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this Bank Guarantee that we receive a valid written claim or demand for payment under this Bank Guarantee on or before

# Annexure-15 Role and Responsibility of Bidder

	Bidder	Role	Responsibility
SI.No			
1.			
2.			
3.			

Annexure-16

Annexure-16: Copies of Work Orders of relevant projects

# Project #

Relevant project experience	
General Information	
Name of the project	
Client for which the project was executed	
Name and contact details of the client	
Project Details	
Description of the project	
Scope of services	
Service levels being offered/ Quality of	
service (QOS)	
Technologies used	
Outcomes of the project	
Other Details	
Total cost of the project	
Total cost of the services provided by the	
respondent	
Duration of the project (no. of months, start	
date, completion date, current status)	
Other Relevant Information	
Letter from the client to indicate the	
successful completion of the projects	
Copy of Work Order	

# Annexure-17 : Self certified certificate for not being blacklisted

(To be submitted on the Letterhead of the responding agency) {Place} {Date} To,
Ref: RFP Notification no <xxxx> dated <dd mm="" yy=""></dd></xxxx>
Subject: Self Declaration of not been blacklisted in response to the RFP for Selection of System Integrator for IT enablement of DDA, Tender No <xxx>&gt;.</xxx>
Dear Sir,
We confirm that our company, and the Consortium Members (if any), is /are not blacklisted as on date, in any manner whatsoever by any of the State/UT and/or central government in India on any ground including but not limited to indulgence in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
Place:
Date:
Bidder's Company Seal:
Authorized Signatory's Signature:
Authorized Signatory's Name and Designation:
Note: The Bidder shall necessarily provide a copy of 'Power of Attorney' authorizing the signatory for signing the Bid on hehalf of the Bidder in its Pre-Qualification Bid

## **Annexure 18: Chartered Accountant Certificate for Net Worth**

(To be submitted on the Letterhead of the responding agency) {Place} {Date}			
То,			
Ref: RFP Notification no <xxxx> dated <dd mm="" yy=""></dd></xxxx>			
Subject: Declaration of net worth in response to the RFP	for <name of="" tender="" the="">, Tender No<xxx>&gt;</xxx></name>		
We have examined the books of accounts and other relevant records of M/s (Name of Company), Address, for the financial year 2017-2018, 2016-2017 and 2015-16. On the basis of such examination and according to information & explanation given to us, and to the best of our knowledge & belief, we hereby certify that the net worth of M/s Company name as at the end of financial year 2017-2018, 2016-2017, 2015-16 was as below.			
Financial Year	Net Worth (Book Value in INR Lacs)		
2017-2018			
2016–2017			
2015–2016			
Copy of summarized and audited balance sheets is attached for your reference.			
Place:			
Date:			
Charted Accountants Company Seal:			
Authorized Signatory's Signature:			
Authorized Signatory's Name and Designation:			

#### **AGREEMENT**

THIS AGREEMENT/CONTRACT	is made on the	day of	2019 at	India
-------------------------	----------------	--------	---------	-------

#### **BETWEEN**

The <insert Purcahser name> having its office at ...... (hereinafter referred to as "**the Purchaser**") which expression shall unless repugnant to the context or meaning thereof mean and be deemed to include its authorized agents, representatives and permitted assigns of the First Part.

#### AND

The Party <insert Agency name>, (hereinafter referred to as "Agency") which expression shall unless repugnant to the context or meaning thereof mean and be deemed to include their successors and permitted assigns having its registered office at ..... of the Second Part.

#### **WHEREAS**

(a)	xx.xx.xxxx (her					
		 	 	"		
(b)	The AGENCY 'Tender')			•		
	with the terms a				er and in acco	ordance

- (c) The Purchaser has agreed to appoint the AGENCY for the provision of <insert service title> such services and the AGENCY has agreed to provide <insert service title>, as are represented in the Tender, including the terms of this Agreement/Contract, the Annexure attached hereto and in accordance with the terms and conditions of the Tender, and in terms of the discussions, negotiations, clarifications in relation to the implementation of the Scope of Work.
- (d) In consideration of the foregoing and the mutual covenants and promises contained herein and other good and valuable consideration the receipt and adequacy of which is hereby acknowledged, the parties intending to be bound legally.

#### NOW THIS AGREEMENT/CONTRACT WITNESSETH AS FOLLOWS:

- 1) In this Agreement/Contract words and expressions shall have the same meanings as are respectively assigned to them in the tender document vide no. < insert Tender Refence details> Dated < insert date>.
- 2) All the terms and conditions as mentioned in the tender document vide no. < insert Tender Refered details> Dated < insert date> are ipso facto applicable under this Agreement/Contract.
- 3) The following documents shall form part of this Agreement/Contract and be read and construed accordingly:-

а	Price Details	Annexure-A
b	Tender Document/Corrigendums	Annexure-B

- 4) In consideration of the payments to be made by the Purchaser to the Agency as hereinafter mentioned, the Agency hereby covenants with the Purchaser to provide < insert service detail>, in conformity in all respects with the provisions of this Agreement/Contract/Tender Documents.
- 5) The Purchaser hereby covenants to pay the Agency in consideration of the provision of < insert service detail> therein, the Agreement/Contract Price or such other sum as may become payable under the provisions of the Agreement/Contract/Tender Documents at the time and in the manner prescribed by the Agreement/Contract/Tender Documents.
- 7) This agreement/contract shall be effective from **dd/mm/yyyy** (hereinafter "the said date" i.e. the date of signing of this Agreement/Contract and shall remain valid for a **period of** < insert period details in terms of month or year)> from the date of signing of this Agreement/Contract.

**IN WITNESS** whereof the parties hereto have caused this Agreement/Contract/Tender Documents to be executed in accordance with tender document read with prevailing laws.

Signed,	Sealed and Delivered for & on behalf of Agency	Signed, S	ealed and Delivered for & on behalf of Purchaser
Signed	:	Signed	:
Name	:	Name	:
Date Place	: : New Delhi	Date Place	: : New Delhi
In the pr	esence of:	In the p	resence of:
Signed	:	Signed	:
Name	:	Name	:
Date Place	: : New Delhi	Date Place	: : New Delhi

**ANNEXURE - A: PRICE DETAILS** 

**ANNEXURE - B: Tender Document/Corrigendums** 

# **Power of Attorney for signing RFP Document**

### Service level Agreements (SLAs)

### 1. Approach

Requests via email should be logged with the Onsite Support Engineer. No verbal communication shall be treated for any form of request. The Onsite Support Engineer shall align the manpower required for the reported issue. All requests logged by DDA, Users will be handled by Onsite Support Engineer. The primary mode of problem reporting is over E- mail. The Onsite Engineer prioritizes the request by type and severity in consultation with DDA.

### 2. Severity

Severity is determined by how much the user is restricted from performing their work. There are three grades of severity:

- 3 Low Issue prevents the user from performing a portion of their duties.
- 2 Medium Issue prevents the user from performing critical time sensitive functions
  - 1 High Service or major portion of a service is unavailable

However, during the agreement finalization, the Purchaser and the selected bidder should agree to agency that finalizes the incident severity.

#### 3. Assistance Incident Request Targets

S. No.	Severity	Response Time	Resolution Time
1	3 – Low	30 Minutes	3 Business Days
2	2- Low	30 Minutes	2 Business Days
3	1-High	30 Minutes	1 Business Day

# 4. Assistance Service Request Targets

S. No.	Response Time	Resolution Time
1	1 Day	5 Business Days

Server Uptime: 99.5%

# **Draft Server Hardware Specifications**

These items will be procured by DDA, based on the improved specifications given by the selected Bidder meeting the SLA criteria. During procurement, the selected bidder will provide handholding with DDA.

	Server Make & Model	
	Form Factor and size (RU)	Rack 2U
	Processor Make	Intel
	Maximum number of sockets available on chipset	2
	Number of core per processor	10
	Processor Configuration	Intel Xeon 2630 v4 (2.20 GHz/ 10 core/25 MB/85 Watt)
	Chipset compatible with CPU	Intel C621
	PCI slots (Express Gen 3.0)	4
	RAM Size	512 GB DDR4
	RAM upgradable up to	3072 GB
2 Processor	DIMM Slots (Minimum)	24
Rack server	Hard Disk Drive Capacity	3 TB
with 512 GM RAM,	Type of Hard Disk Drive	SAS/ SSD
2 TB	RAID Type	5
Hardisk with 5	RAID Controller Cache	2048 MB
Years	RAID Controller Ports @ 12 Gbps	8
support	Video Controller (Support VGA or above resolution)	Yes
	Bays (Minimum 2 internal or more hot plug)	4
	USB Ports (Version 2.0/3.0)	4
	Certifications, Compliance & Support by Windows, Red Hat or Novell	Yes
	Operating System Windows Server 2012 R2 (64 bit) or Higher / Linux or CentOS 7.5 (64-bit) or above	1
	Network Card Supported	1G, 10G
	16 Gbps FC HBA Dual Port Card	1
	Redundant Power Supply	Yes
	Redundant Fan	Yes
	Total Number of Ports	6
	RoHS Compliance	Yes

On Site OEM Warranty	5 Years
Declare SPEC int_rate_base 2006, SPECfp_rate_2006 for processor.	1432 SPEC rating or higher
Power Supply	230 V +/
Maximum Power Consumption of the system	770 Watt

# Annexure-23

# **Certifications and Credentials**

# Annexure-24

# **Empanelment Credentials**

# Interface with Land and Property Information System of DDA

DDA is separately developing/have developed applications for management of Properties within the jurisdiction of DDA, as per the features given at Annexure-25. The proposed Application intended to develop through this Tender, shall provide appropariate user-friendly interface with the said applications so as to provide a seamless experience to implement Ease of Doing Business (EoDB) and Single Window System.

- System is fully complied with 100% requirements of EODB;
- Inbuilt capabilities to integrate with Single Window System;
- Automatic calculation of Property cost, lease cost, O&M cost based on various parameters such as area size, property locations etc.;
- Online submission of applications forms and approvals;
- Property allotment through randomization /direct process/bidding process/first cum first serve basis;
- Allottment calculation sheet generation;
- Process of property possession, lease deed entry, property transfer, property cancelation etc.;
- Demand and reminder notice should be generated through system and provision for sending E-mails.;
- Online payment gateway & payment receipts module;
- Role based management dashboard as per organizational hierarchy;
- Automatic E mail & SMS Alert/ Notification to Allottee for payment dues, generation of demand note, service tracking;
- GIS Integration capabilities to give a birds' eye view of the properties.

System will maintain the complete database on: -

- Property Information
- Allotment Details
- Status of Property
- Land Details
- Infrastructure Details available
- Location Details

### **Allottee Portal**

- Online dues and payment through payment gateway
- Online payment receipt generation
- Online Services
  - o Mortgage Permission
  - Change of Address
  - No Dues certificate
  - Transfer of Property
  - Mutation (Death Case)
  - Lease Deed Execution

- o Possession
- o Sub-Lease Deed of Flat/office /shops Buyers (Sub-Lease)
- Surrender of Plot/Property
- Cancelation of of Plot/Property
- Acknowledgement of service
- Online Service Request Tracking
- Dues Alerts through SMS/Mails

## **Mobile App for Citizen**

- Citizen Service request submission
- Approval of Service Request
- Display of pending request
- Authority Dashboard
- Outstanding dues details
- Online payment by allottees
- Payment history

#### **DELHI DEVELOPMENT AUTHORITY**

Director(Systems) on behalf of Delhi Development Authority invites E-tender for "Selection of Agency for Development of Web based Portal to display about 900 Maps after Digitization, Ground Truthing and Superimposition of Layout Plans, Zonal Plans etc, and integrating with related Land and Property Information System of DDA, in three bid system from the specialized Agencies/Firms having experience 5 years &Average Annual Turnover more than or equal to (>=) INR 2.0 Croresduring previous threeyears (cumulative) as of 31 March 2018.

Earnest Money Rs. 9,00,000/=

e-Tendering annual charges uptoRs.20,000/-

Scope of work as detailed in tender document.

The tender document consisting of eligibility criteria, scope of work and other details alongwith other necessary documents are available at DDA's website http://www.dda.org.inand at CPP portal of NIC at URL <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>.

Various important dates are as follows:

Release of this RFP (available on DDA website)	08.03.2019 at 3:30 PM
Deadline for submission of queries in this RFP online	22.03.2019 at 3:30 PM
at	
1. <a href="mailto:ddsqueries@dda.org.in">ddsqueries@dda.org.in</a> mentioning your name,	
address, phone no, subject and query in clarity or	
call at 011-/24661470. (For queries w.r.t RFP	
Proposal)	
Pre-bid meeting at Conference Hall, Ground Floor,	22.03.2019 at 3:30 PM
B-Block , Vikas Sadan, INA, New Delhi-110023.	
Release of Response to clarifications (through issue of	29.03.2019 at 3:30 PM
Corrigendum)	
Bid validity period	180 days from date of
	opening of Technical bids
Last Date for submission of bids (3 bids-pre-	12.04.2019 by 3.30 PM
qualification, technical and commercial)	
Opening of Pre-Qualification (PQ) Bid at the	15.04.2019 at 3.30 PM
Conference hall of Commissioner (LD), 4th Floor, 'B'	
Block, Vikas Sadan, INA, New Delhi-110023	
Opening of Technical Bid and Financial Bid at the	Will be intimated later to
Conference hall of Commissioner (LD), 4th Floor, 'B'	shortlisted applicants
Block, Vikas Sadan, INA, New Delhi-110023	

Please visit DDA's website at www.dda.org.in or dial 1800110332