

**Government of Jharkhand
URBAN DEVELOPMENT & HOUSING DEPARTMENT**

Notice Inviting Tender (NIT)(Re-Tender)

NIT No.: JH/UDD/SW-URBAN/RE/2015-16/3137

e-Tender (RFP) Reference no:- UDD/22.(Ni.Ko)/RE

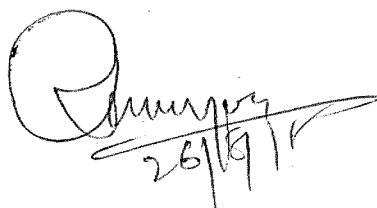
Dated: 26/08/2015

Selection of Software Development Agency for "Implementing State Level Software Solution at Jharkhand under e-Governance in Municipalities Project"

- Urban Development and Housing Department, Govt. of Jharkhand invites online bid through e-Procurement process from eligible bidders for "Implementing State level Software Solution at Jharkhand under e-Governance in Municipalities Project" as a part of National Mission Mode Project under JnNURM including the hardware, software, networking and post implementation services for Jharkhand through this Request for Proposal (RFP)(Re-Tender). The bid shall be submitted online through the Website <https://jharkhandtenders.gov.in>. The bidder(s) should have necessary portal enrolment with their own Digital Signature Certificate.
- RFP documents consisting of Terms of Reference (ToR) with detailed scope of work, instruction to bidders and Performa for submission of proposals can be downloaded from <https://jharkhandtenders.gov.in>.
- Tender Fee , Bid Security and Period of Completion

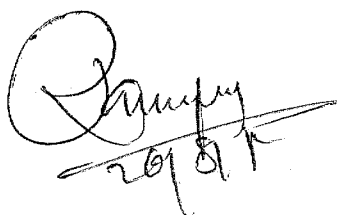
Sl. No.	Tender Fee (Non-Refundable)	Bid Security (Earnest Money Deposit-EMD)	Period of Completion
1	2	3	4
1.	INR 25,000 (Twenty Five Thousands Only) in the form of demand draft in favour of Director, Municipal Administration, Urban Development Department" payable at Ranchi	INR 40,00000 (Forty Lakhs Only) in the form of BG from Nationalised Bank only in favour of Director, Municipal Administration, Urban Development Department" payable at Ranchi	Implementation till Go-Live 365 days (1 Year) from date of signing of the agreement Post Implementation operations and maintenance support: 3 Years (1095 days) from the date of Go-Live

- Period of availability of tender online, date & time of bidding online, last date of seeking clarification, pre-bid queries submission, date of opening of tender (Bid) are as given below –


26/8/15

SN	Procurement Officer	Place of opening	Availability of tender on-line for bidding	Last Date of Pre Bid Queries Submission	Prebid Conference	Date & Time of Technical Bid Opening (Online)
A	B	C	D	E	F	G
1.	Director, Municipal Administration, UDD Jharkhand	e- Procurement Cell (Online), UDD, 4th Floor Project Building, Dhurwa, Ranchi-834004	Bid downloading and Bid from 27.08.2015 10:00 Hrs upto 18.09.2015 17:00 Hrs	01/09/2015 at 05:00 PM through post or email (uddeprocurement@gmail.com)	04/09/2015 at 15:00 Hrs in the Office of Director Municipal Administration 3rd Floor, Room No-342 Project Building Dhurwa Ranchi	21/09/2015 at 10:00 Hrs

- 31/31
26-08-15
- Tender Fee (nonrefundable) as mentioned in column 2 (shown as table) of detailed NIT document, will be in form of Demand Draft drawn on a Nationalized Bank only, Payable to "Director, Municipal Administration, Urban Development Department" payable at Ranchi.
 - The Bidder shall furnish Bid Security/Earnest Money Deposit (EMD) for the amount as mentioned in column 3 (shown as table) of detailed NIT. EMD shall be in form of Bank Guarantee (BG) in favour of Director, Municipal Administration, Urban Development Department, Government of Jharkhand. Bank Guarantee (BG) be drawn on a Nationalized Bank only, in favor of "Director, Municipal Administration, Urban Development Department", payable at Ranchi.
 - Tender Fee and Earnest Money Deposit (EMD) envelop should have the **NIT & e-Tender (RFP) Reference No.** and be addressed to the **Director, Municipal Administration, Urban Development Department Govt. of Jharkhand, 3rd Floor, Project Building, Dhurwa, Ranchi-834004**, with detail of addresses as well. The envelop should be sealed and should not contain any other documents.
 - Tender Fee and Earnest Money Deposit (EMD) in original shall be deposited in the cell / office of "**Director, Municipal Administration Urban Development Department, Govt. of Jharkhand**", **3rd Floor, Project Building, Dhurwa, Ranchi** on all working days between 27/08/2015, 14:00 Hrs to 18/09/2015, 15:00 Hrs either by registered post/Speed post or by hand. Only those bids will be entertained who's cost of bidding/tender document and bid security would be received upto 15:00 Hrs on date 18/09/2015. Urban Development Department will not be held responsible for the postal delay, if any, in the delivery of the document or non-receipt of the same.
 - The interested bidders must submit their queries through post or email (uddeprocurement@gmail.com) in writing. Queries received after the set time limit shall not be considered for reply. Document should contain NIT & e-Tender (RFP) Reference No. and RFP Name.
 - The undersigned reserves the right to accept or reject all proposals without assigning any reason therefore. It is also not bound to answer any or all the queries.
 - For any other clarifications related to bid submission, firms may contact Urban Development Department or telephonically on telephone no. 0651- 2401955/9031003998(e- Procurement Cell Helpline No.) before the last date of submission of the bid document during working hours.
 - Other details can be seen in the RFP document and instruction to bidders.


26/8/15

- 3137
26-08-15
- Bids without requisite details/documents are liable for rejection and department will not entertain any further communication in such cases.
 - Only online bids submitted through website <https://jharkhandtenders.gov.in> will be considered.


Director, Municipal Administration

Request for Proposal (RFP)Re-Tender

For

Selection of Software Development Agency for

“Implementing State Level Software Solution at Jharkhand”

Under

e-Governance in Municipalities Project



e-Tender(RFP) Reference No. : UD&HD/22(Ni Ko)/RE

NIT No.: JH/UD&HD/SW-URBAN/RE/2015-16/3137

URBAN DEVELOPMENT & HOUSING

DEPARTMENT

Govt. of Jharkhand

Project Building, 4th Floor,



Government of Jharkhand
URBAN DEVELOPMENT & HOUSING DEPARTMENT
e-Procurement Notice (Re-Tender)

e-Tender (RFP) Reference No.: UDD/22.(Ni.Ko)/RE
NIT No.: JH/UDD/SW-URBAN/RE/2015-16/3138

Notice No: 3138

Date: 26/08/2015

1.	Name of the Project	Implementing State level Software Solution at Jharkhand under e-Governance in Municipalities Project
2.	Estimated Cost	Open Tender
3.	Tender Fee & EMD (In INR)	Tender Fee: 25,000.00 EMD – 40,000,00.00
4.	Time of Completion	Implementation till Go-Live: 365 days (1 year) from date of signing of agreement Post Implementation operations and maintenance support: 3 Years (1095 days) from the date of Go-Live
5.	Date of Publication of Tender on website	27/08/2015, 09:00 hours
6.	Date of submission of pre-bid queries	01/09/2015 till 17:00 hours, bidders must submit their queries through post or email (uddeprocurement@gmail.com) in writing. Mail should contain NIT & e-Tender (RFP) Reference no. and RFP Name in email subject line.
7.	Mode of submission of bids	e-Tendering (https://jharkhandtenders.gov.in)
8.	Pre-Bid Conference	04/09/2015 at 15:00 hours
9.	Date of Start of Submission of Bids	27/08/2015, 15:00 hours
10.	Last Date/Time for submission of bids	18/09/2015 up to 17:00 hours
11.	Date of Technical Bid Opening (Online)	21/09/2015 at 10:00 hours
12.	Date of financial bid opening	To be announced later in https://jharkhandtenders.gov.in
13.	Bid submission address (Online)	Director, Municipal Administration Urban Development Department, 3rd Floor Project Building, Dhurwa, Ranchi-834004
14.	Helpline no. of e-Procurement Cell	Land Line -0651-2401955/9031003998

Note: Only e-Tenders will be accepted.

Further details can be seen on website <https://jharkhandtenders.gov.in>

Sd/-

Director, Municipal Administration



Government of Jharkhand
URBAN DEVELOPMENT & HOUSING DEPARTMENT

Notice Inviting Tender (NIT)(Re-Tender)

NIT No.: JH/UDD/SW-URBAN/RE/2015-16/3137

e-Tender (RFP) Reference no:- UDD/22.(Ni.Ko)/RE

Dated: 26/08/2015

Selection of Software Development Agency for “Implementing State Level Software Solution at Jharkhand under e-Governance in Municipalities Project”

- Urban Development and Housing Department, Govt. of Jharkhand invites online bid through e-Procurement process from eligible bidders for “Implementing State level Software Solution at Jharkhand under e-Governance in Municipalities Project” as a part of National Mission Mode Project under JnNURM including the hardware, software, networking and post implementation services for Jharkhand through this Request for Proposal (RFP)(Re-Tender). The bid shall be submitted online through the Website <https://jharkhandtenders.gov.in>. The bidder(s) should have necessary portal enrolment with their own Digital Signature Certificate.
- RFP documents consisting of Terms of Reference (ToR) with detailed scope of work, instruction to bidders and Performa for submission of proposals can be downloaded from <https://jharkhandtenders.gov.in>.
- Tender Fee , Bid Security and Period of Completion

Sl. No.	Tender Fee (Non-Refundable)	Bid Security (Earnest Money Deposit-EMD)	Period of Completion
1	2	3	4
1.	INR 25,000 (Twenty Five Thousands Only) in the form of demand draft in favour of Director, Municipal Administration, Urban Development Department" payable at Ranchi	INR 40,00000 (Forty Lakhs Only) in the form of BG from Nationalised Bank only in favour of Director, Municipal Administration, Urban Development Department" payable at Ranchi	Implementation till Go-Live 365 days (1 Year) from date of signing of the agreement Post Implementation operations and maintenance support: 3 Years (1095 days) from the date of Go-Live

- Period of availability of tender online, date & time of bidding online, last date of seeking clarification, pre-bid queries submission, date of opening of tender (Bid) are as given below –

SN	Procurement Officer	Place of opening	Availability of tender on-line for bidding	Last Date of Pre Bid Queries Submission	Prebid Conference	Date & Time of Technical Bid Opening (Online)
A	B	C	D	E	F	G



1.	Director, Municipal Administration, UDD Jharkhand	e- Procurement Cell (Online), UDD, 4th Floor Project Building, Dhurwa, Ranchi- 834004	Bid downloading and Bid Submission from 27.08.2015 10:00 Hrs upto 18.09.2015 17:00 Hrs	01/09/2015 at 05:00 PM through post or email (uddeprocurement @gmail.com)	04/09/2015 at 15:00 Hrs in the Office of Director Municipal Administration 3rd Floor, Room No-342 Project Building Dhurwa Ranchi	21/09/2015 at 10:00 Hrs
----	---	--	---	---	---	----------------------------

- Tender Fee (nonrefundable) as mentioned in column 2 (shown as table) of detailed NIT document, will be in form of Demand Draft drawn on a Nationalized Bank only, Payable to "Director, Municipal Administration, Urban Development Department" payable at Ranchi.
- The Bidder shall furnish Bid Security/Earnest Money Deposit (EMD) for the amount as mentioned in column 3 (shown as table) of detailed NIT. EMD shall be in form of Bank Guarantee (BG) in favour of Director, Municipal Administration, Urban Development Department, Government of Jharkhand. Bank Guarantee (BG) be drawn on a Nationalized Bank only, in favor of "Director, Municipal Administration, Urban Development Department", payable at Ranchi.
- Tender Fee and Earnest Money Deposit (EMD) envelop should have the **NIT & e-Tender (RFP) Reference No.** and be addressed to the **Director, Municipal Administration, Urban Development Department Govt. of Jharkhand, 3rdFloor, Project Building, Dhurwa, Ranchi-834004**, with detail of addresses as well. The envelop should be sealed and should not contain any other documents.
- Tender Fee and Earnest Money Deposit (EMD) in original shall be deposited in the cell / office of **"Director, Municipal Administration Urban Development Department, Govt. of Jharkhand", 3rdFloor, Project Building, Dhurwa, Ranchi** on all working days between 27/08/2015, 14:00 Hrs to 18/09/2015, 15:00 Hrs either by registered post/Speed post or by hand. Only those bids will be entertained who's cost of bidding/tender document and bid security would be received upto 15:00 Hrs on date 18/09/2015. Urban Development Department will not be held responsible for the postal delay, if any, in the delivery of the document or non-receipt of the same.
- The interested bidders must submit their queries through post or email (uddeprocurement@gmail.com) in writing. Queries received after the set time limit shall not be considered for reply. Document should contain NIT & e-Tender (RFP) Reference No. and RFP Name.
- The undersigned reserves the right to accept or reject all proposals without assigning any reason therefore. It is also not bound to answer any or all the queries.
- For any other clarifications related to bid submission, firms may contact Urban Development Department or telephonically on telephone no. 0651- 2401955/9031003998(e- Procurement Cell Helpline No.) before the last date of submission of the bid document during working hours.
- Other details can be seen in the RFP document and instruction to bidders.
- Bids without requisite details/documents are liable for rejection and department will not entertain any further communication in such cases.
- Only online bids submitted through website <https://jharkhandtenders.gov.in> will be considered.

Sd/-
Director, Municipal Administration

Table of Content

SECTION-I	10
1. INTRODUCTION	11
1.1 Background of the Project	11
1.2 Objectives of the Project	12
1.3 Current ICT Gap	13
1.4 Goals	13
1.5 Key Benefits	13
1.6 Key Stakeholders	14
1.7 Implementation Strategy	15
1.8 About Dhanbad Municipal Corporation	16
2. INSTRUCTION TO BIDDER	18
2.1 Detailed instruction for online bidding	18
2.2 Definition	18
2.3 Details of documents to be furnished for online bidding	20
2.4 Cost of Bidding	21
2.5 Composition of the RFP	21
2.6 Clarification on RFP and Pre-Bid Conference	22
2.7 Bidding and Selection Process	22
2.8 Documents Constituting the Bid	22
2.9 Preparation of Bid	23
2.10 Bid Structure	24
2.11 Technical Qualification Criteria	24
2.12 Evaluation of Technical Proposals	28
2.13 Evaluation of Commercial Proposals	28
2.14 Amendment of RFP	29
2.15 Bid Price	29
2.16 Bid Security (EMD) & Tender Cost	29
2.17 Period of Validity of Bids	30
2.18 Format and Signing of Bid	30
2.19 Bid Due Date	31
2.20 Opening of Bids	31
2.21 Award of Contract	31
2.22 Right to reject any or All Bids	31
2.23 Notification of Successful Bidder and Acceptance by Successful Bidder	31
SECTION-II	32
3. GENERAL TERMS & CONDITIONS	33
3.1 General Information	33
3.2 Submission and Withdrawal of Bid	33
3.3 Governing Language	33
3.4 Performance Security (Performance Bank Guarantee)	33
3.5 Mobilization Advance	34



3.6	Purchase Order	35
3.7	Sub-Contracting	35
3.8	Permits and Licenses	35
3.9	Bidder Representations	35
3.10	Warranty	36
3.11	Independent Contractor	37
3.12	Other Contracts	37
3.13	Insurance Requirements	37
3.14	Indemnification	38
3.15	Discrepancies	38
3.16	Time Schedule	38
3.17	Payment Schedule	41
3.18	Taxes & Duties	43
3.19	Services	43
3.20	Intellectual Property Right (IPR)	43
3.21	Change Orders	43
3.22	Variation of Quantity	44
3.23	Liquidated Damages	44
3.24	Conflict of Interest	44
3.25	Vendors Personnel	44
3.25.1	Description of Personnel	44
3.25.2	Removal and/or Replacement of Personnel	44
3.25.3	Requirement of Personnel	45
3.26	Default and Termination	45
3.27	Use of Documents and Ownership of Documents	46
3.28	Arbitration	46
	SECTION-III	48
4.	SCOPE OF WORK	48
4.1	Terms of Reference	48
4.2	Performance Requirements	50
4.3	Hardware	50
4.3.1	Scope of Supply	51
4.3.2	Installation of System Software and Application at Data Center	51
4.3.3	Installation of Components at the ULB	52
4.4	Scope of Site Preparation	53
4.5	Networking and Connectivity	54
4.6	System Software	57
4.7	Software Requirement Study	57
4.8	Integrated e-Governance solution	57
4.8.1	E-Municipality Portal	59
4.8.2	Handheld Device and its Integration	60
4.8.3	Mobile Governance	60
4.9	GIS Requirement	72
4.9.1	Key Objective	73
4.9.2	Scope of Work	73
4.9.2.1	Field Survey & Mapping	74
4.9.2.2	Indexing	74
4.9.3	Deliverables	75



4.9.4	Satellite Imagery Specifications	76
4.10	Video Conferencing	76
4.11	Delivery Channel	77
4.12	Application Software Development Phases	78
4.13	User Acceptance Testing	78
4.14	Hardware Maintenance	78
4.15	Software Maintenance	79
4.16	Support and maintenance	79
4.17	Project Management	80
4.18	Documentation and User Support	80
4.19	Help Desk Support	80
4.20	Data Digitization and Migration	81
4.21	Manpower and Data Entry Operators	82
4.22	Training	84
4.23	STQC Testing	85
4.24	Integration of all remaining ULBs of the state in the State Level Software Solution	86
5.	TECHNICAL REQUIREMENT	86
5.1	Desired System Architecture	87
5.2	Administration for multi-tenancy	88
5.3	Independence to ULBs to Manage their Data & Environment	88
5.4	State Level Administrator:	89
5.5	ULB Level Administrator	89
5.6	Scalability and future provisioning	89
5.7	Facility to accommodate external interfaces	91
6.	FUNCTIONAL REQUIREMENT	91
7.	DESIGN AND SOLUTION ARCHITECTURE	91
7.1	Application components	91
7.1.1	Mailing & Messaging Services	91
7.1.2	Light Weight Access Protocol (LDAP)	92
7.1.3	Single Sign-On	94
7.1.4	Payment Gateway	94
7.1.5	Digital Certificate Services	94
8.	INFRASTRUCTURE AND TECHNOLOGY	94
8.1	Technical architecture	95
8.2	Design of Integration Architecture	95
8.3	Monitoring Tool	95
8.4	Deployment Architecture	96
8.4.1	Application Server and Web Server	96
8.4.2	Database Server	96
8.4.3	Mailing & Messaging Server	97
8.4.4	Directory Server	97
8.4.5	Management Server	97
8.4.6	Backup Server	97
8.4.7	Antivirus & Anti-Spam Server	97
8.4.8	SMS Gateway	97
8.4.9	SAN & Tape Library	98
8.4.10	Firewall & Intrusion Prevention System	98



8.5	Software License Requirements	98
8.6	Warranty Support	98
8.6.1	Hardware	98
8.6.2	Software	100
9.	APPENDICES	101
9.1	Appendix 'A' (Bid Letter Form)	101
9.2	Appendix 'B': Power Of Attorney	103
9.3	Appendix 'C' (Format for Registration of Intent to Bid)	104
9.4	Appendix 'D' Bank Guarantee Format for EMD	105
9.5	Appendix 'E' (Format for Company Profile) Name of the Applicant/Firm	107
9.6	Appendix 'F' (Format for Bidders Experience)	109
9.7	Appendix 'G' (Format for Technical Solution)	110
9.8	Appendix 'H' (Proposed Resource Deployment)	111
9.9	Appendix 'I' (Format for Schedule of Costs)	112
9.10	Appendix 'J' – [Format for Certificate of OEM]	117
9.11	Appendix 'K' (Format for Bidders Experience)	118
9.12	Appendix 'L' (Evaluation Criteria for Resource Deployment)	119
9.13	Appendix 'M' (Functional Requirement Specifications FRS)	120
9.13.1	E-Municipality Portal	120
9.13.2	Registration and Issue of Birth / Death Certificate (Integration from e-District Software)	122
9.13.3	Property Tax	122
9.13.4	Payment and Management of Utility Bills	126
9.13.5	Citizen Grievance Redressal	127
9.13.6	E-Procurement	130
9.13.7	Project Works & Management	141
9.13.8	Building Plan Approval	147
9.13.9	Licensing	149
9.13.10	Solid Waste Management	149
9.13.11	Financial Accounting	151
9.13.12	Personnel Information System	155
9.13.13	Assets and Land Management	171
9.13.14	Inventory Management	177
9.13.15	Legal Management System	179
9.13.16	Geographic Information System (GIS)	181
9.14	Appendix 'N' (Service Level Agreement for Service Support)	205
9.15	Appendix 'O' Bill of Material (BoM)	214
9.15.1	Detailed Bill of Material for Data Center, UD&HD and Dhanbad Municipal Corporation	214
9.15.2	Detailed Bill of Material (For Video Conferencing)	223
9.16	Appendix 'P' Hardware Specifications	224
9.16.1	Specification of Server Hardware	224
9.16.2	Specification of Computing Hardware	224
9.16.3	Specification of Laptops	225
9.16.4	Specification of Laser jet printer	226
9.16.5	Specification of Network Printer, Copier, Scanner in one device	226
9.16.6	Specification of 5 KVA Online UPS	228
9.16.7	Specification of 10 KVA Online UPS	229



9.16.8	Specification of 10 KVA Silent Diesel Generator Set	230
9.16.9	Specification of 25 KVA Silent Diesel Generator Set	231
9.16.10	Specification of Router at Circle Office	232
9.16.11	Specification of LAN switch	234
9.16.12	Specification of Video End Point	235
9.16.13	Specification of System Software	236
9.16.14	Specification of Database	239
9.16.15	General Features of GPS System	240
9.16.16	Specification of Helpdesk and SLA Monitoring Software	241
9.16.17	Specification of Content Management Software	244
9.17	Appendix 'Q' Affidavit for Manpower	246
9.18	Appendix 'R' Hardware Proposed at State Data Center	247
9.19	Appendix 'S' (Format of Bank Guarantee for Performance Security)	251

SECTION-I

1. INTRODUCTION

1.1 Background of the Project

The Government of India has formulated the National e-Governance Plan (NeGP), part of which includes a National Mission Mode Programme (NMMP) for e Governance in Municipalities. This NMMP intends to roll out “e-Governance in Municipalities” on a nationwide basis and has now been included as a part of the Jawaharlal Nehru National Urban Renewal Mission (JnNURM). National Mission Mode Project (NMMP) on e-Governance in Municipalities envisages covering Urban Local Bodies (ULBs) in mission cities identified. This is a unique initiative of the Government of India aimed at improving operational efficiencies within Urban Local Bodies (ULBs).

Since local government is a first interface between the citizen and the government, introduction of e-Governance in municipalities will assist municipal bodies to improve service delivery mechanism, achieve better information management & transparency and ensure utmost citizens involvement in governance.

In Jharkhand, under this initiative One Urban Local Bodies (ULB) has been selected, namely Dhanbad Municipal Corporation (DMC) to implement the project as pilot phase. Government of Jharkhand intends to use the fund available from Government of India under JnNURM for implementation and roll out of e-Governance in the state. Hence **“Implementation of e-Governance projects with pilot at DhanbadMunicipal Corporation”** under URBAN DEVELOPMENT & HOUSING DEPARTMENT, Government of Jharkhand (GoJ) is an initiative to bring in more transparency, efficiency and effectiveness in the services rendered by these ULBs to the citizens, as well as to improve their internal operations and efficiency.

Guidelines on National Mission Mode Project (NMMP) on e-Governance in Municipalities as part of JNNURM defines a minimum of eight (8) identified civic services/ management functions to be delivered under this e-Governance initiative. The developed solution would be deployed at state data center and initially rolled out in Dhanbad. The solution would be subsequently rolled out to the remaining ULB's in the state. The minimum lists of services/ management functions that are proposed to be delivered through e-Governance are listed below:

Table 1: List of Services/ Management Functions

S. No.	List of Services
1.	Birth and Death Registration
2.	Payment of Property Tax, other Utilities Bills/services and Management of Utilities that come under the ULBs

2.1	Property Tax
2.2	Water Supply and other Utilities
3.	Grievance Redressal
4.	Building Approvals
5.	Procurement and Monitoring of Projects
5.1	e-Procurement
5.2	Project/ward Works
6.	Health Programme
6.1	Licenses
6.2	Solid Waste Management
7.	Financial Accounting
8.	Personnel Information System

1.2 Objectives of the Project

The objectives set in the Guideline of National Mission Mode Project on e-Governance in municipalities as part of JnNURM are as follows:

- To focus on clearly identified list of services that would be covered with clearly laid down service levels and outcomes that would be achieved.
- To improve efficiency and effectiveness in interaction between local-government and its citizens and other stakeholders, like non-governmental organizations, community based organizations, resident's welfare associations, private sector etc.
- To improve quality of internal local-government operations to support and stimulate good governance
- To bring about transparency and accountability in the governance of urban local bodies
- To enhance interface between urban local bodies and citizens
- To help in improvement of delivery of services to citizens

This would aim to:

Provide Single Window services to citizens on anytime, anywhere basis Increase the efficiency and productivity of ULBs.

- Provide a single and integrated view of ULB information system across all ULBs in the state.
- Provide timely & reliable management information relating to municipal administration for effective decision making.
- Adopt a standards-based approach to enable integration with other related applications.

1.3 Current ICT Gap

Currently, records are maintained manually or in disaggregated compartmentalized silos, leading to difficulties in timely retrieval, correlation of information and management reporting. The present scenario is far behind the extant trends of citizen centric city management systems that are made possible by an integrated approach to e-governance that combines a comprehensive, transaction-based solution approach along with document management, master data management, storage and retrieval system.

To address the above gaps and to build the citizen centric eco system in the overall administration, URBAN DEVELOPMENT & HOUSING DEPARTMENT wishes to develop an integrated end to end solution for extending Municipal Services to citizen of the state.

The ICT infrastructure and the application software required will be of suitable technology to achieve above objectives.

1.4 Goals

The following are the goals of the current RFP.

- Provide an e governance solution for the efficient and effective management of the Municipal bodies.
- Set up IT hardware and software system of e governance for ULBs .This will facilitate the working of both the ULBs and the URBAN DEVELOPMENT & HOUSING DEPARTMENT.
- Establish capacity in Dhanbad, both physical and human resources, to operate and leverage benefits from an automated environment.
- Facilitate the decision making process of top management through timely, accurate, traceable information including decision support alerts that identify problem areas.
- Enable ULBs to submit detailed information required by various departments of Government of India, Government of Jharkhand and the URBAN DEVELOPMENT & HOUSING DEPARTMENT in the prescribed formats.

1.5 Key Benefits

Benefits to be derived for Citizens:

- Improved access to Municipal Services to all citizens
- Single-window access to various services.
- Better delivery of services and information.
- Quick service delivery at a decentralized level.

- Improved communications.
- Simplification of procedures.
- Streamlining of the approval process.
- Opportunity for greater participation in decision-making.
- Improved interaction with municipal government at different levels.
- Track the performance of Dhanbad Municipal Corporation
- Transparency and accountability in Dhanbad Municipal Corporation functioning.
- Quick redressal of grievances.

Benefits to be derived for the Government and ULB (Dhanbad Municipal Corporation):

The State Government and the ULBs would benefit from this project as it would drastically cut down on redundancy and duplication. The processes of data collection, analysis and audit are made much easier. Decision making gets expedited and there can be tremendous improvements in specialized areas such as efficiency, transparency, collection of revenue etc.

Some of key advantage to State Government and the ULBs are as follows:

- Automation of ULBs Functions and citizen services
- Common information base across departments on a single integrated platform.
- Better co-ordination between departments and agencies.
- Improved communications.
- Creation of effective management information system (MIS).
- Better mobilization and utilization of resources.
- Improvement in revenue collection.
- Efficient citizen grievance redressal.
- Overall improvement in governance, delivery of services and citizen interface.
- Real time monitoring and reporting.
- Post Project evaluation could provide feedback for further improvements
- Objectiveness in decision-making.
- Data integration through the SWAN enabling the head office to extract the required information

1.6 Key Stakeholders

- Government of Jharkhand
- URBAN DEVELOPMENT & HOUSING DEPARTMENT, GoJ
- Local Municipal Bodies

- Administrative Wing
- Officers
- Field Staff and Workers
- PMU (Project Management Unit -Proposed)
- SIC (State Implementation Consultant)
- SDA (Software Development Agency)
- Citizen

The ULB and PMU along with SIC would work closely with the SDA for developing and customizing the software, implement the technical solution.

1.7 Implementation Strategy

ULBs in the Jharkhand state have varying capacity for sustainable e-Governance implementation in terms of capital and recurring costs, required versus available technical skills, and integration requirements with other applications by State/Government of India. Thus the implementation strategy adopted under this RFP is to ensure that application software as per requirements defined in this RFP is available to all ULBs of the state as a service. Features of such an implementation strategy are as below:

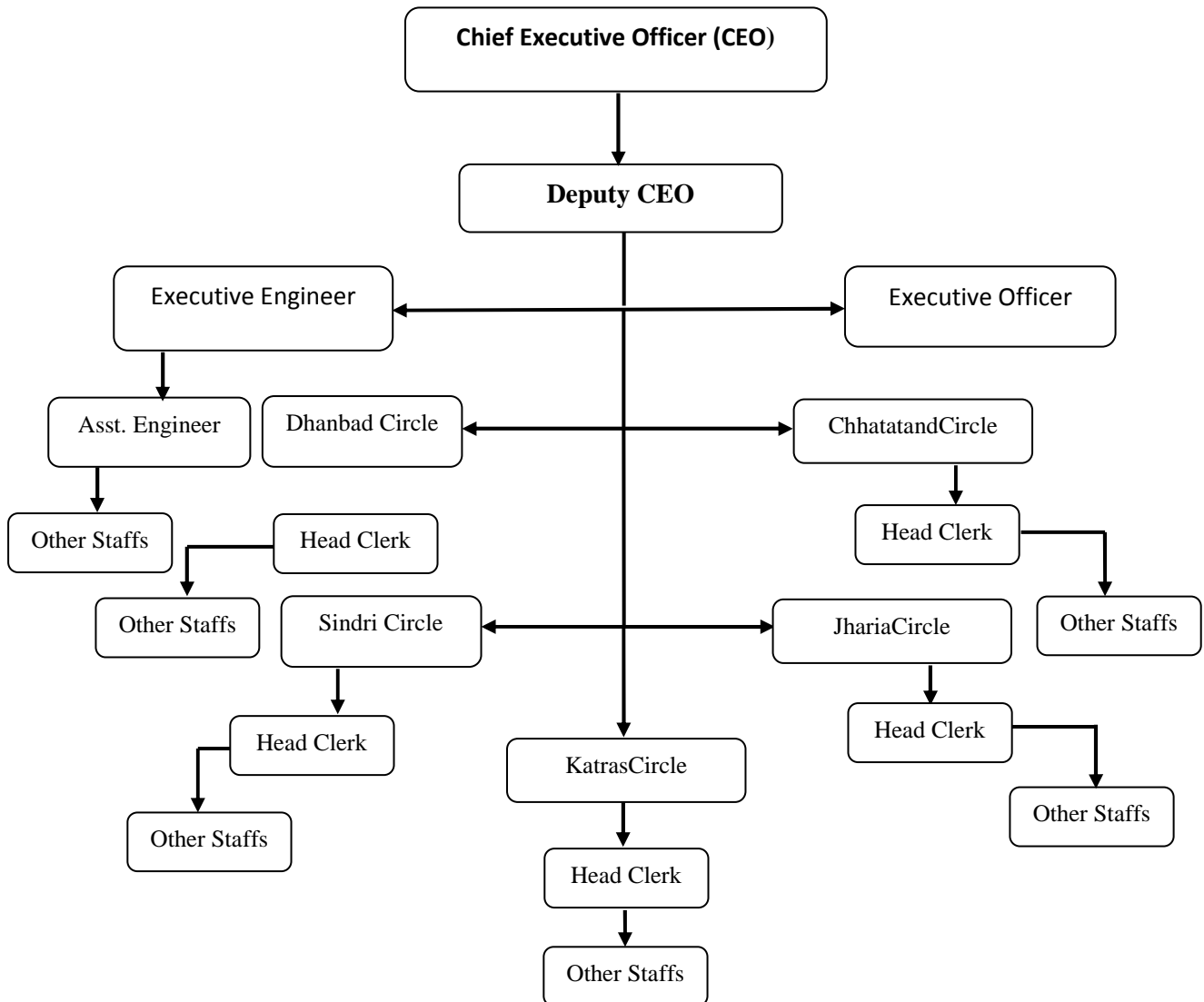
- Bidder shall develop the State Level Software Solution (SLSS) to cater to the requirement of all ULBs (i.e. capable of plug and play) in the state (A total of 39 ULBS are there including Dhanbad Municipal Corporation), currently developed for Dhanbad Municipal Corporation and in future, integration with all other ULBs.
- The SLSS and required infrastructure shall be deployed at state level and rolled out in Dhanbad Municipal Corporation as part of this RFP. The same shall be rolled out to the remaining ULBs in the state in a phased manner.
- The solution will cater to all the Municipal acts of the State and bidder shall identify the optimal processes at the state level to cater to the requirement of all ULBs. The solution shall have provision for customization as per the specific needs of each ULB for supporting their bye-laws on the single instance of the application software.
- The solution shall have the provision of separate interface for citizens and other stakeholders of each ULB. ULB shall be able to use their own logo and customize their interfaces within the application.
- The solution shall be implemented at the State Data Centre (when Operational) and existing infrastructure created as part of other NMMP projects like SWAN may be used.

- Centralized applications would be available to ULBs for access and use as a service and will have features like scalability, interoperability, and multi-tenancy, multilingual and comply with data and Security Standard of DIT, GoI/SSDG guideline.
- Each ULB that uses the centralized solution should be able to administer its data and environment independently. Centralized solution should provide appropriate level of data security, and independence.
- Centralized solution will have the provision to capture the number of transactions for each of the services per ULB and also use of other common resources like storage etc. for the centralized system so as to support any cost / revenue sharing among the participating ULBs.
- It shall be possible for individual ULB to define and monitor their Service levels to be defined as part of Service level Agreements (SLA) in consultation with UD&HD. Any tool required for the purpose will have to be provided by the bidder as part of the solution in the RFP.
- It shall be possible to integrate the Centralized solution with other government departments, existing government applications, systems like common state level Payment gateways, SMS gateways, e-District etc.
- Bidder shall utilize the existing payment gateway facility of the state, in consultation with the UD&HD and concerned department of the state and ensure integration with the payment gateway across all services.
- Bidder shall carry out Customization, for local level, required for integration of other ULBs.

1.8 About Dhanbad Municipal Corporation

Dhanbad Municipal Corporation lies in the city of same name “Dhanbad” of Jharkhand state. Widely known as the “Coal Capital of India” Dhanbad is famous for its coal mines and industrial establishments- with around 112 coal mines with a total produce of 27.5 million tonnes and an annual Income of INR 7000 million through coal business alone.

The Municipal Corporation has been created recently on 1st Feb 2006 with a total of 55 wards under its jurisdiction. The Urban settlements consisted of erstwhile Dhanbad Municipality, Jharia NAC, Chhatatand NAC, Sindri NAC, Katras NAC and 27 census towns (as per 2001 census). The total area of this new Municipal Corporation is around 355.77 sq. Km. with population of 10, 70,560. It is governed by the Ranchi Municipal Act of 2001.

Organizational Structure of DMC

2. INSTRUCTION TO BIDDER

2.1 Detailed instruction for online bidding

- Guidelines for online submission of bids can be downloaded from the website <https://jharkhandtenders.gov.in>
- Interested bidders can download the bid from the website <https://jharkhandtenders.gov.in>
- Bidders in order to participate in the bidding process have to get 'Digital Signature Certificate (DSC)' as per Information Technology Act-2000 to participate in online bidding. This certificate will be required for digitally signing the bid. Bidders can get the above mentioned digital signature certificate from any approved vendors (CCA). Bidders, who already possess valid Digital Certificate, need not procure new Digital Certificate.
- Bidders have to submit their bids online in electronic format with digital Signature. Bids without digital signature will not be accepted. No proposal will be accepted in physical form.
- Bids will be opened online as per time schedule mentioned in the Notice Inviting Tender (NIT).
- Bidders should be ready with the scanned copies of cost of tender document & bid security as specified in the tender document. Before submission of bids online, bidders must ensure that scanned copies of all the necessary documents have been attached with bid.
- Bidders have to submit original Demand Draft towards tender fee & Bank Guarantee of nationalized bank towards bid security as mentioned in the Notice Inviting Tender(NIT) during the period & time as mentioned in the NIT failing which bid will not be accepted. The details of cost of tender document, bid security specified in the tender documents should be the same as submitted online (scanned copies), otherwise bid will summarily be rejected.
- Uploaded documents of successful bidder will be verified with the original before signing the agreement. The successful bidder has to provide the originals to the concerned authority.
- The department will not be responsible for delay in online submission of bids due to any reason, what so ever.
- All required information for bid must be filled and submitted online.
- Other details can be seen in the bidding documents.
- Only online withdrawal or modification of bids is acceptable, if any.

2.2 Definition

In this document, the following terms shall have respective meanings as indicated:

- “RFP” shall mean Request for Proposal, Tender Document or Bidding Document including the written amendments and/ or clarifications issued by UD&HD, JHARKHAND in respect of the RFP.
- “Authorized Representative/Agency” shall mean any person/agency authorized by UD&HD, JHARKHAND.
- “Contract” shall mean the Purchase Order placed by UD&HD, JHARKHAND on successful Bidder and all attached exhibits and documents referred to therein and all terms and conditions thereof together with any subsequent modifications thereto.
- “Site/Name of ULB” shall mean the location(s) of urban local bodies for which the work has been allotted and where the services are to be delivered.
- “Specifications” shall mean and include schedules, details, description, statement of technical data, performance characteristics, standards (Indian as well as International) as applicable and specified in the Bidding Documents
- “Bidder” or “Software Development Agency (SDA)” means any firm or group of firms or companies (called consortium) offering the solution(s), service(s) and/ or materials asked for in the RFP. The word Bidder, when used in the pre-award period shall be synonymous with Bidder, and when used after intimation of successful bidder shall mean the successful bidder, also called ‘Vendor or Bidder’, with whom Govt. signs the Contract.
- “Services” means requirements defined in this Request for Proposal including all necessary additional services associated thereto to be delivered by the Vendor.
- “Installation” means the Vendor’s written notification that the system required for delivery of the desired “Services” has been installed by the Vendor in accordance with requirements and the project plan, and is ready for the acceptance testing.
- “Final Acceptance” means the UD&HD written certification on the basis of report of agreement/acceptance from Dhanbad Municipal Corporation that the equipment & Services delivered has been verified as satisfactory in accordance with the defined Specifications.
- "Acceptance Test Documents" means a mutually agreed document, which defines procedures for carrying out complete test on the equipment, software & services against the technical specifications. It should define tests to be carried out, test equipment and expected test results.
- “Intellectual Property Right”, also called “IPR”, means any and all copyrights, moral rights, trademarks, patent, and other intellectual proprieties.
- “Law” or “Legislation” - shall mean any Act, notification, bye law, rules and regulations, directive, ordinance, order or instruction having the force of law enacted or issued by the

Government of India or State Government or regulatory authority or political subdivision of government agency.

- "Third Party Agency" shall mean any agency appointed by UD&HD, JHARKHAND for monitoring the "Systems" during commissioning and operation.
- Standard Bid Documents (SBD) means the RFP documents. The RFP includes the following Sections:
 - Section I: Introduction and Instruction to Bidders
 - Section II. : General Terms and Condition
 - Section III: Scope of work, Technical Requirements, Functional requirements etc.
- DMC means 'Dhanbad Municipal Corporation'.
- "OEM" means Original Equipment Manufacturer company, that is incorporated in India or abroad, who has management control over the manufacturing/production process, Quality Assurance, Procurement of Raw materials/manufacturing process inputs marketing and warranty services of the resultant products, of at least one manufacturing facility /factory where the manufacturing of equipment, related accessories, as required for the JNNURM, Jharkhand etc. is carried out.
- PBC means Pre-Bid Conference
- UD&HD means URBAN DEVELOPMENT & HOUSING DEPARTMENT.
- SLSS means State Level Software Solution.

2.3 Details of documents to be furnished for online bidding

1. Scanned copies of the following documents to be up-loaded in.pdf format on the website <https://jharkhandtenders.gov.in> in 1st Cover (tender fee/EMD)folder.

- i. D.D. towards Tender fee.
- ii. Bank Guarantee (BG) towards EMD (Bank Guarantee as per Appendix 'D').

2. Scanned copies of the following documents to be up-loaded in .pdf format on the website <https://jharkhandtenders.gov.in> in 2nd Cover (Technical Qualification)folder.

- i. Technical Qualification information and supporting documents as specified in (Section-I) of SBD.

Certificates, undertakings, affidavits as specified in SBD.

- i. Undertakings that the bid shall remain valid for the period as specified in SBD.
- ii. And following:
 - a) Bid Letter Form [Format as per Appendix 'A']
 - b) Authorization letter [As per Appendix 'B']
 - c) Bidder's profile [Format as per Appendix 'E']
 - d) Bidder's experience [Format as per Appendix 'F' and Appendix 'K']
 - e) Technical Solution [Format as per Appendix 'G']

- f) Proposed Resource Deployment [Format as per Appendix 'H'] and Affidavit as per Appendix 'Q'
 - g) Certificate of OEM [Format as per Appendix 'J']
 - h) Duly filled in & Signed un priced BoM
 - iii. Any other information pursuant to Technical Qualification Criteria
3. Scanned copies of the following documents to be up-loaded in .pdf format on the website <https://jharkhandtenders.gov.in> in 3rd Cover (financial bid) folder.
- i. Duly filled in & signed BoM
 - ii. Format for Schedule of Costs [Appendix 'I']
4. Uploaded documents of successful bidder will be verified with the original before signing the agreement. The successful bidder has to provide the originals to the concerned authority on receipt of such a letter, which will be sent though registered post or speed post or delivered by hand.
5. Uploaded documents should be digitally signed by the bidders.

2.4 Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of its bid, and UD&HD will be in no case responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

2.5 Composition of the RFP

The goods required, bidding procedures, and contract terms are prescribed in the RFP document. In addition to the Notice Inviting Tender, the RFP document includes:

- Project Background
- Instructions to Bidders
- General Terms and Conditions
- Scope of Work, Functional Requirement
- Forms and Schedules

The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or to submit a Bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in the rejection of its bid.

2.6 Clarification on RFP and Pre-Bid Conference

The bidders or their designated representatives are invited to submit their queries on or before 03/09/2015, 17:00 Hrs at UD&HD Govt. of Jharkhand, through the mode given in the NIT. They (bidders) or their designated representatives (one) are also invited to attend the Pre-Bid Conference (PBC) at their own cost, on 04/09/2015, 15:00 Hrs at UD&HD Govt. of Jharkhand, Project Building Dhurwa, Ranchi -834004.

- In this PBC, UD&HD may address some of the selective clarifications sought by the bidders with regard to the RFP document and the project. The interested bidders must submit their queries through post or email (UD&HDeprocurement@gmail.com) in writing. Queries received after the set time limit shall not be considered. Document should contain NIT & e-Tender (RFP) Reference No. and RFP Name.
- If required, appropriate corrigendum to this RFP document would also be put up on the website. Such corrigendum, if issued, would form part of this RFP and the bidders would be advised to prepare their technical and financial bids in accordance with such corrigendum.
- UD&HD reserves the right not to respond to any/all queries raised or clarifications sought if, in their opinion and at their sole discretion, they consider that it would be inappropriate to do so or do not find any merit in it. The minutes of the PBC would be circulated online.
- Department will not entertain any further clarifications regarding the RFP document after the pre-bid queries submission date.
- Any deviation with respect to the number of items, specification and other details mentioned in this RFP document, should be communicated till the date of submission of pre-bid queries only.

2.7 Bidding and Selection Process

The bid document is not transferable. The selection of the bidder under this RFP will be effected on a two stage evaluation process (i) Technical Bid and (ii) Financial Bid.

2.8 Documents Constituting the Bid

Documents comprising the bidders' proposal submitted by the bidder shall comprise the following:

Part 1: Bid Price:

1. Tender Fee
2. Earnest Money Deposit (EMD)

Part 2: Technical Qualification Bid:

1. Bid Letter Form [Format as per Appendix 'A']
2. Authorization letter [As per Appendix 'B']
3. Bidder's profile [Format as per Appendix 'E']

4. Bidder's experience [Format as per Appendix 'F' and Appendix 'K']
5. Technical Solution [Format as per Appendix 'G']
6. Proposed Resource Deployment [Format as per Appendix 'H'] and Affidavit as per Appendix 'Q'.
7. Certificate of OEM [Format as per Appendix 'J']
8. Duly filled in & Signed un priced Bill of Material (BoM) as per Appendix 'O'
9. Other necessary documents as per this SBD.

Part 3: Financial Bid:

- i. Duly filled in & signed Bill of Material (BoM)
- ii. Format for Schedule of Costs [Appendix 'I']

Bidders shall furnish the required information on their technical and financial strengths in the prescribed formats only. Any deviations in format may make the bid liable for rejection. The bid shall be attached with the covering letter as specified in Bid letter Form given in Appendix "A" and shall be enclosed in the main envelope, which has the Earnest Money Deposit, Technical bid envelope and Financial bid Envelope. Proposals not submitted with this covering letter shall be liable for rejection. The covering letter must be signed by an authorized signatory of the Bidder, who is authorized to commit the bidder to contractual obligations. All obligations committed by such signatories must be fulfilled.

2.9 Preparation of Bid

Bids shall be prepared as per the following guidelines:

- All bids should be complete and carefully worded and must convey all of the information requested by UD&HD. If errors or exceptions are found in the bidder's offer, or if the bid fails to confirm to the requirements of the RFP, UD&HD will be the sole judge as to whether that variance is significant enough to reject the bid.
- Bids should be prepared simply and economically. All data, materials, and documentation shall be available in a clear, concise form and reproducible upon request "at no cost" for UD&HD internal use. UD&HD reserves the right to reproduce bids for internal use in the evaluation process.
- Each part of the bid (Price of Bid, Technical and Financial) should be uploaded separately. All documentation submitted should be digitally signed. Documentation shall include product (hardware, software) literature and specifications.
- The bidder is solely responsible for all costs and expenses associated with the preparation of the bid, and of any supplementary presentations (including any oral presentation) requested by UD&HD.

- Bids must be made in the official name of the firm, or corporation under which the business is conducted (showing official business address), and must be authorized, to legally bind the business entity submitting the bid.

2.10 Bid Structure

UD&HD will open bids at the place and time decided by them or mentioned at important information sheet. Bidder's representatives (Maximum 2) may attend the opening, and those who are present shall sign a register evidencing their attendance.

- The Evaluation Committee would evaluate the Technical qualification criteria of the bidders. Successful bidders will be informed subsequently. In case of change of place, date and time of opening of the Technical bids the prospective bidders shall be notified separately through writing, mail, fax or on the website <https://jharkhandtenders.gov.in>.
- Commercial Bid will be opened for those bidders who shall qualify in the Technical Bid evaluation. In case of change of place, date and time of opening of the Commercial bids the prospective bidders shall be notified separately through writing, mail, fax or on the website <https://jharkhandtenders.gov.in>.

2.11 Technical Qualification Criteria

Sl. No	Eligibility Criteria to Participate	Preferable Documents
1.	The lead partner of the consortium shall be ISO 9001:2008 certified company.	Copy of relevant certificate
2.	The lead partner of the consortium shall have a valid and existing CMMi Level 5 certification.	Copy of relevant certificate
3.	The lead partner of the consortium should have made a payment of Rs. 25,000 (Rupees Twenty Five Thousand only) for the tender document	Appropriate Demand Draft
4.	The lead partner of the consortium should submit the Bid security/EMD of INR 40 lakhs on behalf of the consortium. Bank Guarantee (BG) from any nationalized bank for the same in favor of UD&HD, Govt. of Jharkhand Payable at Ranchi.	Bank Guarantee (BG) as per the format in Appendix 'S'
5.	Both the partner of the consortium shall be a legal entity registered under applicable laws in India since last 5 years (as of 31st March 2015) and who have their registered offices with legal presence in India.	Copy of Registration Certificate/ Certificate of Incorporation
6.	Either of the two partners of the consortium should be in software development business since last 5 years (as of 31st March 2015).	Copy of Work Orders along with completion certificate / successful progress



		certificate as on date (of relevant project/s) executed in demonstrating the criteria
7.	<p>Either of the two partners of the consortium should have executed transaction based e-Governance projects (activities like software development, hardware procurement and installation, service delivery infrastructure development, and deployment of manpower to execute service delivery, etc.) for Central Government / State Government / PSU / Government Undertaking / ULB in India with ONE project value of Rs. 20 Cr or above OR TWO projects value each of Rs.10 Cr or above in the last 5 years (as of last date of submission of bid) as evidenced by the certificate issued by a competent authority of the concerned government organization(s).</p> <p>In order to enable Department to assess the authenticity of the above, the bidder shall provide relevant and necessary documentary evidence in relation to the previous similar contracts executed by the bidder. Eg. Copies of the Work Order and its timely completion certificates, customer satisfaction certificate etc. Govt. reserves the right to verify, if it so desires, the correctness of documentary evidence furnished by the bidder.</p> <p>Department further reserves the right to verify the successful operation and performance of qualifying projects and Bidder shall arrange permission for the same.</p>	<p>Copy of Work Order / Contract Agreement (including detailed scope of work and terms and conditions) AND Project Completion Certificate/ Customer satisfaction certificate for each project</p> <p>Department further reserves the right to verify the successful operation and performance of qualifying projects and Bidder shall arrange permission for the same.</p>
8.	<p>Either of the two partners of the consortium must have prior experience of implementing at least 1(One) e-Governance project (Software Services Project and System Integration) for any Urban Local Bodies anywhere in India in the last five years (as of last date of submission of bid). Project must be at least Rs.5 crores or more. ULB projects only involving consultancy, hardware procurement and installation shall not be considered. The implemented solution must be presently working in the ULBs”.</p>	<p>Bidder to provide detailed work order / contract agreement along with other relevant documents (If any) to establish the scope of work. Work order / Contract should establish value of the assignment.</p> <p>Bidder to submit client certificate showing satisfactory progress of the project or project completion.</p> <p>Separate set of documents need to be provided for each cited project, else they will not be considered during</p>



		evaluation.
9.	Either of the two partners of the consortium should have prior experience of executing GIS integration project in overall e-Governance implementation assignments in India.	Work order / Contract agreement showing detailed scope of work and Client certificate for successful completion / progress of GIS integration.
10.	<p>The lead partner of the consortium be a profitable vendor and should have an annual financial turnover of at least Rs. 50 Crores (Rupees Fifty Crores only) from IT business of similar nature in each of the last three financial years.</p> <p>Certificate from Independent Chartered Accountant (CA)/CA Firm for last three financial years to be submitted.</p> <p>The other partner of the consortium should have annual turnover of at least 25% of the quoted bid price in each of the last three financial years.</p>	Certificate from Independent Chartered Accountant (CA)/CA Firm of the audited account for last three financial years to be submitted (2013-14, 2012-13, 2011-12)
11.	The bidder (or all partner of the consortium) should have positive net worth for the past three financial years (FY 14-15, 13-14 and 12-13). The bidder has to submit copies of balance sheets/profit & loss accounts/ annual reports of last three financial years (up to 31-Mar-2015).	Copies of balance sheets/profit & loss accounts/ annual reports of last three financial years
12.	Both the partner of the consortium should have valid registration under sales tax registration certificate, income tax and service tax in India.	<p>a. Copy of Sales Tax registration certificate</p> <p>b. Copy of income tax registration certificate</p> <p>c. Copy of service tax registration certificate.</p>
13.	The Bidder should have direct authorization from the Original Equipment Manufacturers (OEM) for selling and supporting the components offered under this project for the entire lifecycle of the project. Responsibility of all kind of maintenance and support of application software, hardware and networking component specified in this project will be on the selected bidder.	Copy of authorization certificate from the Original Equipment Manufacturers (OEM) for products and equipments supplied
14.	The lead partner of the consortium should have local presence and this should be an existing set up or agree to setup local office within One month from award of contract or open a project management office as required as per the need of the project at Dhanbad or Ranchi within One month.	<p>Self-Declaration (by authorized signatory) and Address proof of local office</p> <p>OR</p> <p>Self-declaration for setting up of office (by authorized signatory)</p>
15.	Both the partner of the consortium should not have been blacklisted by any State / Central Government or any	Submit Self declaration, signed by Authorized Signatory



	other government or public sector entity in India during last five years (as of 31st March 2015) for corrupt, fraudulent or any other unethical business practices or for any other reason.	
16.	The partner providing the manpower should have at least 200 professionals in software development in India in company's payroll.	Manpower certificate from HR authority of the bidder firm dated not older than 30 days from bid submission date.
17.	Bidder has to deploy a team of professionals for project management with qualification criteria as detailed in Annexure 'L'. The professionals deployed at the client location by the bidders should have experience in implementing at least one project in the Urban Development Domain. The partner claiming expertise/experience in the relevant domain would be responsible for assigning personnel for that task.	CVs to be submitted. Selection will be based on interview by competent expert panel constituted by department
18.	The partners of the consortium should enter into a Memorandum of Understanding (MoU)/Agreement with mention of the responsibilities of the parties as per scope of work of the RFP. The number of members in a consortium shall not be more than two (2). However, the lead partner of the consortium should be solely responsible (on behalf of the partner of the consortium as well) to UD&HD for successful implementation of the project.	Copy of the signed MoU/Agreement
19.	Bidder has to give acceptance to clause on period of validity of bid (2.17), PBG (3.4), warranty (3.10) and IPR (3.20).	Bidder has to provide their undertaking for acceptance to this clause by authorized signatory.
20.	EMD of the selected bidder will be forfeited in the events of (a) bidder (either of the partner of the consortium) withdraws during the evaluation process (b) does not submit unconditional acceptance to the Letter of Intent (LoI) within SEVEN days from issuance of the same.	Bidder has to provide their undertaking for acceptance to this clause by authorized signatory.

Note:

#	Consortium Eligibility Criteria
1.	The number of members in a consortium shall not be more than two (2). However, the lead partner of the consortium should be the signatory and solely responsible (on behalf of the partner of the consortium as well) to UD&HD for successful implementation of the project.
2.	The bid should contain details of all the members of the consortium including their legal status and specify their roles and responsibilities in the project.
3.	The members of the consortium should enter into a Memorandum of Understanding (MoU)/Agreement and shall specify the lead partner of the consortium. There should be mention of the responsibilities of the partners as per scope of work of the RFP and the same should be submitted to UD&HD Department along with the technical proposal.
4.	The signatory to the agreement be solely responsible for all obligations under the agreement.

2.12 Evaluation of Technical Proposals

The Evaluation Committee would evaluate the technical bids. Bidders should be ready to give the presentation on their proposed solution in front of the Evaluation Committee at a date, time and location determined by department. They are expected to reply to all the queries from the Evaluation Committee during the presentation. The presentation would be part of technical evaluation process.

Department may also undertake oral clarifications from the bidder. The primary function of clarifications in the evaluation process is to clarify ambiguities and uncertainties arising out of the evaluation of the bid documents.

Bidders considered qualified in the technical evaluation will only be considered for further financial bid evaluation. Bids which didn't qualify in the technical evaluation will be considered technically non-responsive and hence debarred from being considered from Commercial evaluation.

Bidder must provide as supporting documentary proof in form of work orders confirming year, value of services delivered in each of the projects, completion certificate from client confirming year and value, scope of work along with reference details of the client.

2.13 Evaluation of Commercial Proposals

After evaluating the Technical Bids, Department shall notify the bidders whose Technical proposals were considered acceptable to the URBAN DEVELOPMENT & HOUSING DEPARTMENT, indicating the date, time and place for opening of the Commercial Bids.

The following points may be noted for the evaluation of the Commercial Bid

- Prices shall be written in both words and figures. In the event of difference, the price in words shall be valid and binding.
- Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the Bidder does not accept the correction of the errors, its tender will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.
- Any discrepancy relating to prices quoted in the offer across different sections of the bid, only prices given in the prescribed format given in Appendix-"I" of this RFP shall prevail.

The bidder (who are qualified to open the commercial bid) with the lowest cost (L1) as per financial bid submitted in the prescribed format of this RFP shall be the successful bidder.

2.14 Amendment of RFP

At any time prior to the deadline for submission of bids, UD&HD may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the RFP by an addendum/corrigendum. All Bidders will be notified of the amendment(s), and these will be binding on them. The addendum/corrigendum will also be communicated by fax / email or published on Jharkhand e-Procurement site at <https://jharkhandtenders.gov.in>, and it will be responsibility of the bidder to check the web site for updates.

In order to allow Bidders a reasonable time to take the amendment into account in preparing their bids, UD&HD, at its discretion, may extend the deadline for the submission of bids.

2.15 Bid Price

- The bidder shall indicate the prices in Indian Rupees only as per the format provided in Appendix 'I' while quoting rate per unit against each item.
- Unit and total prices of equipment and services offered should be quoted inclusive of all taxes and duties, and all other cost incidental thereto.
- Prices quoted by the bidder shall be firm. Bids submitted with adjustable price quotations will be rejected.
- The bidder's pricing shall take into account the following aspects
 - The price should contain the all-inclusive price and costing details as per the Cost Sheet format provided in Appendix 'I'.
 - Supply, Insurance, Transportation, Delivery, Testing, implementation and commissioning of all hardware and software.
- UD&HD reserves the right to part procurement or staggered procurement based on unit rates offered.
- Department will not take responsibility for cost escalation during the contract period for the proposed scope of work.
- Any change in scope and corresponding increase in cost will be subject to approval of competent authority in Government of Jharkhand or any related stake holder.
- Bidder will not be allowed to stop the work as per contracted scope due to any dispute arising out of implementation, scope change.

2.16 Bid Security(EMD) & Tender Cost

- The Bidder shall furnish both (tender cost & EMD) in a separate envelope marked as 'Bid Price'.
- Tender Cost/Fee(nonrefundable) of **RsTwenty FiveThousand** in the form of Demand Draft in

favour of Director, Municipal Administration, URBAN DEVELOPMENT & HOUSING DEPARTMENT, Government of Jharkhand payable at Ranchi, Jharkhand.

- Bid Security (EMD) of Rs Forty Lakhs in the form of Bank Guarantee (BG) in favour of Director, Municipal Administration, URBAN DEVELOPMENT & HOUSING DEPARTMENT, Government of Jharkhand. (As per format provided in Appendix 'D'). Bank Guarantee (BG) be drawn on a Nationalized Bank in favor of "Director, Municipal Administration, URBAN DEVELOPMENT & HOUSING DEPARTMENT", payable at Ranchi.
- The EMD shall remain valid for a period of 180days (in case of BG, additional claim period of 30 days will be applicable) from the date of submission of the proposal, any period of extension subsequently requested. In case Unsuccessful Bidder's will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of Bid security validity.
- The successful Bidder's EMD will be returned upon the Bidder furnishing the Performance Security 10 % of the quoted price as per the format provided in Appendix 'S'.
- The Bid Security may be forfeited either in full or in part, at the discretion of UD&HD, on account of one or more of the following reasons:
 - i The Bidder withdraws the Bid offer during the period of validity specified in the RFP.
 - ii Bidder does not respond to requests for clarification of the Bid offer.
 - iii In case of a successful Bidder, the said Bidder fails to furnish the Performance Security within 15 days from the date of issue of Lol.

2.17 Period of Validity of Bids

Bids shall remain valid for a period of six months (180days) from the date of bid submission. Any Bid valid for a shorter period shall be rejected as non-responsive.

In exceptional circumstances, UD&HD, JHARKHAND may solicit Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The Bid security shall also be suitably extended. A Bidder granting the request is neither required nor permitted to modify the Bid.

2.18 Format and Signing of Bid

- The bidder shall upload the bid in following folder:
 - Folder 1: Bid Price:**
 - Folder 2: Technical Bid:**
 - Folder 3: Financial Bid:**
- The scanned copies of the bid documents shall be digitally signed.
- All pages of the bid should be serially numbered.

2.19 Bid Due Date

Last date/time of submission of bids	18/09/2015 up to 17:00 Hrs
Date/time of Technical Bid opening	21/09/2015 at 10:00 Hrs

2.20 Opening of Bids

The bids will be opened, in three sessions, one each for Bid price, Technical and Commercial online at the specified date, time. In the event of the specified date of bid opening being declared a holiday for UD&HD, Bids shall be opened at the same time and location on next working day.

During bid opening preliminary scrutiny of the bid documents will be made to determine whether they are complete, whether required bid security has been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Bids not conforming to such preliminary requirements will be prima facie rejected.

The Technical Bids of only the bidders who have deposited the tender fee and EMD as per the SBD will be opened. Similarly, The Commercial Bids of only the bidders' short-listed from the Technical bids will be opened. The bids will be opened on the scheduled date and time.

2.21 Award of Contract

UD&HD, JHARKHAND will award the contract to successful bidder whose bid has been determined to be responsive and has been determined to be most competitive provided further that the bidder is determined to be qualified to perform the project satisfactorily.

2.22 Right to reject any or All Bids

UD&HD, JHARKHAND reserves the right to reject any Bid, and to annul the bidding process and reject all bids at any time, without thereby incurring any liability to the affected Bidder(s) or any obligation to inform the affected Bidder(s) of the grounds for such decision.

2.23 Notification of Successful Bidder and Acceptance by Successful Bidder

- Prior to expiration of the period of Bid validity, UD&HD, JHARKHAND will notify the successful Bidder in writing that its Bid has been accepted by issuance of Letter of Intent (LOI).
- Within 7 days of receipt of such LOI, the successful Bidder shall give its acceptance to UD&HD, JHARKHAND in writing. Subsequently UD&HD, Jharkhand will issue Purchase Order and or enter into a contract agreement.
- Bidder shall submit the required Performance Security within 15 days after issuance of LoI.

SECTION-II

3. GENERAL TERMS & CONDITIONS

3.1 General Information

During the evaluation process, UD&HD reserves the right to request additional information or clarification from bidders. Such request and response to the same shall be purely of a clarifying nature, with no impact on the substantive content, quality or cost of the services offered.

The terms and conditions in this tender document shall prevail unless otherwise modified by UD&HD as an Addendum/Corrigendum to this tender document. UD&HD reserves the right to reject, in whole or in part, any bid, which does not comply with such terms and conditions. UD&HD reserves the right to retain all bids submitted and to use any ideas in a bid, regardless of whether that bid is selected. Submission of a bid indicates acceptance by the firm of the conditions contained in this Request for Proposals, unless clearly and specifically noted in the bid submitted, and confirmed in any resulting contract between UD&HD and the firm selected.

3.2 Submission and Withdrawal of Bid

Bids are to be as directed under *Notice Inviting Tender and Instructions to Bidders*. Failure to do so may result in premature opening of, or a failure to open such bids. Bids submitted through e-Procurement process will only be accepted for consideration. Bids may be withdrawn by the bidder prior to the closing date and time.

3.3 Governing Language

All correspondence and other documents to be exchanged by the parties shall be written in the English language.

3.4 Performance Security (Performance Bank Guarantee)

The successful bidder shall at his own expense deposit with UD&HD, within fifteen (15) working days of the date of notice of award of the contract or issuance of Letter of Intent (LoI) prior to signing of the contract whichever is earlier, an unconditional and irrevocable Performance Security (Performance Bank Guarantee) from a nationalized bank in India, payable at Ranchi, in the format prescribed in Section III (Appendix 'S') of this RFP, payable on demand, for the due performance and fulfillment of the contract by the bidder.

This Performance Bank Guarantee will be for an amount of 10% of the total contract value, valid till one year after expiry of contract, and shall be submitted by the successful bidder within 15 days (in case the 15th day is a holiday the next working day will be acceptable) of receipt of the Letter of Intent (Award of Contract) from UD&HD. All incidental charges whatsoever such as premium; commission etc. with respect to the performance bank guarantee shall be borne by the bidder.

Subject to the terms and conditions in the performance bank guarantee, one year after the contract period, the performance bank guarantee will lapse automatically. The performance bank guarantee may be discharged/ returned by UD&HD upon being satisfied that there has been due performance of the obligations of the bidder under the contract. However, no interest shall be payable on the performance bank guarantee.

Performance Security shall be invoked by UD&HD in the event the Bidder

1. Fails to meet the milestones provided for in the Time Schedule for Implementation and Operations contained in Section II or any changes agreed between the parties,
2. Fails to perform the responsibilities and obligations as set out in Section I to the complete satisfaction of UD&HD
3. Misrepresentations of facts/information submitted to UD&HD.
4. Unable to service the contract or meet the requirements of the project for whatever reason

Notwithstanding and without prejudice to any right whatsoever of UD&HD under the contract in the matter, the proceeds of the PBG shall be payable to UD&HD as compensation for any loss resulting from the bidder's failure to perform/comply its obligations under the contract. UD&HD shall notify the bidder in writing of the exercise of its right to receive such compensation within 40 days, indicating the contractual obligation(s) for which the bidder is in default.

UD&HD shall also be entitled to make recoveries from the bidder's bills, performance bank guarantee, or from any other amount due to him, an equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement.

In case the project is delayed beyond the project schedule as mentioned in this RFP, for the reasons attributable to the service provider, the performance bank guarantee shall be accordingly extended by the service provider for the duration equivalent to the delays caused in the project.

3.5 Mobilization Advance

The successful bidder may be given mobilization advance to a maximum of 10% of the contract value after start of work and submission of Performance Bank Guarantee for an amount of 10% of the Contract value as mentioned in the section 3.4 above. In case, mobilization advance is given to the successful vendor then, the full amount of the mobilization advance shall be recovered from the first milestone payment done to the vendor. Also, in case the first "payment milestone" amount is less than the value of mobilization advance, then the rest amount of mobilization advance be recovered from subsequent payment milestones to the vendor (*As per Payment Schedule mentioned in section 3.16 of the RFP document*).

3.6 Purchase Order

Detailed purchase order shall be issued in favour of successful bidder only after the successful bidder has accepted the contract and has submitted acceptable Performance Security to UD&HD.

3.7 Sub-Contracting

The bidder may form Consortium (with a maximum of two partners in the consortium) with any other party for participation in the Bid as per the technical evaluation criteria mentioned in the bid document.

In no other case, sub-contracting is done by the bidder or partners of the consortium except for the following services –

- Site Preparation (electrical work, earthing, minor civil work)
- GIS field survey work

Also, the selected vendor shall not outsource the work (part/whole) to any other associate / franchisee / third party under any circumstances without the prior approval of the department.

3.8 Permits and Licenses

Bidder shall be responsible to comply with any permits and / or licenses that may be required for him to perform the contract. However, UD&HD will make available any supporting material that may be needed from it, for him to seek licenses / permits.

3.9 Bidder Representations

Each bidder by submitting a bid represents that:

- The bidder has read and understood this RFP (including all specifications and attachments) and that the bid is made in accordance therewith.
- The bidder has reviewed the RFP, has become familiar with the conditions under which the work is to be performed, and has correlated personal observations with the requirements of the proposed contract documents. For the purpose, if required, bidder may visit respective ULBs & other locations “if any”.
- The bid is based on the terms, materials, systems and equipment required by this RFP, without exception.
- The bidder is qualified to provide the services required under this RFP and, if awarded the contract, will do so in a professional, timely manner using the bidder's best skill and attention.

3.10 Warranty

The bidder will provide comprehensive onsite warranty of all components to be supplied under this contract including hardware, system software and application software of e-Governance implementation in Municipalities for a period of three years from the date of its successful implementation and commissioning and acceptance of the same by UD&HD.

- (a) The successful bidder shall warrant to UD&HD that all the components of e-Governance implementation in Municipalities project designed, supplied and deployed by the successful bidder shall be of the most suitable grade and fit for the intended purpose. They shall be free from all defects and faults in design and consistent with established and generally accepted standards for the system of the type ordered and in full conformity with the requirement specifications. The successful bidder shall warrant further that the services to be carried out under this contract shall conform to generally accepted professional standards and UD&HD's practices.
- (b) The warranty shall be valid till completion of the contract, i.e. the period of implementation (Go-Live) plus 3-year warranty period.
- (c) During the warranty period, the successful bidder will provide all product(s) and documentation updates, patches/ fixes, version upgrades, and new software version releases within 30 days of their availability and should carry out installation and operation of the same at no additional cost.
- (d) If during the period of warranty any component of the software solutions is found defective, and which failed in test or in operation, the same shall be rectified or replaced by the successful bidder free of cost. However if some component of the solution experience the failure more than three times in a period of six months, then the UD&HD reserves the right to get it replaced by the bidder at no extra cost to UD&HD.
- (e) Any approval or acceptance by UD&HD of the software solution shall not in any way limit the liability of successful bidder of his responsibility.
- (f) UD&HD shall promptly notify the successful bidder in writing of any defect and claim arising under this warranty. Such notice shall be valid during the period of warranty and up to 30 days after the date of expiry of the period.
- (g) Upon receipt of such notice, the successful bidder shall promptly and satisfactorily rectify or re-implement the defection portion of the software at state and ULBs.
- (h) The liability of successful bidder in respect of such claims against warranty shall be limited to rectification or re-implementation of the concerned component of the software, inclusive of all charges for such rectification and re-implementation. Such rectification or re-implementations shall be warranted for the same period as mentioned above.

- (i) In the event of an emergency where delay in rectification would cause serious loss or damage, if successful bidder fails to remedy the defects in accordance with the contract within a reasonable time, UD&HD may proceed to take such remedial action as may be necessary at the risk & cost of the successful bidder and such amount may be recovered from performance security.
- (j) The warranty of the successful bidder shall be without prejudice to any other rights or remedies that UD&HD may have against the successful bidder under the contract.
- (k) The cost of any special or general maintenance of system rendered necessary during the warranty period due to defects in the system or defective work carried out by the successful bidder shall be to the account of the successful bidder.
- (l) The successful bidder shall co-operate with UD&HD in all ways in the rectification or re-implementation work, so as to minimize to the extent possible the interruption in operations.
- (m) The successful bidder shall prove and establish the performance of the system as specified by testing, should he be unable to do so in the first instance, he shall be given an opportunity to rectify the defects and the performance shall be repeated within a specified time. Should the performance of the system still not be upto mark, UD&HD shall recover from successful bidder suitable amounts towards the performance deficiencies or reject the system in case the deficiency is beyond the specified limit.

3.11 Independent Contractor

Bidder is an independent contractor and shall not be deemed the agent or employee of UD&HD for any purpose whatsoever.

3.12 Other Contracts

UD&HD may award other contracts for additional work, and the successful bidder shall fully cooperate with such other contractors, and carefully fit its own work to such work, as may be directed by UD&HD. The successful bidder shall not commit or permit any act by its forces, which will interfere with the performance of work by any other contractor.

3.13 Insurance Requirements

The bidder is required to ensure that all components to be supplied under this contract including equipments and software, in addition to the persons deployed on site for the project at all times are

adequately insured at no extra cost to UD&HD. No separate cost would be payable to the bidder.

3.14 Indemnification

Except for expenses or liabilities arising from the negligence of UD&HD, the bidder shall indemnify and hold UD&HD harmless, against any and all expenses and liabilities, arising out of the performance or default of this Contract as follows:

The bidder agrees to the extent that, there is a causal relationship between its negligent, reckless or intentionally wrongful action or inaction, or the negligent, reckless or intentionally wrongful action or inaction of any of its employees or any person, firm, or corporation directly or indirectly employed by the bidder, and any damage, liability, injury, loss or expense (whether in connection with bodily injury or death or property damage or loss) that is suffered by UD&HD and its employees, or by any member of the public, to indemnify and save UD&HD and its employees harmless against any and all liabilities, penalties, demands, claims, lawsuits, losses, damages, costs and expenses, arising out of the performance or default of this contract. Such costs are to include defense, settlement and reasonable attorneys' fees incurred by UD&HD and its employees. This promise to indemnify shall include bodily injuries or death occurring to bidder's employees and any person directly or indirectly employed by bidder (including without limitation any employee of any subcontractor), UD&HD employees, the employees of any other independent contractors, or any member of the public. When UD&HD submits notice, bidder shall promptly defend any aforementioned action. This obligation shall survive the suspension or termination of this agreement. The limits of insurance coverage required herein shall not serve to limit this indemnity obligation. The recovery of costs and fees shall extend to those incurred in the enforcement of this indemnity.

3.15 Discrepancies

Should the bidder conclude from the RFP that, there exists any inconsistency, discrepancy or conflict within the content thereof, of figures and word indistinct, or be in doubt as to the true meaning of any part of the RFP, he should notify UD&HD for clarification, prior to the submission of his bid.

3.16 Time Schedule

UD&HD envisages the completion of the successful implementation of the e-Governance project within a timeframe 1(One) Year from the start of the project (signing of the agreement). Post successful implementation, the bidder needs to maintain and support the application for a period of 3 years.

An Indicative Project Timeline has been given below:

Sl. No.	Activity/Task	Timeline
1.	Project Start	T
2.	Detailed Requirement Analysis (including software requirement study), submission of document with detailed Functional and Customization requirement	T + 6 Weeks
3.	System Design, submission of High Level and Low Level Design document, Acceptance of Design documents by Dhanbad Municipal Corporation/UD&HD	T + 8 Weeks
4.	Inspection and Supply of requisite Hardware / Network equipments for Project	T + 10 Weeks
5.	Installation and Commissioning of requisite Hardware / Network equipments for Project	T + 12 Weeks
6.	Completion of Data Digitization and Migration and its acceptance by UD&HD	T +16 Weeks
7.	Preparation and submission of Test Plans, and Acceptance of Test Plans by Dhanbad Municipal Corporation/UD&HD	T + 16 Weeks
8.	User Acceptance Test and Bug Fixes for phase-I modules**	T + 18 Weeks
9.	Go live of Phase-I modules** (Without GIS integration)	T + 20 Weeks
10.	User Acceptance Test and Bug Fixes for Phase-I modules**	T + 22 Weeks
11.	Go live of Phase-II modules** (Without GIS integration)	T + 24 Weeks
12.	Preparation and Submission of the following manuals - <ul style="list-style-type: none"> • Systems Administration Manuals • User manuals (Hindi & English) 	T + 32 Weeks

	<ul style="list-style-type: none"> • Installation Manuals • Operational Manuals • Source Code • Maintenance Manuals 	
13.	User Acceptance Test and Bug Fixes for Phase-III modules**	T + 40 Weeks
14.	Completion of GIS integration with the Software Application	T + 44 Weeks
15.	Go live of Phase-III modules**	T + 48 Weeks
16.	Post Go Live Support	36 months after the final acceptance of the application
17.	Preparation of Training Material, Conducting Training and submission of Training documents	As per project requirement during the entire duration of the project

* T = Date of Signing of Contract / Agreement

**Phasing of the Modules as given below –

S.No	Phase Wise List of Modules
Phase-I	
1.	Birth and Death Registration (Integration of e-District Software)
2.	Grievance Redressal
3.	Licenses
4.	Content Management
5.	Forms Management
6.	Status Tracking
7.	Payment of Property Tax
8.	Payment and Mgt of Utilities Bills
9.	Schemes Management System
Phase –II	
10.	Inventory Management System
11.	E-Procurement
12.	Legal Management System
13.	Water Supply and other utilities
14.	Financial Accounting
15.	Personnel Information System
16.	MIS and Reporting
Phase –III	
17.	Building Plan approval

18.	Project/Ward Works
19.	Solid Waste Management
20.	Assets and Land Management System
21.	Large Scale Document and image base Management
22.	Other Module

3.17 Payment Schedule

The payment schedule is as follows:

- The payment will be in combination of both milestone based payment and QGR (Quarterly Guaranteed Revenue) based payment. The QGR payment period will be through the maintenance period, which would start from the date of Go Live as defined in the RFP.
- QGR payment for each quarter shall include the application development, procurement, implementation, operation and maintenance of equipments as specified i.e. for each site along with the specified solution/ services for the entire service period. The detailed schedule in each head is specified in the table below.

Category	Payment – Milestone Based	Payment QGR Based	Remarks
Mobilization advance	Maximum of 10% of contract value	-	Payment only after submission of PBG as per RFP clauses.
Hardware/Network Equipment	80 % of the of total Hardware(including Video Conferencing items) and Networking Equipment Cost on Inspection, Supply, Installation and commissioning of all the equipments at the respective sites after acceptance by UD&HD.	20% of total Hardware and Networking Equipment Cost will be paid through QGR for the warranty support period of 3 year	QGR Payment start date will start from the date of successful completion of “System Go Live of all the modules”
System Software / Licenses	100% on installation and commissioning at the respective sites and submission of the license details to UD&HD	-	-
Application Cost	25% of Total Application Development Cost on completion of UAT, development and Go-Live of Phase-I modules	20% of Total Application Development will be paid through QGR for the maintenance period of 3 years	QGR Payment start date will start from the date of successful completion and acceptance of “GIS Integration and
	25% of Total Application Development Cost on		



	completion of UAT, development and Go-Live of Phase-II modules		Go-Live of all the modules of Software Application”
	30% of Total Application Development Cost on Completion of GIS Integration, UAT, development and Go-Live of Phase-III modules and acceptance by UD&HD.		
Data Digitization & Migration	50 % on completion of Data Entry, its Digitization and acceptance by UD&HD		
	50 % on successful Migration and system Go-Live with migrated data		
Site Preparation	100% on Completion of Site preparation and acceptance by UD&HD		
Training	100% of Training cost on successfully completion of training and submission and acceptance of all user manuals by UD&HD.		
Manpower and Data Entry Operator Cost		100% of total Cost will be paid through QGR for the contract period (based upon salary slips, attendance report with man month utilization report)	
Help Desk Resource Cost		100% of total Cost will be paid through QGR for the contract period	
Other Payments			
Category	Payment – Milestone Based	Payment QGR Based	Remarks
Optional / Additional Cost (if any)	--	--	Yearly Payment as per actual

Note: Mobilization Advance (if any) shall be recovered as per clause “3.5” of the RFP.

3.18 Taxes & Duties

- (a) The bidder is liable for all taxes and duties etc as applicable.
- (b) UD&HD would deduct all statutory taxes/ duties as per rule.

3.19 Services

The bidder is required to provide support services as per service level agreement, with details as in Appendix “N”.

3.20 Intellectual Property Right (IPR)

“Intellectual Property Rights” means and includes all rights in the Software, its improvements, up gradations, enhancements, modified versions that may be made from time to time, database designed, compilations made, source code and object code of the software, the said rights including designs, copyrights, trademarks, patents, trade secrets, moral and other rights therein;

- a. Source code will be handed over to UD&HD, the existing IP of the product will belong with the OEM. IP of any customization done as a part of the implementation shall belong to the UD&HD. Bidder will ensure that there is no violation of intellectual property rights, in any form, during execution of this project.
- b. In case of any infringement/ violation, bidder shall indemnify the State Government from all actions, costs, claims, demands, expenses & liabilities, whatsoever, resulting from any actual or alleged infringement as aforesaid and State Government/Competent Authority shall be defended in the defense of any proceedings which may be brought in that connection at the expenses of the bidder.
- c. The above will exclude for any proprietary products used in the implementation. However customization of such proprietary products will be covered under the above IPR clause described 3.19a and 3.19b.

3.21 Change Orders

The Purchaser may at any time by written order given to the bidder make changes within the general scope of the contract in any one or more of the following: -

- a) Designs and specifications
- b) Method of transportation or packing
- c) Place of delivery
- d) Services to be provided by the Vendor

If any such change causes an increase or decrease in the cost or the time required for the execution of the Vendor, an equitable adjustment shall be made in the contract price or delivery schedule or both, and the contract shall accordingly be amended.

3.22 Variation of Quantity

Bill of Material (BoM) and specifications mention in the RFP are as per the minimum requirement of the project. Bidder may quote as per the solution proposed for all the components necessary to meet the intent of the project maintain the minimum requirement specified in the RFP. Accordingly, UD&HD reserves the right to vary the quantity of components so as to complete the project.

3.23 Liquidated Damages

Penalty will be levied at the rate of 1% per week or part thereof of delay on the respective milestone subject to a maximum of 10% of the value of the delayed service if the work has not been completed in full within the stipulated time schedule as per contract subject to force majeure conditions. If the delay is more than 10 weeks, UD&HD has the right to terminate the contract and encash the Performance Security. Besides, such performance may entail black listing of the Vendor.

3.24 Conflict of Interest

The Vendor should provide professional, objective, and impartial advice and at all times hold the Department's interests paramount, strictly avoid conflicts with other assignments/jobs or their own corporate interests and act without any consideration for future work. The Vendor shall not deploy former employees of UD&HD in any assignment under the RFP.

3.25 Vendors Personnel

Vendor need to deploy a team of personnel for implementation of the project.

3.25.1 Description of Personnel

The Vendor shall employ and provide such qualified and experienced Personnel as required to carry out the Services and approved by UD&HD.

3.25.2 Removal and/or Replacement of Personnel

- Except as UD&HD may otherwise agree, no changes shall be made in the Personnel proposed in the bid for the project. If, for any reason beyond the reasonable control of the Vendor, such as retirement, death, medical incapacity, among others, it becomes necessary to replace any of the proposed Personnel, the Vendor shall provide as a replacement a person of equivalent or better qualifications prior to relieving the outgoing personnel.

- If UD&HD finds that any of the Personnel have
 - Committed serious misconduct or have been charged with having committed a criminal action, or
 - Have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Vendor shall, at the UD&HD's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to UD&HD.
- The Vendor shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.
- Details of resource deployment and detail of each deployed resource be provided as per Appendix 'H' and to be submitted as a part of Technical bid.
- The resource category, their minimum educational qualification years of experience as required under this project are given in Annexure 'L'
- The bidder is to propose the number of resource(s) for each category as per Annexure 'L' (except and otherwise specified for few specific categories) keeping in consideration of meeting the project schedule and scope of work.
- The Bidder shall give an affidavit for manpower (resource provided) as per Appendix 'Q' and submit it as part of Technical Bid.

3.25.3 Requirement of Personnel

The Vendor may be required to provide personnel beyond the project implementation period (i.e. after 3 years of post Go-Live) for three (3) more years for carrying out the work further. The required number of personnel may be 3 or more (they would be from application development, GIS solution category etc.) All the personnel shall be from the team deployed by the vendor for implementation (involved during the project implementation).

3.26 Default and Termination

- (a) UD&HD may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the Vendor, terminate the Contract:
- i. If the Vendor fails to deliver either the whole or part of the "Services" within the time period(s) specified in the Contract or any extension thereof granted by UD&HD.
 - ii. If the Vendor fails to perform any other obligation(s) and,
 - iii. If the Vendor, in either of the above circumstances, does not cure its failure within a period of 30 days (or such longer period as UD&HD may authorize in writing) after receipt of the default notice from UD&HD.

- iv. If the vendor becomes insolvent or bankrupt.
- v. On a notice period of 60 days.
- (b) All data /reports collected by the bidder shall be returned in its original form upon such terminations. Bidder shall not have any right on this database, which is proprietary to UD&HD.
- (c) Non-adherence to Time Schedule of project delivery phases may also lead to termination of the contract.

3.27 Use of Documents and Ownership of Documents

- a) All bids and supporting materials (including all data, material, and documentation originated and prepared for UD&HD pursuant to this RFP, and including correspondence relating to this RFP shall, upon delivery to UD&HD, become the property of UD&HD.
- b) All project related documents issued by UD&HD shall remain the property of UD&HD and originals and all copies shall be returned to UD&HD on completion of the Vendor's performance, if so required by UD&HD.
- c) Under no circumstances the Vendor shall, without prior written consent of UD&HD, make use of any document or information made available for the project except for purposes of performing the job.

3.28 Arbitration

- In the event of any question, dispute or difference arising under or out of or in connection with the conditions mentioned in this document the same would be referred to the Sole Arbitration of any person appointed by the Secretary / Director, UD&HD, administratively dealing with the contract at the time of such appointments, or if there is no State Secretary or S/he is on leave or is absent from duty or is not available for any reason whatsoever, the Director dealing with the contract of such appointment shall be competent to take action in place of Secretary. There will be no objection to any such appointment that the person appointed is a Government servant that has to deal with the matters to which the contract relates, or that in the course of his duties as a Government servant S/he has expressed views on all or any of the matters in dispute or difference.
- In the event of the arbitrator dying, neglecting or refusing to act or resigning or being unable to act for any reasons or his award being set aside by the court of or any reason, it shall be for the State Secretary or the Director, as the case may be to appoint another arbitrator in place of the outgoing arbitrator in the manner aforesaid and the person so appointed will proceed with the reference from the stage at which it was left by the predecessor. It is also a term of this contract that no person other than a person appointed by the State Secretary or the Director of the URBAN DEVELOPMENT & HOUSING DEPARTMENT, as aforesaid shall act



as Arbitrator and if for any reason that is not possible the matter shall not be referred to arbitration at all.

- Subject as aforesaid the Arbitration and Conciliation Act, 1996 and the rules there under and any statutory modification thereof for the time being in force shall apply to the arbitration proceedings under this clause.
- Upon every and any reference as aforesaid the assessment of costs of the incidental to the reference and award respectively shall be indiscretion of the sole arbitrator.
- The venue of the arbitration proceeding will be Ranchi, Jharkhand.

SECTION-III

4. SCOPE OF WORK

4.1 Terms of Reference

- The successful bidder will be responsible for the design, development, testing, implementation, commissioning and operations of hardware equipment and software at the location to be defined by UD&HD, Govt. of Jharkhand including handling transportation & insurance etc. of the hardware equipment Database Server(s), Application/Web servers and backup system etc. In the project duration it may be required to shift the hosting at the state data centre. Bidder shall undertake the shifting to the state data centre in consultation to the state insuring no or minimal down time at no extra cost to state. The bidder will also be responsible for liaising with all parties concerned for the smooth implementation & operation of the relevant services.
- The successful bidder shall design (including data models, interface diagram, entity relationship diagrams) develop and implement the application software for all services as per the functional requirement defined in the RFP.
- All components of the Application should be scalable and modular.

- The system should be completely web-enabled, allowing users to access the application and all its functionalities through browsers anywhere i.e. LAN / WAN etc.
- It should be possible to access reports through a browser. It should be possible to export reports to other formats such as MS Word, Excel or PDF.
- The system shall be able to facilitate easy integration with other third party solutions as well as data exchange with other utilities. (Ex- State Payment Gateway, State SMS gateway, e-District Application etc.)
- The system shall use the design / quality parameters for benchmarking purpose.
- As a common database is intended to be used for all ULBs within the state, the system shall be able to manage data from different ULBs intelligently and store in the database.
- As the data captured by the proposed system shall be used for commercial purposes, the bidder shall ensure that the system should be properly maintained at all times during warranty and subsequent AMC (if any). Bidder shall ensure regular preventive maintenance of the system at least once in three months during warranty period.
- The system shall be scalable enough to accommodate new ULBs, which may be serviced in the future through minor customization by the users, without any major change in programming.
- In pilot ULB (Dhanbad Municipal Corporation) it is estimated to have approx.200 employees at present. This number of employee may increase after proposed merger and transfer of employee from Mineral Area Development Corporation (MADA) in Headquarter and Circle offices of Dhanbad ULB. There are approx. 2000 employees in all other ULBs (38 ULBs at present). The number of employee may increase in due course.
- The Application Software will be GUI based and menu driven. The software development will be Web Enabled Database environment for maximum ease of use. The client software will be capable of running in a browser (Internet Explorer latest version/ any other latest browser)
- The applications should be supported at least by the latest 2 versions of Internet Explorer and any other latest browser. Support should be provided to the new versions of the above-mentioned software. The system shall also be able to support IPv6.
- The bidder will supply all the required tools for simulation of performance (i.e.) Performance Testing whenever desired by UD&HD. These should be provided by the bidder at his own expense.
- The bidder shall be responsible to extract and enter the required data into the database as per the requirement defined in this RFP. In addition, it is required to provide data migration/ export from other commonly used databases/ formats like Excel etc.

- The bidder shall provide detailed training to the users on all relevant components of software solution.
- The bidder shall provide **three (3) years** post implementation **warranty** maintenance service for all components of System. The Service Level Agreement clauses for these services have been placed at *Appendix 'N'*.
- The Bidder must indicate specifically the Make & Model of the each item to be supplied and also attach the factsheet for the same with technical bid.
- UD&HD will do physical verification or inspection for all the supplied items. The bidder will have to provide relevant data, access to the equipment supplied and documentation to such agency and in general facilitate such verification.
- The bidder shall ensure that the implementation of the project should be done with highest workmanship, should follow the safety parameters as per industry standard and shall be free from any hanging component. Also the project implementation should not affect the working of the ULBs/ Other users in the data centre.
- Bidder shall coordinate with the communication service provider to ensure the timely completion of the project.

4.2 Performance Requirements

For applications installed within the proposed computing environment, the system is expected to respond to the initial user input within **5 seconds**. This response should be measured by reference to the time between initial input, and the subsequent response, at the interface between the network and the web server, of the server infrastructure.

It is proposed to establish benchmark measurements for acceptance testing at the time of implementation, and required tests on the proposed configuration, in order to establish its adequacy to support the workload of the ULBs from the mission cities.

4.3 Hardware

Bill of Material (BoM) and specifications mention in the RFP are as per the minimum requirement of the project. Bidder has to provide the required hardware to meet the performance requirements as per the specifications and BOM. However, if the bidder feels that that proposed bill of material and specifications are not adequate to meet the minimum performance requirement and the functional specifications, he may propose additional bill of material and/or specifications, maintaining the minimum requirement mentioned in the RFP.

4.3.1 Scope of Supply

- Supply of all the products and equipment (active and passive) specified in Bills of material at their appropriate quantity and capacity at their respective sites. Items should be with their OEM certificates. It would be inclusive of but not exclusive to –
 - Timely delivery to various locations as per the agreed timelines with the Department
 - Transporting the items – no extra / additional charges (road tax, excise, toll tax, insurance, etc. would be considered for payment
 - Safety – The Bidder would be responsible for maintaining adequate safety measure at the storage points. Depending upon the availability and suitability, appropriate location for storage would be provided by Department. The Department would not be responsible for any losses due to theft, fire or any exigencies in this regard.
- The Bidder would need to get the factory acceptance test for the products listed in the bills of material or agreement and provide documentary evidence for the same to UD&HD.
- The bidder must not supply bid/supply any equipment that it likely to declared end of sale within three years from the date of supply. The bidder would have to replace any such equipment with at least the equivalent or higher configuration.
- Supply of all such material e.g. nuts, screws, wires etc. necessary for installation of the systems has to be provided by the Bidder.
- It is expected that the Bidder would undertake necessary inputs from similar assignments as learning have and will be inclusive in the total costing.
- The Bidder shall provide a total of three years of standard warranty of all the Hardware Components.

4.3.2 Installation of System Software and Application at Data Center

The overall solution will be hosted at Jharkhand State Data Center (SDC) located in Ranchi when the SDC becomes operational (Proposed Hardware for SDC in Appendix 'R'). The bidder has to install the System Software and the components at the State Data Center. The developed application has to be deployed at the Servers located at the State Data Center. The application has to be tested in terms of security compliance before deploying at the SDC.

However, if the SDC is not ready (Operational) till the time of hosting of application software, the bidder has also to install all the system software and the components in the server proposed in the BoM (Appendix 'O') and to be hosted on 'Cloud' (Co-hosting) till the SDC is operational. The bidder shall provide requisite information of co-hosted location and shall be responsible for data security.

4.3.3 Installation of Components at the ULB

- Supply of the hardware, software, networking equipment, UPS, DG set to the location as per the requirements
- Network Connectivity – Ensuring last mile connectivity and testing.
- Installation of all active and passive components and accessories supplied under this Project and configuring it.
- Installation, integration and commissioning of Local Area Networks at implementation locations as per the requirements. The installation charges should include minor civil works if required.
- Configuring and fine tuning of sub-systems to achieve overall optimal network performance and highest security
- The components to be installed would include but not limit to:
 - ✓ Routers
 - ✓ Switches
 - ✓ Passive components like patch panels, I/O outlets, etc.
 - ✓ Any other software besides the standard software and Server Operating System
- The ULB and UD&HD, Ranchi needs to be connected with the Jharkhand SDC location using horizontal connectivity of SWAN and through VPN (with internet) connectivity. Also, before SDC become operational, ULB and UD&HD, Ranchi be connected with Co-hosted location.
- Installation, Testing and Commissioning of UPS.
- Physical Installation of all the equipment such as All-in-one Desktops, Printers, Scanners/ MFP, Network devices including Switch- Connecting peripherals, (wherever required) etc.
- Operating System Installation and Configuration for All-in-one desktops
- Installation of Antivirus and all other support software/ drivers, if any
- Configuring the security at the All-in-one desktops.
- Installation and configuration of networking active components like Switch and lease line Routers.
- Installation and configuration of Networking passive components and establishment of LAN at Dhanbad and Ranchi.
- Test accessibility and functionality of State Level Software application from the desktops
- Ensuring all the systems required are installed, configured, tested and commissioned and declaring the site to be operational.
- It shall be the responsibility of the Selected Bidder to bring all the installation equipment and tools required for the aforementioned all activities

4.4 Scope of Site Preparation

The Department shall provide the necessary minimum constructed space for locating the systems purchased under this scope. The bidder would be responsible for site preparation at the circle offices, Dhanbad HQ under jurisdiction of the DMC and UD&HD. The list of locations are given below

—

- Dhanbad Municipal Corporation (HQ)
- MADA Offices (MADA HQ & 1 Other Office in Dhanbad Town, near S.P. Residence excluding the MADA office in which Dhanbad Circle Office is located)
- Dhanbad Circle Office (includes the MADA office in which it is located)
- Jharia Circle Office
- MADA Water Supply Office-Jharia
- MADA Health Office-BhulanBarari, Jharia
- MADA Health Office-Jharia Bazar
- Sindri Circle Office
- Chhatatand Circle Office
- Katras Circle Office
- MADA Health Office-Katras
- MADA Water Supply Office-Katras
- MADA Health Office-Putki
- URBAN DEVELOPMENT & HOUSING DEPARTMENT (UD&HD), Ranchi

The modification of the room including other infrastructure requirement (viz. power, lighting etc.) & other minor civil works shall be constructed as per the requirement of each office. The entry and exit to the site for the equipment and personnel for the bidder shall be in accordance with security rules and regulations, which may apply to the Government offices wherever the sites are located.

The bidder is expected to prepare the client sites for setting up the necessary client site infrastructure.

Site preparation of offices in Dhanbad may include but is not limited to:

- ✓ Earthing (as required for each locations). The bidder is supposed to undertake “Chemical Gel Earthing”(Including copper strip, Copper Plate, Chemical Gel, Pipe, installation with pit, optional cabling - upto 20 meters etc. to provide 0.5Ω earth resistance in worst case at instrument site and 0 to 0.5 Volt AC between earth and neutral in all season throughout the year.

- ✓ Electric cabling as required at all the sites (including board, 5 & 5/15 Amp switches, sockets. Standard quality of wire be used for required electrical cabling with cables for UPS and DG set be provided at all the locations).
- ✓ Other Minor Civil Work (including painting, civil work required for LAN, installation of items under present scope, wall mounting of racksetc).
- ✓ Supply & provisioning of computer furniture (Computer chair and table or Cubicles with chair as per number of computers (All-in-One Desktop) required in each of the sites (number of desktop mentioned in Bill of Material (BoM) given in Annexure 'O'.
- ✓ Ensure adequate power points in adequate numbers for successful installation, testing & maintenance of all Hardware and Network equipment such as All-in-one desktop, laptops, printers, scanners, UPS, modem, Routers and Switches etc. at the offices.

4.5 Networking and Connectivity

The primary connectivity for project at the ULB shall be 2 Mbps Lease line. Successful Bidder is required to ensure and assist UD&HD for Leased Line connectivity (leveraging SWAN connectivity) for the Dhanbad Municipal Corporation (including all its circle offices, MADA offices and Headquarter) as well as UD&HD, Ranchi and finally connecting the offices to the location where solution will be hosted.

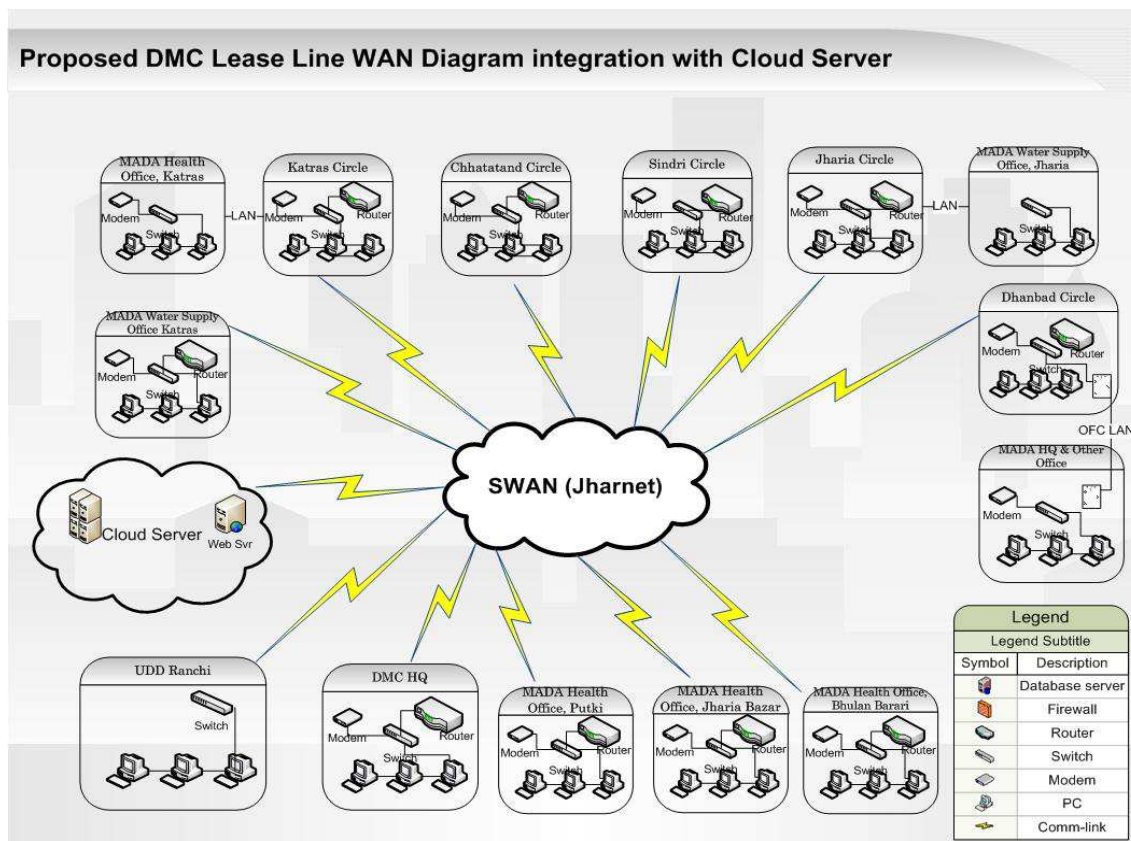
The secondary connectivity for project at the ULB should be VPN (with internet). Successful Bidder is required to ensure and assist UD&HD for VPN (with internet) for Dhanbad Municipal Corporation (including all its circle offices, MADA offices and Headquarter) as well as UD&HD, Ranchi and finally connecting the offices to the location where solution would be hosted. So, 2 Mbps broadband connectivity should be provided to DMC HQ, 5 other circle offices i.e. Dhanbad, Jharia, Sindri, Chhatatand&Katras, MADA offices (3 MADA offices in Dhanbad Town, near S.P Residence, Water Supply Office-Jharia, Health Office-Jharia Bazar, Health Office-BhulanBarari, Health Office-Katras, Water Supply Office-Katras and Health Office-Putki) and UD&HD,Ranchi.

- The requisite WAN connectivity (both primary and secondary) mentioned above shall be sourced by UD&HD directly. UD&HD shall have agreement with the service provider separately for bandwidth. The successful bidder will however have to assist the Department for the same and also co-ordinate/ liaison with the service provider for the timely commissioning and maintenance of the connectivity. Additionally the bidder has to perform the following jobs –
 - Monitor the connectivity of the Department using Network management software.
 - Lodge a call with the service provider in case of link breakdown
 - Liaison with the service provider in an active way to restore the fault in early time

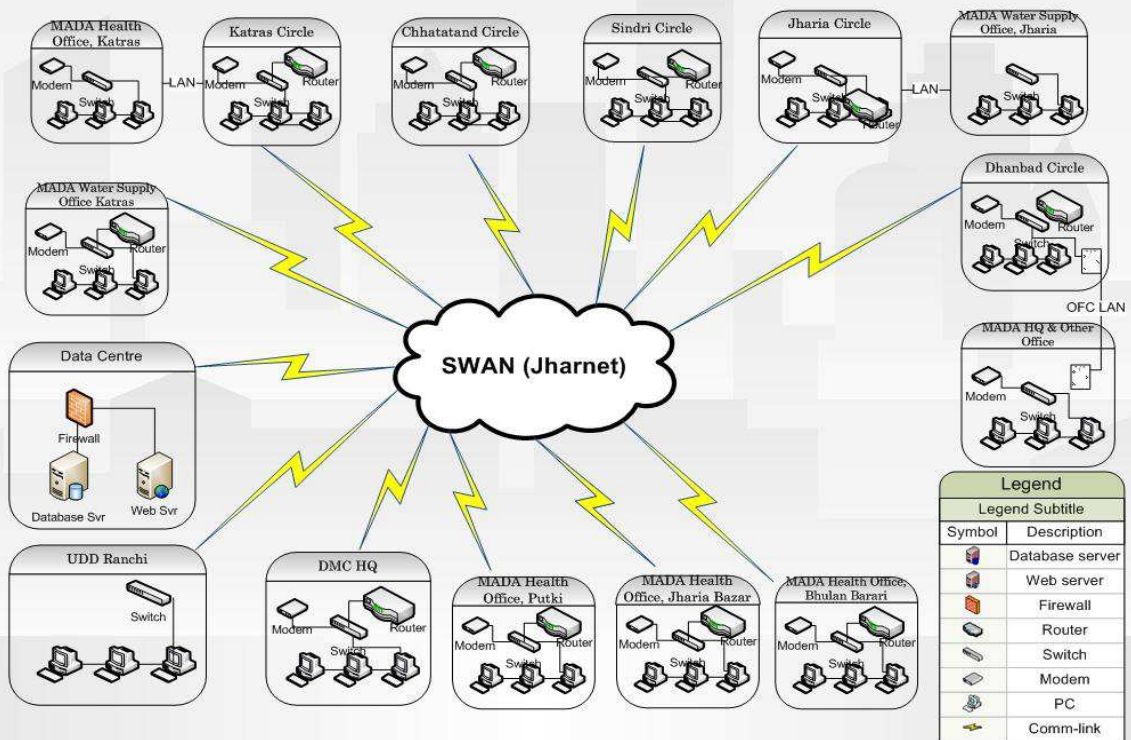
Bidder should ensure termination of the aggregated bandwidth from service provider of both the links directly to the location where the application is hosted. Bidder shall be required to provide all the necessary hardware/ software for implementing the network solution for project. They will also be responsible for setting up and maintenance of LAN at the individual offices, wherever required.

- ✓ Bidder shall ensure connectivity from Cloud Server and SDC to the ULB and UD&HD, Ranchi. Bidder shall be required to provide all the necessary hardware/ software for implementing the aforementioned network solution for project.
- ✓ Bidder shall prepare comprehensive WAN architecture for connecting all the offices to the Cloud Server as well as SDC. Bidder will be required to liaison and coordinate with the service providers for ensuring seamless connectivity at both ends.
- ✓ LAN cabling as required at all the sites (including I/O box, patch chord with proper tagging).
- ✓ It is imperative to mention that Bidder would be responsible for ensuring successful network connectivity across the offices.

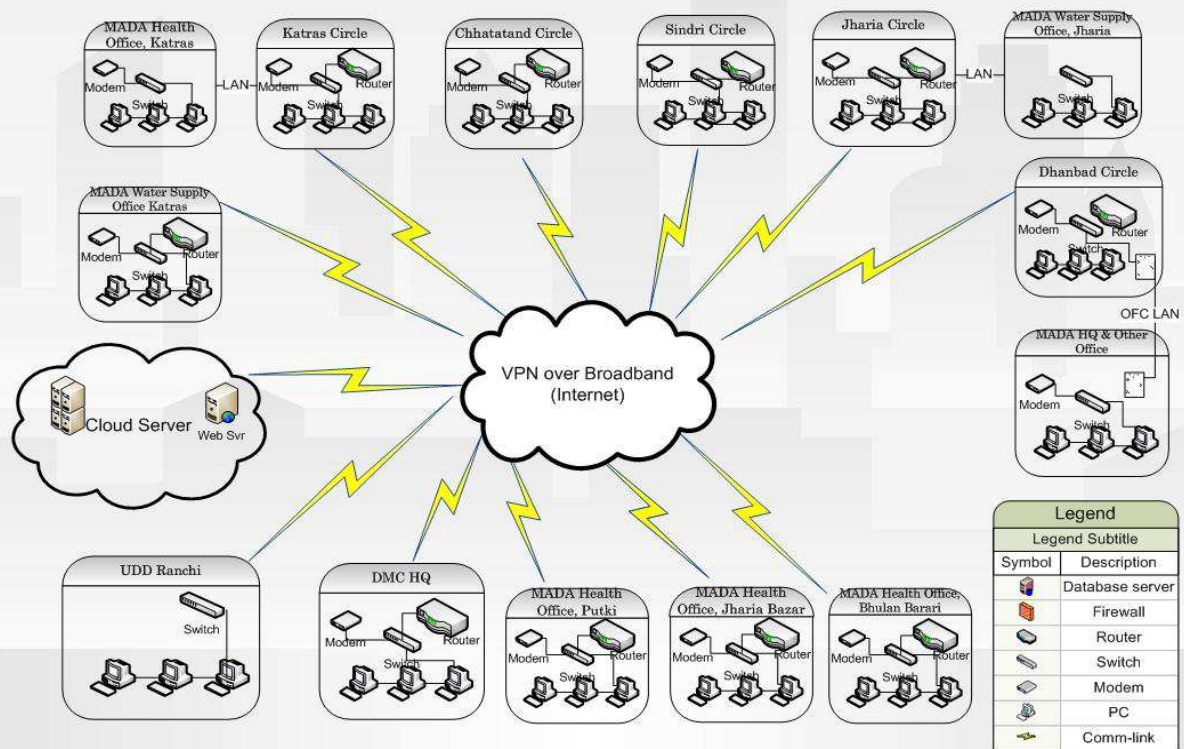
Indicative WAN diagram for Primary and Secondary Connective are given below –



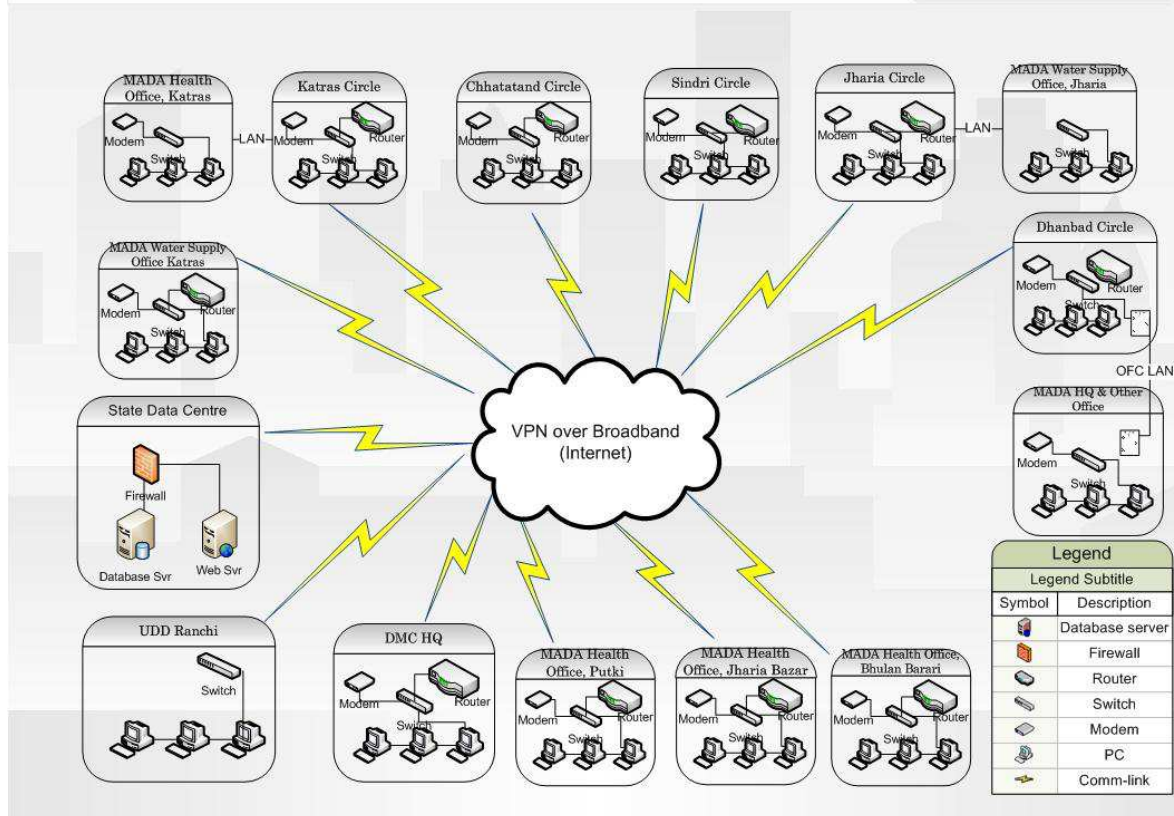
Proposed DMC Lease Line WAN Diagram integration with SDC



DMC VPN over Broadband Diagram integration with Cloud Server



DMC VPN over Broadband Diagram integration with SDC



4.6 System Software

Bidder has to provide the system software required as defined in RFP. However, if the Bidder feels that that proposed bill of material/ specifications is not adequate to meet the performance and the functional specifications, he may propose additional / modified bill of material.

4.7 Software Requirement Study

The functionality required for system development is mentioned in the RFP is indicative however the Bidder is required to undertake a detailed software requirement and submit the same for approval.

4.8 Integrated e-Governance solution

The e-governance solution should have applications that automate the transaction processing of the core ULB departments as given below. It must be an integrated GIS based Enterprise Wide Resource Planning suite of applications. The following core departmental transactions should be covered by the e-Governance Application Software.

A: Mandatory Modules

- Birth and Death Registration

- Payment of Property Tax, other Utilities Bills/services and Management of Utilities that come under the ULBs. UD&HD is also envisaging introduction of handheld device for door to door billing and collection of property tax and water charges (bill) by the ULB which would be integrated with the e-Governance application software.
 - Property Tax
 - Water Supply
 - Other Utilities Bills/services
- Citizen Grievance Redressal
- Procurement and Monitoring of Projects
 - e-Procurement
 - Project Ward Works
- Building Plan Approval
- Health
 - Licensing
 - Solid Waste Management
- Financial Accounting
- Personnel Information System

B: Other Modules

- Assets and Land Management System
- Inventory Management System
- Legal Management System
- Schemes Management System
- Content Management
- Large Scale Document and image base Management
- Forms Management
- Status Tracking
- MIS and Reporting
- Others (Hospital Management, School Management, Sports & Culture Management, Slum Development)

Out of the above modules/services, the services under the module named '*Others (Hospital Management, School Management, Sports & Culture Management, Slum Development)*' are not provided by the Dhanbad Municipal Corporation at present but may be required to be covered for other ULBs.

Each service has been explained in the sections below to provide process overview. However bidder is required to finalize the requirement through software requirement study (SRS) in line with the requirements of Municipal acts and bye-laws in the state/ULB.

Apart from details of different services (covered through proposed mandatory and other modules), detail of the portal service (E-Municipality Portal) is also mentioned.

4.8.1 E-Municipality Portal

The primary objective of the e-municipality Services Portal is to provide single window access to information and services provided by the ULB.

The portal is the user interface and delivery channel to citizens for providing access to the services delivered by ULBs. Users could have direct access to the services being provided on the portal from their office/homes/other locations.

- ✓ There should be provision to display and add any event, news, announcement as per the requirement of the department in the portal. The content would be decided / approved by the department.
- ✓ The ULB Portal is a critical element of the System Architecture, which provides secure and reliable message routing between service delivery channels (e.g. Portal, CSCs, etc.), ULB information users/ providers (e.g. State Service Delivery Gateway, National Service Delivery Gateway etc.) and the Back Office system
- ✓ Multi-lingual support: The ULB portal would support bilingual versions in English and Hindi.
- ✓ For making such information and services accessible in a convenient manner, the e-municipality Portal shall be established to provide a one-stop source for all the information and services.
- ✓ The portal will be developed as per the Govt. guideline and should be dynamic in nature.
- ✓ Secure dynamic online self-registration for users: The portal must provide for the ability for users to register themselves in the user directory and then be assigned the related privileges / entitlements based on their preferences and eligibility. This facility should also give the user the ability to edit details about themselves, such as username and password.
- ✓ While registering the citizen as user, along with all the required details of the Citizen, there should be provision to capture their Aadhaar details.
- ✓ “Single Sign-On” capabilities across services: Single sign-on facility and single user credentials meaning that users can have one user ID and password, or a digital certificate, which they can use for all online public services.

- ✓ Portal shall provide the printable formats for all the Forms and user, upon filling up the details, can obtain the printout of the same. All the e-forms shall have appropriate field level and form level business validations built into it to ensure that scope for incomplete/ inaccurate information is eliminated and the information is captured for all the mandatory fields in the form.

4.8.2 Handheld Device and its Integration

The URBAN DEVELOPMENT & HOUSING DEPARTMENT (UD&HD) envisages introduction of Handheld Device for billing and collection of Property Tax (Holding Tax) and Water charges (Bills) in the ULB including Dhanbad Municipal Corporation. The scope of supply of the handheld device is not in the present RFP but proposed modules of the RFP i.e.

- a) Payment of Property Tax and,
- b) Payment and Mgt of Utility Bills

should have facility for integration with the handheld application. The proposed application should be able to exchange, integrate with the hand held device (application installed in the handheld device), the required interface for the same should be developed by the bidder. The successful bidder would be provided with the information about the handheld device when finalized by the UD&HD. Bidder shall include the handheld integration cost in the cost of the above two software module cost.

4.8.3 Mobile Governance

- ✓ Looking at the increasing number of mobile subscribers and its reach, it has become imperative to offer Government services over mobile-phones to ensure that the vision of NeGP to provide Government services to every citizen near their doorsteps becomes a reality.
- ✓ With rapidly increasing levels of mobile penetration and continuous improvement in bandwidth, and requirements of accessibility and citizen convenience, it has been envisaged to offer more and more services over mobile devices. The vendor must build strong interfaces, technologies, applications etc. for mobile devices. In order to maximize citizen convenience and bring about business process improvements, the vendor must continuously innovate, upgrade and incorporate such new technologies that emerge. It is also assumed that Vendors will attempt to include as many services over mobile devices as possible, beyond the ones explicitly mentioned in this document.
- ✓ The mobile application must be based on latest mobile technology. A mobile application should normally be structured as a multi-layered application consisting of user experience, business, and data layers.

- ✓ The proposed mobile application should be integrated with main application. There should be facility to PUSH through and PULL through mechanism to get and receive information using SMS service. The facility of SMS gateway (states existing SMS gateway facility should be utilized for this purpose), Unstructured Supplementary Services Data (USSD) to be used in the system.

Mandatory Modules Details:

- **Registration and Issue of Birth and Death Certificates**

The registration of birth and deaths is one of the major functions of public health section. The births and deaths, which take place in the hospital are recorded and reported to the municipalities. For non-hospital events, the concerned parties can make necessary applications to the municipalities. Delay in registration of the events requires clearances from various authorities. Once the event is registered, ULB issues the necessary certificate. In the case of non-hospital event, the certificate is issued after necessary scrutiny and inspection. At any given point of time, corrections to birth/death details can only be done by the Registrar of births & deaths. Necessary records are maintained by the health section.

The facility of registration of both Birth and Death and issuance of certificate is already there in the e-District portal of State of Jharkhand. Therefore, the bidder should integrate “Birth and Death Registration” module of the e-District in the SLSS and are not required to develop this module separately. (In the commercial bid as per appendix ‘I’ i.e “Format for Schedule of Cost” only integration cost for this module be given)

- **Payment of Property Tax**

Property tax is one of the main sources of revenue for the ULB. This module covers all the aspects of assessing the property for tax. Residential and commercial properties, situated within the limits of ULB, are to be assessed for tax. Based on such assessments, all the assesses are expected to pay the property tax. The information regarding all the new constructions, existing construction and other extensions/ modifications, if any, will be provided by the Town Planning Department for tax assessment.

The main features of the property tax module include

- Assessment of the building for property tax based on the parameter such as residential status, annual rental value, rates of taxes, depreciation and the age of the building
- Serving of the demand notices for assessments and collection of taxes
- Acceptance, disposal and monitoring of the revision petitions received
- Monitoring of the appeals filed

- Collection of the taxes and maintenance of appropriate records etc.

Indicative Sub Modules are -

- GIS Based Town Planning & Property Tax Database, Holding Tax Collection
- GIS Based Land / Property Assessment & Allocation
- Holding Tax Assessment
- Holding Tax Collection
- Property Mutation
- **Payment and Mgt of Utilities Bills**

As it is one of the sources of revenue generation, it becomes imperative for the Municipal Corporations to effectively and efficiently manage and collect the various bills. Utility bills include Water and Sewerage bill, Sanitation Charge, Rental and Lease from Municipal properties, playgrounds, auditoriums, marriage halls, etc. Utility bills will be generated for all types of properties i.e. Commercial, Residential and Industrial.

The various activities involved in water and other utility module deals with

- Receipt of application, inspection, processing and issue of water tap connection
- Levy of tax for the water used based on the type of connection
- Issue of demand notices
- Collection and monitoring of taxes and regularization charges
- Disconnection in cases of non-payment and illegal connections

Indicative Sub-Modules are -

- Water Connection charges
- Water User Charges
- Hire Charges for Cess Pool, Water Tank
- Community Hall Charges
- Misc. Fees
- **Building Plan Approval**

In the local bodies, the town planning section issues permission for construction of buildings, based on specific set of rules and regulations. In Dhanbad Municipal Corporation, at present this service is provided by Mineral Area Development Authority (MADA).

The building permission module facilitates quick processing, disposal of building plan permissions, standardization of collection of building fee & other charges, to automate the technical scrutiny,

effective monitoring of file processing and have transparency, accountability and accessibility to the information and status of the building applications, retrieval of data at any future date

The main features of the building plan approval module are-

- Approval of building proposals of various types and nature of buildings
- The building plan approval system will have interface with the GIS application
- Approval of layout proposal
- Processing and disposal of Government references, court cases, Chief Minister Cell reference, LokAyukta references etc.
- Planning and implementation of developmental activity such as road widening, junction improvements, development of parks, play grounds, subways, parking lots, bus bays etc
- Calculation of various fees such as admission fee, developmental charges, regularization charges, building license fees, scrutiny fees, demolition charges etc
- Collection of the fees and maintenance of appropriate records.

This module should also be synchronized with the Master Plan (having GIS information) of the ULB. It should be able to provided information related to new construction, existing construction, planning and implementation of developmental activity such as road widening, junction improvements, development of parks, play grounds, subways, parking lots, bus bays, residential area based on the Master Plan of the ULB.

- **E-Procurement**

E-Procurement combines the use of Internet technology with procurement best practices to streamline the purchasing processes of the ULBs and reduce costs. The e-procurement module aims to automate the activities related to the procurement of works as well as goods.

This module should also handle the procurement and contract management process. The procurement management process should set-forth procurement methods and establish standards for obtaining goods and services. The procedures defined under the process should include guidelines for the solicitation, award and administration of purchase orders/ contracts for various categories of purchases as per procurement policy manual. This department also monitors the performance of the vendors and updates the vendor master List.

The contract management process should include contract requisition, contract planning, deciding scope of work for contract, bidding and finally award purchase order to a selected vendor. The department should be able to carry out pre-tendering, tendering, tender evaluation, award & commitment and post award activities, which are associated with the development and award of

contracts. It should start from the receipt of a requirements plan from the user department till contracts signatures and should include regulatory and approval activities during contract signature and issuance of final accounts.

Under the works procurement the module aims to automate the following functions of the ULBs:

- Vendor Performance Rating
- Enabling of the competitive bidding (tendering) process on internet
- Enabling of the dynamic pricing (Auction) process on internet
- Under the goods procurement scenario, the module aims to automate the following functions in addition to those listed above:
 - Rate contract management
 - Online RC catalogue based procurement
- Vendor Registration
- Purchase Process
- Expediting Process
- Monitor Performance Metrics
 - Pre-tendering Procedures
 - Preparation of Terms of Reference / Scope of work
 - Preparation of Tender document
 - Bidders List, Single Source Tendering & Approval of Tenders
- Tendering Procedures
 - Tender Invitation, Collection/Dispatch Tenders
 - Site Visits & Pre-Tender Clarification Meetings
 - Tender Period, Extension of Tender Period & Pre-Tender Clarifications
 - Submission of Tenders, Late Tenders & Tender Opening
 - Tender Cancellation
- Evaluation Procedures
 - Technical Evaluation, Commercial Evaluation & Final Evaluation Report
 - Technical & Commercial Evaluation
 - Basis of Rejection of Bids
 - Price Negotiation & Revised Proposals
 - Extension of Tender Validity Period
- Contract Award Procedures
- Contract Variations Procedures
- Contract Management
 - Extension of Time
 - Claims/Dispute Management
 - Contract Termination

- Contract Close out
- Bonds & Bank Guarantees
 - Tender Bonds
 - Advance Payment Bonds
 - Performance Bonds
 - Any other Contractual Bank Guarantees
 - Record, Tracking & Reporting

• **Project/Ward Works**

The municipalities execute various maintenance and developmental work through the engineering wing. All civil engineering works such as building of roads, bridges, culvert, storm water drains, buildings, parks and playgrounds etc. are carried out with proper planning, authorizations and allocation of the funds. Apart from this, ULBs also assist various departments of the State Government in implementing the departmental schemes for the welfare of the people in the municipal area. The schemes need to be monitored to achieve the desired objective and the funds allocated are utilized for the said purpose.

The main features of this module are

- Preparation of cost estimation for the projects
- Assist in preparation of tender document
- Monitor the tendering process and award of work
- Monitor the progress of work in term of measurements, material issues, execution time etc.
- Monitor the budget allocation and perform a variance analysis
- Assist in preparation of the bills
- Monitor the bill payments and release of EMDs/Security Deposits
- Recording and accounting of the grants/funds received for implementation of the schemes
- Preparing of budget for the implementation of the schemes
- Allocation of work and fund required for implementation
- Recording and accounting for the expenditure incurred for the implementation of the project
- Generating necessary reports needed for monitor the implementation of the Schemes

Indicative Sub-Modules are-

- GIS based Estimation Support Tool
- Automated Measurement Book
- Project Planning and Monitoring
- **Licenses**

The ULBs also issues different licenses to Hotels, Restaurants, Hawkers, Hospitals etc and look after the works like hazardous waste disposal etc. In this, a ULB may issue licenses of different categories Sanitary Zone or ward wise. The module under this category may –

- Able to issue licenses trade category wise
- This should include provision of application for a new license as well as renewal
- Different categories trade rates be mentioned
- Provision of late fee as well as provision of defaulter list

Indicative Sub-Modules are –

- Trade Licenses
- Issue of Hoarding/ Advertisement License
- Hawkers Licenses
- Rickshaw Licenses

• **Solid Waste Management**

ULB's employ various methods for removal of garbage and debris under the supervision of health wing. The solid waste is collected and transported to the dumping grounds. The process involves route optimization i.e. shortest path from the collection point to the dumping yard using GIS and GPS enablement. The solution should capture real time data using GPS device to be installed in the vehicles to be used for carrying solid waste in the ULB. The solution using GIS data should be able to do route optimization of the vehicles. . This should also help to maximize all the infrastructure facilities used and making decisions about the sorting area, disposal area, vehicle routes, optimize the number of collection points & transport of garbage, maximize the collection coverage, optimize fuel efficiency. As solid waste management involves cleaning, transporting and dumping, this module deals with the following -

- Allocation of manpower for sweeping and garbage removal, monitoring and recording of the work executed
- Allocation of the vehicles for garbage removal, monitoring and recording of the movement of vehicles.
- GPS device be procured by the bidder. The approximate number of vehicles are about 50, so 50 nos. of GPS devices be procured.
- Planning of the resource for effective utilization of manpower and vehicles
- Monitoring and recording of the garbage collection and dumping at the dumping grounds

Indicative Sub-Modules are -

- Vehicle Monitoring & Tracking
- Weighment& Dump yard Monitoring
- Garbage Collection Planning

- **Financial Accounting**

The accounting system being followed in Municipalities is different from the normal accounting systems followed in commercial practice. The accounting system is designed to seamlessly record all the financial transactions taking place in various departments of the municipalities

The main features of the financial accounting module are:

- Accrual accounting
- Assets/Liability recording
- To record all receipts from different modes of payment
- To record all payments
- To generate all records required under the law
- To generate statements required by various authorities for budgeting and decision making
- To maintain accounts required under the law

Indicative Sub-Modules are-

- Revenue and Receivables
- Purchases and Payables
- Inventories
- Cash and Bank
- Closing of Accounts
- Budgeting
- Cost Management Procedures
- Investments
- Year End Adjustments
- Integrated Payment Gateway
- General Ledger and cash module
- Receipt Module
- Assets Module
- Budget Module
- Reportage module

- **Grievance Redressal**

As municipalities provide various public utility services, they receive a large number of complaints / suggestions pertaining to its services. Grievance redressal module is basically meant for redressing the grievances of citizens in a “timely and effectively” manner

The main features of the module are

- Registration of the complaint / suggestion
- Issuance of acknowledgement
- Capturing of status of the complaint till it is resolved
- Generation of necessary reports for proper monitoring

Indicative Sub-Modules are –

- Grievance Handling
- Right to Information act (RTI)

- **Personnel Information System**

The employees form a major asset base of all state departments including the municipalities. Efficient and effective utilization of this asset viz. the available human resources, is important to ensure effective administration of these departments. The state Governments, being the single largest employers in most states, recognize the need for an integrated information technology solution to address the needs and streamline its complex and dispersed payroll and human resource management system.

The key functions under proposed human resources management system module are

- Recruitments/Appointments
- Promotions of non-gazetted staff
- Regularization of staff
- Department promotional committee meetings
- Increments
- Seniority matters
- Processing of annual confidential reports
- Processing of transfer of charge
- Probation
- Deputations (Foreign/Others)
- Compulsory waits
- Processing of Leave Travel Concession (LTC) requests
- Medical reimbursements
- Travel & tour management
- Leave Management
- Retirements
- Resignations
- Government provident fund

- Processing of bills
- Service Register

Indicative Sub-Modules are -

- Manpower Planning Module
- Staff Salary & Pension Processing
- Work Force Recruitment Module
- Compensation Management Module
- Payroll Processing Module
- Training Development and Labour welfare
- Advance and Loan Module
- Work Force Administration Module
- Leave Management Module
- Disciplinary Action and Grievance Module

B Other Modules:

- **Assets and Land Management System**

This module will help to manage the complete lifecycle of an asset in the ULB including inventory, procurement, and contract and work management. The system should provide insight for all the enterprise assets as well as Land (Owned or Managed by the ULB) and work processes for better planning, controlling and closely aligning them with the overall strategy of the ULB. It should provide tools for long and short-term planning, preventive and reactive schedule management, resource optimization and key performance indicators. It should also enable managing vendor contracts with comprehensive support for purchase, lease, rental, warranty, rate, master and user-defined contracts. It should also help in aligning service levels with business objectives by defining service offerings and establishing Service Level Agreements (SLAs).

It should also maintain latest information on the location and other attribute information of all assets including Land (Owned or Managed) of the ULB and provides a spatial knowledge base for any spatial decision.

Indicative Sub-Modules are -

- Asset Management System
- Land Management System
- GIS based Asset Mapping

- Owned & Hired Vehicle Management
 - Vehicle Registration
 - Vehicle Log
 - Invoice Processing
 - Repair & Maintenance
- Asset Register

• **Inventory Management System**

The stores departments in the DMC handle the entire store and inventory of stationeries, electric equipments, computers and all other materials. The module will track in detail the indenting of the materials, stock updates, replenishment points etc. To accommodate a Just-In-Time philosophy, stock/Inventory department should be able to monitor parameters like reorder points, safety stock levels and economic order quantity for all items in the store. The system should have an interface with the e-Procurement system. The application should help the ULB for maintaining and monitoring inventories in the store. Using the preventive maintenance application, to plan upcoming maintenance and inspection work, can help the ULB to determine which items will be needed in the future.

Indicative Sub-Modules are –

- Material Indent Management
- Stores / StockManagement

• **Legal Management System**

The module shall support the senior management to keep track of Legal / Court case proceedings and efficiently manage calendars, representations etc. The module should provide electronic case summaries, calendar dockets and reports, and issue auto alerts and escalations for stakeholders. The system shall provide customizable reports and powerful search functions and should be able to upload and manage legal documents. Feature of multi search facilities be there to track the legal cases through case no, file no, keywords for all the Legal/Court Cases.

Indicative Sub-Modules are –

- Legal Case Monitoring

• **Schemes Management System**

This module shall cover all the schemes running through the ULB. It should be able to manage and maintain the details about selection of beneficiaries (beneficiaries like – BPL families, SCs, STs, Slum dwellers etc) and benefits provided under the schemes. . The module should have the facility to update the list of beneficiaries (addition and deletion) for all type of schemes. There should be facility of categorization like centrally sponsored schemes, state sponsored scheme or ULB based

schemes. All other details related to the scheme as well as the files related to it are managed through this system.

Indicative Submodule is –

- Centrally sponsored scheme Management
- State sponsored scheme Management

- **Content Management**

This capability is to be used by the front end service providers to fetch procedural knowledge relating to the business services.

- Dispense Context sensitive Information such as checklists, rule books, procedural documents, and government orders etc. to the users.
- Ability to group, classify and discover organizational knowledge. Once such knowledge can be grouped into relevant topics, the same can be shared across the stakeholders. For instance, the government needs to disseminate Guidelines, Government orders, Court orders, Operational procedures, Clarifications, Notes etc. to the practicing officers and Section heads in a consistent way.
- Entire life cycle of document management including creation, editing, publishing, dispensing, retiring
- Versioning of documents
- File Tracking System
- Search documents
- Search content with respect to Acts, Rules, Circulars

- **Large Scale Document and image base Management**

Almost every application will have attachment of documentary evidence submitted along with the application. These documents may be scanned and attached to the service request instance, stored and retrieved. With the expected volumes of transactions and also the number of attachments expected, this service shall be volume intensive.

There should also be feature of Master Plan uploading through this module. Different versions of the Master Plan be maintained as per the requirement.

Some of the salient features of the module be -

- Ability to search within images
- Fast and indexed retrieval
- Purging of old images based on rules.

- **Forms Management**

Almost all business services start with an application received from the citizen. For instance a citizen makes request to be provided with a Birth certificate through an application to that effect.

- Manual Forms that can simply be downloaded, filled in by hand, scanned, uploaded and attached to a business process request.
- Electronic forms that can be filled online, validated and forwarded online

- **Status Tracking**

Should have ability to track SLA compliance based on service delivery standards and norms as well as act as status tracking monitor for the citizen or the service provider.

- **MIS and Reporting**

Under this, following types of reports, but not limited to, are required to be generated for different modules and their sub module as per the requirement of the ULB. The report should be generated in standard formats like pdf, word, spreadsheets etc.

a. Fixed Format Reports: Application should provide robust reporting capabilities. Application publishing engine should generate output in multiple formats including PDF, HTML, and Excel etc. The output can also be delivered through email or can be printed or faxed.

b. Ad-hoc Reports: Application should provide business users with ad hoc query & analysis capability. Application should create new analyses from scratch or modify existing analyses in dashboard pages. Business users do not need to understand physical data storage to combine data from multiple enterprise information sources intuitively, quickly, & easily.

It should have ability to form linear, grouped, filtered, drill down reports, multi dimensional Cubes, charts and graphs. Ability to save report instances to the document management server as static reports. The system shall have the ability to export these reports to other formats like PDF, Excel etc. Bidder shall perform an independent study, to verify and validate all functional and non-functional requirements, for the State level software solution. The solution should be able to address all the objectives, as detailed in section Project Intent.

4.9 GIS Requirement

Bidder shall provide a GIS platform (A Web GIS Application Module) for use by all ULBs in the state for various applications from the state level software solution (SLSS). The proposed GIS platform would allow ULBs to host their digital maps/ Satellite maps (Desktop product) after editing for necessary geo referencing and integrate with various application services of SLSS. The proposed GIS platform (For Dhanbad Municipal Corporation an integrated GIS system consisting of GIS Map data integrated with centralized Web GIS application module should be provided.

4.9.1 Key Objective

- Intent of this specification is to carry out mapping and asset coding work in line with the methodology and developing GIS Solution in the specified area / areas.
- This specification includes proposed solution/methodology of providing a GIS based Unique holding tax payer Indexing, mapping and asset coding for the land, property, holding tax assessment & calculation of the ULB and develop a project area information management system with GIS software. The GIS based system would provide tools to assemble intelligent information system at ULB/circle level. The work shall involve GPS survey for finding Latitude-Longitude of all the entities which comes under the purview of the ULB and are liable to pay property tax to the ULB, land base features, Base map preparation, entity data collection and geo-coding, uniquely indexing each holding tax payer based on the periphery of the ULB and holding tax payer data collected through door to door survey and physically link of each holding tax payer on the map of project area. In case of multi-storey apartments, additional information like floor / height etc. shall also be included in the project area.
- This shall enable creation of GIS base application geo-database, which shall provide interfaces to the business process applications of the ULB and to future business applications planned to be implemented by the ULB. For the business processes to be implemented in future, the agency shall have to furnish desired information about s/w data structure, source code written by agency, design document, user manual etc., proprietary as well as non-proprietary as and when required at no extra cost to the ULB so that the required socket for communication with the future application can be designed and made operational.
- The indexed holding tax payer database, when created and operational, shall be capable of being 'on line' connected to other business process software without any limitation. The database shall be based on established open database (ODBC) architecture suitable for linkage to other databases. The database shall be capable of updating through user-friendly form entries and through file transfer modes.

4.9.2 Scope of Work

The description given here is broad scope of work to be carried out by the Bidder. However, any work even if not specifically mentioned but reasonably implied for the successful implementation and good performance of the system are deemed to be included in the scope of work. The Bidder shall prepare a flow diagram showing holding tax payer indexing and asset mapping and information management system, enumerating various interactive features with its own and other business process Software systems of the ULB and proposed additions as covered in this specification elsewhere, such as MIS, customer care etc. The scope of work of the Bidder shall include:

4.9.2.1 Field Survey & Mapping

- Mapping the location co-ordinates (Latitude-Longitude) of each of the house and all types of properties like residential, commercial, industrial, public places and assets of the ULB and of town's landmarks using Differential Global Positioning System method while doing field survey. Collecting and developing attribute data of each holding tax payer and mapped landmarks. Creation of digital map of the complete project area through GIS application. In order to ensure that during the execution period of project, data being collected does not become stale, agency should devise a mechanism, including but not limited to clearly stating responsibilities of ULB, to incorporate the changes in system.
- Creation of base maps of project area using specified satellite imagery and geo-referencing the same. Preparation of physical area maps for the areas, based on collected information, digitization of project area entities and landmarks, overlaying of features on the base map with predefined scale for viewing graphically with the aid of suitable GIS software.
- The mapping must be done with +/- one-meter location accuracy with differential corrections.
- The viewing scale of vector data must be user dependent.
- To meet the requirement indicated in the specification and depending on the specific area to be mapped, Bidders may adopt satellite-imaging technique on predefined scales as suggested below:
 - Urban on 1:1000 scales.
 - Semi urban on 1:2500 scales
- Cloud free (less than 10 %) Satellite imagery map (as per Satellite Imagery Specification provided at clause no. 8.0) to be procured by the successful Bidder in digital form for the towns.
- Map Resolution : The map resolution of GIS mapping shall be as under
- Spatial resolution - Less than or equal to 2.5 meter GSD per pixel for Urban /Semi urban Area.
- Satellite Imagery maps of the relevant areas are to be obtained/ prepared by Vendor at his own cost. The ULB will issue the necessary letter of authority for obtaining any permission for acquiring such maps from appropriate authority. All information thus obtained by the successful Bidder shall be treated strictly confidential and shall be used solely for the intended purpose under the contract and shall be returned to the ULB on completion of the work.

4.9.2.2 Indexing

- Carry out holding tax payer indexing through door-to-door survey, and developing holding tax payer database.

- Asset code of all assets (Lands, Property etc.) is to be legibly painted on the asset. Surface preparation etc to be done before painting. Authorized representative of ULB shall specify colour scheme and quality of work.
- This information shall be stored with provision for revision of any of these data. For developing proper code and indexing for each holding tax payer the exact manner shall be subject to ULB's approval before commencement of work. For this purpose, the Bidder will be provided with the 'as available' category wise list of holding tax payers in each area along with the particulars such as name of holding tax payer, address of holding tax payer etc.

4.9.3 Deliverables

The Bidder shall deliver the following at various stages as indicated:

- Supply of Base map of project area both in hard and soft copy.
- Supply of Base map of project area overlaid with digital project area maps of designated areas both in hard and soft copy.
- Spatial and non-spatial database for objects of project area as specified in this document elsewhere.
- List of holding tax payers with their database along with the relevant codes of indexing generated to be delivered ward wise as soon as it is complete for each ward.
- The deliverable outputs mainly but not limited to in a format that would enable carrying out of the following functions in the designated area satisfactorily:
 - Holding tax payer Data base and indexing Management
 - Asset Management
 - Holding tax payer Relationship Management
 - Project Management and extension in project area
 - Holding tax payer Billing & Revenue Management
- All the deliverables shall be computerized outputs and the vendor shall submit four (4) copies of each deliverables in both soft and hard copy forms for approval / comments by the ULB. In case of comments by the ULB the same would be incorporated and resubmitted by the vendor.
- Satellite base maps, GPS, holding tax payer maps and complete GIS System Software, Hardware and database for the designated areas.
- Four copies of the final deliverables incorporating necessary changes / comments shall be submitted along with their softcopies on CD-ROM.

4.9.4 Satellite Imagery Specifications

- The following SOI/NRSC supplied imageries from IKONOS/Digital Globe/Quick bird/Cartosat-2/Cartosat-1 or equivalent shall be used as follows:
 - Urban --- less than or equal to 1 meter resolution
 - Semi Urban—less than or equal to 2.5 meter resolution
- Required GCPs etc. required for getting the images as per specification above shall have to be arranged by the successful Bidder at no extra cost.
- Archive Images captured up to six months before date of LoA are acceptable.
- Licensing -
 - The license shall be for the ULB.
 - All terms and conditions of SOI/NRSC associated with sale of maps shall be complied by the vendor and also applicable to ULB for compliance.
 - The license of the satellite imagery should permit the user following activities:
 - ✓ Reformat the product for ULB's use into different formats or media from those in which it is delivered.
 - ✓ Make an unlimited number of hard copies and soft copies of product for ULB's internal use.
 - ✓ Distribute the product (with copy right marking) on an isolated, non commercial basis.
 - ✓ Modify the imagery product through manipulation techniques and / or the addition of other data, and make copies of the resulting bundled image product for ULB's internal use.
 - ✓ Make the product available to its consultants, agents, and sub-contractors for purposes consistent with the permitted use with restrictions without the right to transfer, modify, copy or sub-license.
 - ✓ Should permit to post the product and derived works on Internet site in a non-downloadable fashion with appropriate credit of the satellite imagery product.

4.10 Video Conferencing

A Video Conferencing facility needs to be implemented for the UD&HD with Dhanbad Municipal Corporation (DMC) at present. The video conferencing shall be streamed live across the said locations with the facility of presentation sharing. The requisite connectivity for this video conferencing system has to be proposed for the purpose (leveraging SWAN connectivity/Jharnet). The Bill-of-Material for Hardware Component is given in Appendix 'O' (in section- 9.15.2).

The bidder needs to do the following -

- Supply, Delivery, Installation and Commissioning of the items as per standards and protocol as listed in Bill-of-Material (BoM) for Video Conferencing
- Integration of the entire system (with existing MCU and other hardware of Jharnet) with Installation of necessary software
- Warranty Support for three years
- Providing High Definition Video Conferencing Endpoint equipments with complete set of all required accessories

4.11 Delivery Channel

The services offered by the Dhanbad Municipal Corporation are mainly to serve the common citizen of the municipal area. To reach out to the maximum number of people there should be a different delivery channel other than the Citizen Windows located at the Municipal Corporation / Circle offices.

The proposed municipal application shall be portal based. Citizen can log in to the portal and access the application. They can apply for different services, track the status of the application, lodge a grievance etc.

To reach out a more number of citizens, existing Common Citizen Service (CSC) / Pragya Kendra shall be used as a delivery channel.

CSCs scheme has been established with the vision to develop these centers as a front-end delivery points for government, private and social sector services to citizens of India in an integrated manner.

The objective is to develop a platform that can enable Government, private and social sector organizations to align their social and commercial goals for the benefit of the rural population in the remotest corners of the country through a combination of IT-based as well as non-IT-based services.

There are a total of 267 CSC in Dhanbad district out of which approximately 75 CSCs (Pragya Kendra) are under Dhanbad Municipal Corporation jurisdiction area.

The CSCs (Pragya Kendra) under Dhanbad Municipal area may be used as the front end delivery channel to provide the municipal services to the citizen. The administrator of the CSC (Pragya Kendra) has to enroll him /her through the application and further login to the application and facilitate the citizen for taking benefit of the services without visiting the Municipal offices through a single window system.

4.12 Application Software Development Phases

The Bidder will be responsible for designing and developing the application software that will be inline with the functional requirements as per Functional Requirement Specifications (FRS) given in Appendix 'M'. UD&HD reserves the right to ask the Bidder to develop prototypes of the application (including the navigation scheme) and demonstrate the same for acceptance by UD&HD, Govt. of Jharkhand.

4.13 User Acceptance Testing

The Bidder will coordinate and complete successful acceptance tests, in accordance with the provision of the contract. An acceptance test plan along with use cases should be prepared by the Bidder and submitted to the UD&HD, Govt. of Jharkhand for approval. The Bidder will also provide all means for measuring the performance and reliability of the proposed application system during the implementation and acceptance testing of the equipment.

The primary goal of Acceptance Testing & Certification is to ensure that the project meets requirements, standards, specifications and performance prescribed by the RFP, by ensuring that the following are associated with clear, quantifiable metrics for accountability:

- a) Functional requirements
- b) Availability
- c) Performance
- d) Security
- e) Manageability

4.14 Hardware Maintenance

- The Hardware support should be for all the Hardware including the Video Conferencing equipments, which is part of the system during the warranty period for a period of Three years from the date of installation/commissioning and acceptance of the systems by UD&HD, Govt. of Jharkhand
- Bidder shall provide timely support for all the Hardware related problems.
- Bidder shall provide basic instruction to the technical staff of the client for basic problem identification.
- Bidder shall provide the service support as per the scope of Appendix-'N' Service Level Agreements.
- Bidder shall repair and/or replace the faulty systems within the time, as specified in the SLA, ensuring minimum down time impact.

4.15 Software Maintenance

The Bidder is required to provide support service on planning, implementation, fault diagnosis and resolution, consultation, and updating services on:

- All the proposed software for the development, implementation and operation of the System
- The online applications
- The online supporting applications developed for updating the servers
- Cost of any change request (CR) or patches in the Application Software will be handled separately depending upon the severity impact of the CR/Patch and this will be decided by UD&HD, Govt. of Jharkhand at that time.
- Maintenance Charges will include Warranty Period of three years.

Besides these, The Bidder shall upgrade the application software, interfaces, system software, browser and any other supporting software to their new releases and versions within the quoted price within the project duration of three years and subsequent AMC, if any.

- The Bidder shall monitor system performance and capacity.
- The Bidder shall process ad hoc requests.
- The Bidder shall perform change management and quality assurance.
- The Bidder shall update document to reflect changes.
- The Bidder shall make recommendations on system changes.

4.16 Support and maintenance

Support and maintenance of the proposed solution during implementation and in live running is included in the scope of this RFP. Bidders must therefore provide details of how they would provide with a comprehensive support and maintenance package for their proposed solution.

Support and maintenance methods must address the Software, Modifications, Interfaces, and future enhancements. Bidders should therefore indicate how they propose to address tasks such as:

- Resolution of Application faults;
- Maintenance of application documentation;
- Application of future upgrades and standard releases
- Logical design for enhancements to the system
- Physical design
- Configuration Management
- Integration
- Construction

- Application Testing
- System Testing and Installation

4.17 Project Management

Representatives of the Bidder will meet UD&HD, Govt. of Jharkhand representatives every fortnightly or upon request from the UD&HD, Govt. of Jharkhand. They should also work in close coordination and guidance of representative of Dhanabad Municipal Corporation and the Project Management Unit (PMU).

The Bidder has to submit fortnightly work progress and reports to the UD&HD, Govt. of Jharkhand. They should include but not be limited to the following:

- Design, plans and schedules
- Minutes of project related meetings
- Project Progress Reports
- Monthly Highlight Reports
- Quality Assurance Plan and Report
- Project Evaluation Review and Report
- Post Implementation Review Plan.

4.18 Documentation and User Support

Three set of the following documentation shall be provided along with one set in electronic format.

- System Design Document
- Operational Manual
- Database Dictionary
- Training Manual (Hindi & English) etc.

Bidders must provide details of the documentation, which they will provide, as part of their proposed solution. Details of any arrangements for the provision of user support must also be provided.

In addition, two sets of operational manual for each of the services shall be provided to each of the ULB as and when they join the State level software solution for service delivery.

4.19 Help Desk Support

- The Bidder agency is required to set up helpdesk facility at the Department.
- The Bidder shall also provide an onsite technical support, handholding support and training services as part of the post implementation services, on a scheduled basis as well

as on a need basis for a complete period of defect liability and the support for next 36 months.

- The implementation agency shall set up and maintain help desk with 12x6 (12 hours- 8.00 AM – 8 P.M. and six days for a week – Monday to Saturday) uptime for the entire contract period.
- The help-desk personnel must have good understanding of the project, the technical, functional and operational details of the technologies involved, including a very good understanding of the application software.
- Personnel at the help desk must comprise of at least 1 Managerial staff and technical staff with sufficient delegation to act as coordinator for managerial and technical aspects of the project respectively at state. There are total minimum 4 (Four) resources to be deployed at help desk.
- The implementation agency will be required to adhere to SLAs regarding the required uptime for maintaining the quality of service.
- The following are the minimum requirements for the help desk:
 - The Helpdesk should take care of call management of all the hardware and network equipments (All-in-One Desktops, Laptops, Printers, Scanners, Switches, Routers and UPS and Video Conferencing equipments etc).
 - Reporting of calls of Hardware and network failures (All-in-One Desktops, Laptops, Printers, Scanners, Switches, Routers and UPS and Video Conferencing equipments etc) to the respective OEM/Vendor and liasoning for the restoration of the equipments.
 - Management of Warranty support of the supplied products and services.
 - A daily reporting of problems and issues, categorized and classified appropriately, must be shared to UD&HD.
 - A monthly, quarterly and yearly summary must also be sent to UD&HD.

4.20 Data Digitization and Migration

As part of the Department's (ULB) transition to software based functioning, Dhanbad Municipal Corporation (including all its circle offices and other offices mentioned) past records related to different activities since last 8 years (as of the start date of the project) (which are currently stored as Hardcopy files & records) need to be digitized & migrated into the new system for department.

The Bidder is solely responsible for 100% accuracy of the digitization of all the past records.

The objective of data entry is mainly to utilize the data for searches and modifications. The vendor should have the following responsibilities:

- Undertake successful data digitization and migration
- Verify and validate the data digitized with 100 percent accuracy
- Integration of the data created with the Application Software Vendor
- The implementation agency should collect the exact number of records that have to be digitized for a particular location. The data digitization has to be completed within the timelines shown in the project schedule.

Data to be migrated should be cleansed, rationalized, transformed (if required) and reconciled. The following is the indicative list of the type and amount of data to be migrated from the manual systems of ULB.

S.No.	Module	No of Pages to be Digitized/year
1.	Birth Registration	20000
2.	Death Registration	3000
3.	Payment of Property Tax(Holding Tax)	10000
4.	Payment and Management of Utility Bills (Includes Water Connection)	7500
5.	Licenses (Include Trade License)	2000
6.	Project/ Ward Works	600
7.	Solid Waste Management	1000
8.	Assets and Land Management	500
9.	Personal Information System	2000
10.	Below Poverty Line list under Schemes Management System	4000
11.	Others	2000

4.21 Manpower and Data Entry Operators

The Dhanbad Municipal Corporation (including all its circle offices) requires “Data Entry Operators (DEOs)” for entry of information/data in the developed software modules for 3 years after the contract agreement with the Bidder. They would also provide handholding support to the ULB officials before and after the development of software modules (as per role of the officials).

Apart from this, UD&HD,Ranchi requires other Manpower(Database Administrator) and MIS Manager for the project for their own use. The qualification and role of these Manpower would be –

Category	Indicative Roles & Responsibilities	Minimum Qualification & Experience Requirement
Database Administrator	<ul style="list-style-type: none"> • Data Migration & Merging to higher versions or server migrations 	<ul style="list-style-type: none"> • 3+ Years of Relevant Experience in RDBMS platform • BE / B. Tech / MCA /



	<ul style="list-style-type: none"> • Cloning & Patching • RAC and Performance Tuning • Database performance monitoring 	M.Sc. (Computer Science, IT) <ul style="list-style-type: none"> • Relevant valid Certification of international Standard
MIS Manager	<ul style="list-style-type: none"> • Manage and collect the data for the SLA monitoring • Prepare reports on the progress made in different components • Collect data on progress vis-à-vis the approved project plan 	<ul style="list-style-type: none"> • 3+ Years of Relevant Experience in MIS management. Experience in e-Governance project would be preferred • BE / B. Tech / MCA / M.Sc. (Computer Science, IT) Relevant valid Certification of international Standard

The required numbers of Data Entry Operators (DEOs) and Other Manpower are –

S. No.	Location	Number of DEOs Required
1.	Dhanbad Headquarter	5
2.	Dhanbad Circle Office	2
3.	Chhatatand Circle office	2
4.	Sindri Circle office	3
5.	Jharia Circle office	3
6.	Katras Circle office	3
7.	MADA, HQ office Dhanbad	2
8.	MADA, other office Dhanbad	1
9.	MADA Water Supply Office, Jharia	1
10.	MADA Health Office, BhulanBarari, Jharia	1
11.	MADA Health Office, Jharia Bazar	1
12.	MADA Health Office, Katras	1
13.	MADA Water Supply Office, Katras	1
14.	MADA Health Office, Putki	1
SubTotal (A)		27
S. No.	Type of Manpower and Location	Number of Other Manpower Required

1.	DBA at UD&HD, Ranchi	1
2.	MIS Manager at UD&HD, Ranchi	1
SubTotal (B)		2
Total (A+B)		29

Note: The required minimum qualification for the above DEOs should be –

- Graduation in any discipline with Diploma/Degree in Computer Science/Computer Application with 2 years experience in Data Entry Works.
- Degree in Computer Application with 2 years experience in Data Entry Works.
- The DEOs involved in the Finance and Accounts module is desired to have degree in Accounts/Commerce.

**** Selected Bidder may opt for hiring the existing manpower working for the Department if found suitable.**

***** All resources will be hired only after interview by the expert panel (Team of members) constituted by UD&HD.**

4.22 Training

The planning phase should involve but not limited to determining the training scope and approach for delivery of training associated with the overall project milestones. This should conclude with an agreed development and delivery approach to deliver the training requirements of the Project. This should be aligned to ULB's standards and methodology, thus ensuring the delivery of quality system-based training materials. In addition, scope and complexity of the project's training requirements should be conducted and documented along with the training approach in the Training Management Plan. Focused sessions should be planned at discussing the training materials, Training environment requirement analysis and training schedule planning. The templates for content development should also be discussed for certain work products. A schedule reflecting the plan to deliver Training should also be delivered which will be aligned to the Project implementation milestones and releases.

Training needs to be carried out at the following levels by the bidder –

- Conduct Change Management Workshops / training of one day each to be conducted twice in Dhanbad Municipal Corporation for all the officials and staffs and at least Once for UD&HD officials (Approx. number of staffs and official is 200). Brochure should be distributed to all of at least 20 pages. The Brochure should be developed by the Bidder in consultation with the Department and the Bidder needs to get the brochure approved by the bidder Department before printing. Bidder will have to print 250 brochure and these

brochure's needs to be distributed to the Department Employees during the Training. Logistics for both training and Change Management workshops will be provided by the Department.

- Hands-on training to all Focal Points and department heads (Dhanbad Municipal Corporation) about the system features in multiple batches for at least three day for each batch. No over-head charges will be paid for such trainings by the department.
- Detailed trainings to end users in multiple batches department-wise.
- Training to IT staffs for system administration and management.
- Preparation of User Manual (Bilingual) including but not limited to all the modules. Copies of approved user manuals should also be submitted in electronic form as well as in print (coloured) form to UD&HD and Dhanbad Municipal Corporation (At least 10 sets of printed user manual be submitted).
- The bidders are required to propose a training plan as a part of their proposal
- The bidder should also give training on the basic computer skills to the staffs of Dhanbad Municipal Corporation based on the requirement.

4.23 STQC Testing

Bidder is required to follow DIT standards & should ensure and get STQC Certification before Go-Live.

The following point needs to be kept under consideration:

- a) Bidder shall abide the laid down set of guidelines & accepted norms for e- Governance, for the testing and certification in all aspects of project development and implementation covering software, hardware and networking including the processes relating to the design of solution architecture, design of systems and sub-systems, coding, testing, business process description, documentation, version control, change management, security, service oriented architecture, performance in relation to compliance with SLA metrics, interoperability, scalability, availability and compliance with all the technical and functional requirements of the RFP and the agreement.
- b) Bidder shall ensure that the guidelines are being followed and all documentations are maintained from the early project development phase to avoid large-scale modifications/errors.
- c) Bidder shall establish appropriate processes for notifying the concerned department in case of any deviations from the norms, standards or guidelines at the earliest instance after noticing the same to enable the Agency to take corrective action.

- d) Such an involvement of and guidance by the agencies will not, however, absolve the Agency of the fundamental responsibility of designing, developing, installing, testing and commissioning the various components of the project to deliver the services in perfect conformity with the SLAs.

4.24 Integration of all remaining ULBs of the state in the State Level Software Solution

The developed solution would initially cater to the needs of the selected ULB (Dhanbad Municipal Corporation), and would be rolled out to the remaining ULB's in the state in a phased manner, as per the phasing strategy decided by the State Government.

In the process of rollout in the remaining ULBs in the state, the Bidder is required to facilitate for the following:

- The Bidder should consider the requirement (ex- no. of users etc) of the ULBs while considering the sizing of the solution.
- The Bidder shall carry out Customization, for local level, required for integration of ULBs.
- UD&HD may ask for carrying out enhancement/customization in any of the modules.
- The Bidder shall configure the remaining ULBs in the state level software solution.
- The Bidder is required to provide guidance and training to the ULBs in the rollout process.

5. TECHNICAL REQUIREMENT

Through this Request for Proposal (RFP), it is intended to invite Proposals for "Selection of a Software Development Agency (SDA) for State level implementation of "e-Governance in Municipalities" solution as per scope of work defined".

A common e-Governance infrastructure would be established at state level, which will be used by various ULB's in the state. The State Level software solution would be made available to ULBs by the State from the State Data Center. All items (as per Bill of Material in Appendix 'O') required to deliver the services to ULB (Dhanbad Municipal Corporation) are within the scope of this RFP. However, the IT infrastructure at respective ULBs other than the Dhanbad Municipal Corporation would be separately provided.

The application software should be scalable for both application server and database server for future roll-out.

The State level software solution (SLSS) will be utilized by multiple ULBs within the state through multi-tenancy where single instance will be used by multiple ULBs. SLSS shall provide the ability to each participating ULB joining the SLSS to maintain its independent identity.

5.1 Desired System Architecture

- The proposed solution should be a comprehensive, hot-pluggable software suite for building, deployment and management of Service-Oriented Architecture (SOA). This should include the service-oriented development of applications, service-oriented integration of applications and IT systems and process orchestration of system services and process monitoring solution.
- The solution should have capability where any services like Payment Gateway, the mobile devices including GPS-enabled handheld devices and other mobile-GIS computing devices for queries/ reporting and providing day-to-day approvals by competent authorities as per authorized workflow for different kind of requests; and external entities like Bank, Departments and others can invoke this framework by passing the required parameters and specifying the desired output.
- The consolidated architecture need to consider all the major processes/ sub processes and should choose/map all the solution components complying with the specifications mentioned in the Tender Document. This end-to-end architecture blueprint should be based on SOA architecture.
- All solutions should be deployed with extreme flexibility so that new services and operational requirements can be made whenever needed by modifying existing processes. All software modules should be tightly integrated with each other as per the business requirement and the integration should be achieved under Enterprise Application Interface (EAI) framework using industry standard connector/ adapter.
- Applications should be near linear scalable with multi-layered and multi-tiers, distributed, component-based architecture for reusability and scalability with full support load balancing functionality. Provision for future services within the overall design architecture of convergent, multi-service provisioning and activation system should be available.
- The solution should accommodate the exponential growth projections of ULBs by enabling the architecture to be independent of the technology and the Bidder thereby allowing its evolution in a 'plug-and-play' environment.

Selected Non-functional features would be-

- The solution architecture should be built on sound architectural principles enabling fault-tolerance, high-performance and scalability both on the software and hardware levels
- Solution architecture must be loosely coupled so as to integrate additional systems in future.

- Solution architecture must support trace logging, error notification and resolution and exception handling.
- The system architecture should include adequate security covering management of identity, threat and vulnerability. The architecture should cover network, host, application and data security.
- The solution shall provide the functionality to configure the parameters to define the business rules with the application.
- Hard coding in any of the modules should be avoided and in case it is unavoidable, case to case approval should be sought at the SRS level.
- The solution shall be able to interoperate with standard RDBMS platforms like Oracle, MS SQL, DB2, Informix, Sybase or any other RDBMS conforming to ANSI/ISO SQL-200n standards; Operating systems - Windows, Unix, Solaris; and Web browsers - Internet explorer, Mozilla Firefox, Opera and Chrome etc.

The Bidders should propose detailed system architecture describing solution integration, security and deployment and addressing scalability, availability, performance and manageability. The solution architecture should also cover proposed hardware configurations to ensure high availability, integrity, scalability, distribution and concurrency.

5.2 Administration for multi-tenancy

As the application will be used by multiple ULBs, it should provide the following facility:

- User administration at ULB level
- Manage business environment at ULB.
- To provide independence to ULBs to manage their data & environment.
- Should be capable to single instance of the software runs on a server, serving multiple ULBs (tenants). Multi-tenancy is contrasted with a multi-instance architecture where separate software instances are set up for ULBs.
- Should have multi-tenant architecture so that each ULBs works with a customized virtual application instance

5.3 Independence to ULBs to Manage their Data & Environment

ULB specific administrators to manage users & their access rights which will support ULBs in the following:

- Be able to assign role(s)/ tasks to employees according to the workflow for a process.
- Allow Dynamic workflow management.
- Should be able to collapse or expand a workflow depending on the ULB's specific requirements

- Facility to accommodate ULB specific customization for dynamic business workflow.
- Monitor record & track different services related transactions for accounting purpose among ULBs.
- Establishment of accountability & problem detection, the means by which changes to the information (inserts, updates and deletes) are recorded for 'audit' purposes
- Security features to protect information and control relevant accesses; (i.e. capability to secure data using encryption, provide network and infrastructure security for reliable and transparent services)

5.4 State Level Administrator:

- At state level there will be an administrator which will be responsible for following:
- State Level User Management: Create user, Revoke user, Change user role
- State Level Roles and Rights Management: Create/Revoke Roles, Create/Revoke Rights, Assign Rights to Roles, Assign Users to Roles.
- Organization and Geography management
- Backup processes
- End of Period Management and reporting
- Digital Certificates management

5.5 ULB Level Administrator

- ULB Level User Management: Create user, Revoke user, Change user role
- ULB Level Roles and Rights Management: Create/Revoke Roles, Create/Revoke Rights, Assign Rights to Roles, Assign Users to Roles.
- Backup processes
- Create and manage access and login rights of the ULB users.
- Handle ULB specific business logic and by-laws in the application solution.
- The customizations specific to ULBs for dynamic business workflow, forms/reports, language, look and feel be taken care in the application solution.
- Manage contents of the application solution

5.6 Scalability and future provisioning

One of the basic requirements of e-Municipality Architecture is its scalability. The architecture should be scalable, configurable and capable of delivering high-performance as and when the transaction volumes increase and methods improve. It is required that the application and deployment architecture should provide for Scale-Up and Scale out on the Portal, Application and

Web Servers, Database Servers, Application Integration Servers, and all other solution components.

Scalability of the solution is to be achieved along with the following dimensions, as described below:

- Scalability in terms of the volumes of transactions handled: Bidder shall provide the facility to enhance the hardware, software and network capacities to maintain the performance levels always in synchronization with the SLA metrics prescribed with addition within the existing setup.
- Scalability in terms of addition of new services of an existing department: Bidder shall provide seamless and effortless integration with the backend application such that new services for an existing department can be added with ease at the Data Centre level. This should be achieved without interrupting existing services at the centralized solution.
- Scalability in terms of addition of new e-Municipality Service & System: This shall provide seamless integration with heterogeneous systems at the backend with ease of deployment of the applications and services, maintaining the common look and feel and functionality at the front-end for the ULB.
- Scalability in terms of addition of new channels of delivery: Solution should be designed to provide services through additional delivery channels like the mobile phones, PDAs and other devices
- Scalability in terms of addition of new services of new departments: As and when required, it shall be possible to add new services beside the minimum services identified in the RFP above. New services should be integrated with existing services while maintaining the integrity of data across such interfaces without adversely affecting any of the existing services.

In addition the application should meet following functionalities:

- Should support appropriate technologies to address hardware & software scalability like virtualization, server farms, cloud computing, etc. should be evaluated and deployed
- Should be able to continue to function well when it (or its context) is changed in size or volume in order to meet a user need.
- Should handle the rescaling to a larger size or volume due to increase in number of ULBs
- Should accommodate changes in transaction volume without major changes to the system.

Bidder shall give details, how the scalability shall be achieved in each of the above scenario as part of the technical solution in the technical bid.

5.7 Facility to accommodate external interfaces

For Application solution to provide a gateway to have interface to external applications viz.

- Geographical Information System (GIS) platform shall be made available as part of the State level software solution which will allow hosting the ULB specific maps with geo referencing and use by all services as per requirement. The MIS data of the ULB shall be linked to GIS platform by each ULB and will allow multiple layers of information on the platform. Proposed applications should provide facility to interact various applications to GIS platform.
- Payment Gateway: A common gateway to be provided to support all services of centralized application and Bidder shall ensure integration with the payment gateway supporting multiple choices for payments by the users.
- Interoperability to other existing applications of ULBs, State (if any) i.e. UID, SSDG, e-District etc.

6. FUNCTIONAL REQUIREMENT

Proposed solution shall offer an integrated platform for delivery of the services to the citizens, where data is entered only once and used across services to maintain integrity and support business processes to achieve the desired Service level Benchmarks as per the GoI guideline.

In addition, the applications are to be so designed so as to support the migration to the IT system keeping in view the prevailing capacity with the ULBs. There would also be a large amount of legacy data, which will have to be entered into the system and in order for effective change management, the state level software solution is required to support the following features:

Detailed Functional Requirement is attached in Appendix- 'M' and includes process overview. However Bidder is required to finalize the requirement through software requirement study (SRS) in line with the requirements of Municipal acts and bye-laws in the state/ULB.

7. DESIGN AND SOLUTION ARCHITECTURE

The Bidder is required to provide illustrative architecture of the proposed solution. Beside other details, the architecture should provide details about following key domains:

7.1 Application components

7.1.1 Mailing & Messaging Services

This would be used for sending the alerts as mail message to the registered users of the application and will be used for messaging and calendaring services. The Mail Server should provide a highly

available, scalable and reliable platform for delivering secure communication services. It would be required to cluster this Server to ensure high availability and reliability. This server will also act as Messaging Server. It should provide with extensive security features ensuring the privacy of users and the integrity of communication through user authentication, session encryption, and content filtering to help prevent spam and viruses, and mechanisms to monitor and enable regulatory compliance. It should support standard SMTP, IMAP and POP3 services. The Messaging system should provide a secure messaging and collaboration – email solution with standard features like calendaring, contacts and tasks, Archiving, Directory and LDAP address book, web based access to emails and support for data storage. Other features to be supported include – per-user filtering policies, user management, mailing list manager and synchronization with MS Outlook / Lotus Notes/equivalent.

7.1.2 Light Weight Access Protocol (LDAP)

Details:

- LDAP server should be able to replicate data between servers and support cascading replication.
- It Should have support for open standards [LDAP v.3, XML]
- The directory service should provide support for Group policies and software restriction policies. The group policies should have settings to configure various desktop or user related settings via centralized control. These settings will include items like Browser setting, desktop restrictions, program restrictions, admin controls, software deployment etc.
- Should have support for integrated authentication mechanism across operating system, messaging services. The Directory Server should have out of the box integration with the e-mail server. Should provide enhanced authentication like Kerberos which support authentication across multiple Operating system like Windows, Unix/Linux etc
- Should be able to integrate with other Standards based Directory system for synchronizing user accounts and passwords.
- The directory service should support features for health monitoring and verifying replication.
- The directory service shall provide support for modifiable and extensible schema
- Support for controlling access to the directory, a sub tree, entries, attributes by setting permissions for users, groups, roles and location information like IP addresses etc.
- Support for user authentication through user ID/password, public-key certificates, or Anonymous authentication Should support security features, such as support for Kerberos, smart cards, public key infrastructure (PKI), and x.509 certificates
- Should support LDAP servers in multi master configuration Ability to keep replicas in Sync to enforce Replication updates
- The solution should provide a comprehensive single window Admin tool locally or over internet to administer the directory services. The directory service shall provide support for modifiable and extensible schema both manually and programmatically
- The system must maintain- time-stamped records of every access change request, approval/denial, justification and
- Change to a managed resource



- The system must maintain- time-stamped record of every administrative and policy-driven change to access rights
- The system must provide reports on audit trails for users, systems, administrators and time periods, including workflow approvals, rejections, request statistics, policy compliance and audit reports, user account reports, access reports and service reports and also any customized reports based on specific need.
- Audit trails in a tamper proof environment in accordance with the purchaser's policy for a reasonable amount of time to allow for accountability and evidential purposes. Backup copies shall also be maintained to protect against any accidental or deliberate erasure of data.
- Ability to define organizational structures based on the access granting authority
- Ability to delegate each administrative task with fine-grained control at organizational unit level so that the team or dept. administrator can completely perform the administrative tasks for their organization unit.
- Ability to access all delegated capabilities over the Web via Web Browser.
- Ability to incorporate Web access control with single sign-on environment and to distribute provisioning components securely over WAN and Internet environments, including crossing firewalls.
- Ability to incorporate custom user authentication approaches commensurate with internal security policies and to create private, filtered views of information about users and Essential available resources.
- Ability to import and export configurations to enable migrations between Development, Production environment without delays.
- Ability to interact with target resources without interfering with their performance.
- Ability to continue to operate without degradation when the managed system is temporarily inaccessible.
- Ability for the managed resources to remain fully functional if the provisioning solution is unavailable
- Ability to load and maintain synchronization with user information from existing human resources and other identity systems, both statistically and dynamically.
- from existing systems Ability to load account and authorization information from existing operational systems without data entry
- End-to-end security over account changes.
- Entirely Web-based functionality to allow easy distributed administration on an unlimited scale.
- Integrated functionality that does not require duplicate data entry or manual synchronization of information shared for multiple functions.
- Ability for provisioning solution to maintain accuracy when local administrators maintain privileges to make changes to target resources.
- XML-based extensibility and interaction with external systems
- Use of common and de facto standards for interfaces that are internal and external to the provisioning solution.
- Inclusion of a persistent data store or repository for audit trails and system recovery.
- Ability to respond quickly to user interactions including report requests, access change requests, policy changes and password self-service.

7.1.3 Single Sign-On

Details:

- Web application authentication should happen through a centrally managed application
- Centrally managed application should provide authorization services to the web application. It should be authorize user access based on access policies defined within the system
- Standards-based interface for extensive integration with password policies in directory stores (LDAP, Active Directory, NT, etc.)
- Ability to pass user name, credential and other customer defined attributes to the authentication forms of other products (HTTP POST).
- Ability to pass user name, credential and other customer defined attributes as header variables
- Cookie Based, Basic Auth (W3C)
- Support for multiple host names from the same appliance, as well as support for multiple customizable sign-in pages.
- Modes of operation Clientless –Browser based, Client : For client server access
- Full Network access should also be supported with end point security.
- SSO enabled applications and enable users to experience single sign on right from first time login.

7.1.4 Payment Gateway

The application would provide the online payment services (for payment of Property tax, license fee, etc.) through integration with the payment gateways. The solution shall support card payments using all the popular debit and credit cards (Visa, Master card etc.) and Direct Debit. For online payments, Secure Socket Layer (SSL) shall be used for supporting & securing the transactions taking place through the payment gateway. As Commercial transaction over internet is prone to Identity Theft and can cause financial loss to department and citizens, the solution would incorporate PCI DSS ver. 1.1 standards.

7.1.5 Digital Certificate Services

The system should automatically enable/disable the Digital Signature Certificates (DSCs) of employees depending on the current status of each employee namely, fresh appointment / transfer / leave/ training / retirement etc. The system should accordingly enable DSC only for an “active” employee. Procurement of digital certificates for the users of the ULB will be the responsibility of UD&HD.

8. INFRASTRUCTURE AND TECHNOLOGY

Bidder should ensure that proposed State level solution for the State will be in accordance with the State level Municipal Act(s) and has provision to customize for each ULB as per their by-laws. All ULBs in the state will be able to make use of this software solution through a web-based access

mechanism, to provide citizen services and cater to their internal functions. As part of specific customization, ULBs should be able to adopt the system after incorporating customization to support their bye-laws.

8.1 Technical architecture

The Bidder should provide adequate information that proposed State Level Software Solution is the centralized solution & should facilitate the delivery of municipal services to various stakeholders in the State.

8.2 Design of Integration Architecture

- a) Bidder shall evaluate all requirements for integrations for real time and batch mode interfaces
- b) Bidder shall develop integration strategy, and integration architecture. It shall prepare detailed Data flows, and functional requirements for all interfaces
- c) Bidder to provide the integration Tools and perform integration and document test results after integration.

8.3 Monitoring Tool

It shall be possible for each ULB to monitor its own SLAs independently. In case of ULBs, the SLAs involve for all the supplied components by the bidder i.e. Software, Networking and Hardware (Desktop, Laptop etc.). In case of SDC, SLAs involves for all the supplied components by the bidder i.e. Networking, Hardware, System Software (Middleware, Databases etc) and Application Software. The Bidder should proposed suitable monitoring tool, so that each local body could monitor its committed SLAs, for a particular reporting period. Each ULB can have different committed SLAs, and the tool must support the monitoring individually. The proposed tool should have following functionalities:

- The proposed service management system should provide a detailed service dashboard view indicating the health of each of the departments / offices and the health of the services they rely on as well as the SLAs.
- The system should provide an outage summary that gives a high level health indication for each service as well as the details and root cause of any outage.
- The system must be capable of managing IT resources in terms of the business services they support, specify and monitor service obligations, and associate users/Departments/Organizations with the services they rely on.
- The Users definition facility must support defining person(s) or organization(s) that uses the business Services or is a party to a service level agreement contract with a service provider or both. The facility must enable the association of Users with Services and SLAs.

- The Service Level Agreements (SLAs) definition facility must support defining a set of one or more service Guarantees that specify the Service obligations stipulated in an SLA contract for a particular time period (weekly, monthly, and so on). Guarantees supported must include one that monitors service availability (including Mean Time to Repair (MTTR), Mean Time between Failure (MTBF), and Maximum Outage Time thresholds) and the other that monitors service transaction response time.
- SLA violation alarms must be generated to notify whenever an agreement is violated or is in danger of being violated.
- The system must provide the capability to designate planned maintenance periods for services and take into consideration maintenance periods defined at the IT resources level. In addition the capability to exempt any service outage from impacting an SLA must be available.
- The system must provide a historical reporting facility that will allow for the generation of on-demand and scheduled reports of Business Service related metrics with capabilities for customization of the report presentation.

8.4 Deployment Architecture

Deployment methodology is another major design concerns while crafting the overall architecture. By considering the possible deployment scenarios, a situation where the application cannot be deployed successfully, or fails to perform to its design requirements due to any technical infrastructure limitations, can be prevented. To run the application successfully on the network Web Server, Application Server, Database Server etc. will be required. A server for mail will be hosted in the DC for mailing and messaging solution. Some other servers like Directory Server etc. will also be hosted for their different purposes. The option of having clustered servers is to allow for redundancy and load sharing for both database management and applications. The followings are description of major servers proposed at data center-

8.4.1 Application Server and Web Server

Application server would be used as middle tier for various web based applications. It would take care of the necessary workflow and Web server would be required for the interfacing with the end user. Both the web and application server would be seamlessly integrated to provide high availability and performance. These servers would be installed and operated in clustered configuration to ensure high availability and reliability.

8.4.2 Database Server

The application will be hosted on database which will contain all the data of the application. Since this data will be centralized and is very critical, the server would be installed and operated in

clustered configuration to ensure high availability and reliability. The data would be physically stored on an External Fiber Channel (FC) based Storage (SAN). These will be Mid/High Range Enterprise servers.

8.4.3 Mailing & Messaging Server

Mailing & Messaging Infrastructure would provide email services to ULB Employees. The Mail Server would provide a highly scalable, reliable, and available platform for delivering secure communication services. This server would be installed and operated in clustered configuration to ensure high availability and reliability. This server will also act as Instant Messaging Server.

8.4.4 Directory Server

The Directory Server will be used for authentication and authorization of users. LDAP v3 compliant directory software would be installed on this server.

8.4.5 Management Server

The management server would help in administration of distributed systems at the server farm. The management server would help in efficient and reliable administration of all the distributed computing devices. It would provide Inventory Management, Fault Management and Performance Management and Patch management and it would monitor the availability of Services. EMS will be installed on this system.

8.4.6 Backup Server

A backup server would be deployed for installation of backup software which will take care of backup activity.

8.4.7 Antivirus & Anti-Spam Server

A separate server for Anti-Virus and Anti-Spam would be deployed to keep the other servers and application secure from the attack of virus, Trojans and spam. This will also act as a centralized system for updating the virus definitions on the systems across ULB offices.

8.4.8 SMS Gateway

SMS gateway will be used to send the notification and other updates to employees, Businesses and Citizens.

8.4.9 SAN & Tape Library

A SAN (Storage Area Network) will be used for storage of data from all the locations. This will act as central repository for data, documents and records. A Tape Library would be used for taking the regular backup of centralized storage (SAN).

The whole setup would be configured with SAN for external storage of data for faster access and would be implemented on RAID 5/6 for redundancy. The Database cluster connects to SAN through a redundant fiber switch to ensure no single point of failure.

8.4.10 Firewall & Intrusion Prevention System

Firewall with Intrusion Prevention System has been proposed to stop intrusion attempts before it enters the network. Firewall integrated with Gateway Antivirus/Intrusion Prevention Service would inspect traffic from numerous protocols to identify attacks against the network; by blocking malicious traffic.

8.5 Software License Requirements

Once the application is rolled out in DMC, the application shall be rolled out in the remaining ULBs with no additional investments (financial or otherwise) required in terms of licenses (excluding GIS licenses for Other ULBs), storage, servers etc in Data Center. Indicative number of user has been mentioned earlier for licensing requirement.

8.6 Warranty Support

8.6.1 Hardware

- Bidder shall provide a comprehensive warranty and on-site free service warranty for 3 years from the date of installation/commissioning and acceptance by UD&HD for all equipment.
- Bidder shall obtain the three year product warranty and three year onsite free service warranty from OEM on all licensed software, computer hardware and peripherals, networking equipment and other equipment for providing warranty support to purchaser.
- Bidder shall provide the comprehensive manufacturer's warranty and support in respect of proper design, quality and workmanship of all hardware, equipment, accessories etc. covered by the RFP. Bidder must warrant all hardware, equipment, accessories, spare parts, software etc. procured and implemented as per this RFP against any manufacturing defects during the warranty period.
- Bidder shall provide the performance warranty in respect of performance of the installed hardware and software to meet the performance requirements and service levels in the RFP.

- Bidder is responsible for sizing and procuring the necessary hardware and software licenses as per the performance requirements provided in the RFP. During the warranty period Bidder shall replace or augment or procure higher-level new equipment or additional licenses at no additional cost to the purchaser in case the procured hardware or software is not adequate to meet the service levels.
- Mean Time between Failures (MTBF): If during contract period, any equipment has a hardware failure on three or more occasions in a period of less than three months, it shall be replaced by equivalent or higher-level new equipment by the Bidder at no cost to purchaser. However, if the new equipment supplied is priced lower than the price at which the original item was supplied, the differential cost should be refunded to purchaser. For any delay in making available the replacement and repaired equipment for inspection, delivery of equipment or for commissioning of the systems or for acceptance tests / checks on per site basis, purchaser reserves the right to charge a penalty.
- During the warranty period BIDDER shall maintain the systems and repair / replace at the installed site, at no charge to purchaser, all defective components that are brought to the Bidder's notice.
- The Bidder shall as far as possible repair/ replace the equipment at site.
- Warranty should not become void, if purchaser buys, any other supplemental hardware from a third party and installs it within these machines under intimation to the Bidder. However, the warranty will not apply to such supplemental hardware items installed.
- The Bidder shall carry out Preventive Maintenance (PM), including cleaning of interior and exterior, of all hardware and testing for virus, if any, and should maintain proper records at each site for such PM. Failure to carry out such PM will be a breach of warranty and the warranty period will be extended by the period of delay in PM.
- Bidder shall monitor warranties to check adherence to preventive and repair maintenance terms and conditions.
- The Bidder shall ensure that the warranty complies with the agreed Technical Standards, Security Requirements, Operating Procedures, and Recovery Procedures.
- Bidder shall have to stock and provide adequate onsite and offsite spare parts and spare component to ensure that the uptime commitment as per SLA is met.
- Any component that is reported to be down on a given date should be either fully repaired or replaced by temporary substitute (of equivalent configuration) within the time frame indicated as per MTBF.
- The BIDDER shall develop and maintain an inventory database to include the registered hardware warranties.

8.6.2 Software

- Bidder shall maintain data regarding entitlement for software upgrades, enhancements, refreshes, replacements and maintenance.
- If the Operating System or additional copies of Operating System are required to be installed / reinstalled / de-installed, the same should be done as part of warranty support activity.
- Bidder should carry out any requisite adjustments / changes in the configuration for implementing different versions of Application Software. Updates/Upgrades/New releases/New versions/Patches/Bug fixes: The BIDDER shall provide from time to time the Updates/Upgrades/New releases/New versions/Patches/Bug fixes of the software, operating systems, etc. as required. The BIDDER should provide free Updates/Upgrades/New releases/New versions/Patches/Bug fixes of the software and tools to purchaser as and when released by OEM.
- In case of COTS products, OEM should commit to support the software licenses provided in the scope of this RFP for a period of 10 years. OEM should provide a stated policy document stating that the proposed software version is supported for the next 10 years. UD&HD should not be forced to upgrade the solution at any stage.
- Software License Management: The Bidder shall provide software license management and control. Bidder shall maintain data regarding entitlement for software upgrades, enhancements, refreshes, replacements, and maintenance.
- Bidder shall have complete manufacturer's technical support for all the licensed software problems and/or questions, technical guidance, defect and non-defect related issues. BIDDER shall provide a single-point-of-contact for software support and provide licensed software support including but not limited to problem tracking, problem source identification, problem impact (severity) determination, bypass and recovery support, problem resolution, and management reporting.
- The Bidder would be responsible for arrangements with Manufacturer for all the technical support which shall at a minimum include but not limiting to online technical support and telephone support during the ULB's business hours from (Mon-Sat) with access for BIDDER to the manufacturer's technical support staff to provide support as per the SLA mentioned in the RFP. There should not be any limits on the number of incidents reported to the manufacturer by BIDDER as part of provisioning of support services to purchaser. BIDDER shall have access to the online support and tools provided by the manufacturer as well as should have 24x7 accesses to a variety of technical resources including the manufacturer's knowledge base with complete collections of technical articles specifically for purchaser/ULBs.



9. APPENDICES

9.1 Appendix 'A' (Bid Letter Form)

Bidder's name:

Full Address:

Telephone No. :

Fax No

To

The Director,
Municipal Administration,UD&HD
Project Building
Fourth Floor,
Dhurwa, Ranchi
Tel/Fax:

Sub: Bid proposal for Implementation of e-Governance in ULBs at Jharkhand state as a part of national mission mode project under JNNURM

Dear Sir,

We, the undersigned bidder having read and examined in detail the specification and documents pertaining to the works as stated above do hereby propose to perform the works as a fully coordinated package as set forth in your specifications and documents.

1.0 BID VALIDITY

We confirm that all the terms and conditions and price of this proposal are valid for acceptance for a period of 180 days from the date of opening of bid (Opening of technical bid).

2.0 PRICES

We do hereby confirm that our bid price includes all the import duties and levies including license fees, royalty, etc. payable by us on imported items. We also confirm that our bid price includes all taxes, duties, levies etc. applicable on the design, handling, transportation, Insurance, supply, installation, testing and commissioning of centralized application.



3.0 BID SECURITY

We have enclosed a bid security in the form of Bank Guarantee from an acceptable bank, for a sum of Rs. **40, 00,000/-** valid for a period of 180 days from the date of opening of the bid (Opening of technical bid)

We confirm that prices quoted are inclusive of all Indian taxes, duties & levies applicable on indigenous supplies & all taxes & duties applicable on the imported materials including custom duty, countervailing duty, etc. with firm prices.

4.0 We have noted that the data and other input parameters provided in the tender documents for designing of centralized application is in the nature of broader guide lines and we confirm that all the data, input parameters of present operating conditions of all the units and actual measurement wherever required for the project shall be gathered by our representative during site visits and finalized immediately after the award. We shall be solely responsible for gathering all the various relevant parameters, input parameters required for successful design, supply, installation, testing & commissioning of centralized application.

5.0 We hereby declare that only the persons or firms interested in this proposal as principals are named here that no other person or firm other than herein mentioned have any interest in this proposal or in the contract to be entered into if we are awarded the contract. We also confirm that this proposal is made without any connection with any other person, firm or party likewise submitting a proposal and that this proposal is in all respect fair and in good faith without collusion or fraud.

Dated this _____ day of _____ of 2014.

Thanking You,

Yours Faithfully,

(Signature, name, designation and company seal)

Business address:

Name & Address of Principal Officer



9.2 Appendix 'B': Power Of Attorney

Please attach the Power of Attorney of the Authorized Signatory



9.3 Appendix 'C' (Format for Registration of Intent to Bid)

(To be submitted in company's letter-head before due date of Bid submission)

From

<Name, address, contact telephone, fax, email of intending bidder>

To

The Director,
Municipal Administration, UD&HD
Project Building
Fourth Floor,
Dhurwa, Ranchi

Telephone –

Fax—

Email-

Sub: Intent to Bid against the RFP for Implementation of e-Governance in Municipalities at Jharkhand as a part of national mission mode project under JNNURM.

Dear Sir,

We hereby express our intent to submit our bid against the above RFP. We request you to register our firm as an intending bidder for the above tender. Our contact address, telephone, faxes and e-mail address are as above.

Yours faithfully

(Name, Designation)



9.4 Appendix 'D' Bank Guarantee Format for EMD

(Format for Bank Guarantee for EMD)

From:

Bank - -----

To,

The Director,
Municipal Administration,
URBAN DEVELOPMENT & HOUSING DEPARTMENT
Project Building
Fourth Floor,
Dhurwa, Ranchi

Whereas <Company Name> (hereinafter called the Bidder") has submitted their offer dated for 'Implementing State Level Solution at Jharkhand' under e-Governance in Municipalities project for ULBs of Government of Jharkhand with pilot implementation in Dhanbad Municipal Corporation (hereinafter called the "Bid") against the Buyer's e-Tender (RFP) Ref. No.dated xx/xx/2014

KNOW ALL MEN by these presents that WE,of, having our registered office at are bound unto.....(hereinafter called the "Buyer") in the sum offor which payment will and truly to be made to the said Buyer, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this.....day of.....20..... . The conditions of obligations are –

- (1) If the Bidder withdraws or amends, impairs or derogates from the Bid in any respect within the period of validity of this tender.
- (2) If the Bidder having been notified of the acceptance of his tender by the Buyer during the period of its validity.
- (3) If the Bidder fails to furnish the Performance Security for the due performance of the contract.
- (4) Fails or refuses to accept/execute the contract.

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

This guarantee will remain in force upto and including 180 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.



.....

(Signature of the authorized officer of the Bank)

Name and designation of the officer

Seal, name & address of the Bank and address of the Branch

9.5 Appendix 'E' (Format for Company Profile) Name of the Applicant/Firm

1. Address
Telephone Number
Fax Number
e-mail
2. a) Registered Office Address :
Address:
Telephone Number:
Fax Number:
Email address:

b) Local Office address in ----- through which this work will be handled:
Name & Designation of officer in-charge:
Address:
Telephone Number:
Fax Number:
Email address:
3. Year and Place of the establishment of the company
4. Former name of the company, if any.
5. Website Address:
6. No. of years of operation in Government sector
7. Number of years of experience of your firm:
(a) In software Industry
(b) In creating similar type of solution (GIS based for ULB) (in numbers and years)
8. In which fields of software development does your firm have specialization?
9. Provide Financial Information about your company in the following format:
(In Rupees Lakhs)

Component	1 st year	2 nd Year	3 rd Year
a. Turn Over			
b. Net worth			
c. Net Profits after tax			

Note: The bidder should enclose documentary evidence for last three audited years.

10. Furnish Quality certifications achieved by your organization.



11. Track Record:

a.	Have you completed the projects with major clients? List the major clients' with whom your organization has been/ is currently associated. Attach satisfactory completion Certificates from clients.	Yes/No
b.	Were you ever required to suspend a project for period of more than three months continuously after you started? If so, give the names of project and reasons for the same	Yes/No
c.	Have you in any capacity not completed any work awarded to you? If so, give the name of project and reason for not completing the work.	Yes/No
d.	Have any penalties be imposed on any project for delay? Please give details	Yes/No
e.	If there are any legal disputes in Court against the organization / any promoter/director, please give details	Yes/No
f.	Have you ever been black listed by any Government Department / Public Sector Undertaking? (Give details)	Yes/No
g.	Have you ever been denied tendering facilities by any Government/Department/Public sector Undertaking? (Give details)	Yes/No
h.	Have you ever been declared bankrupt? (if yes, please give details)	Yes/No

12. Furnish the Permanent Account Number of the organization.

13. Furnish the Service Tax Registration No. of the organization.

14. List major awards / achievements / accreditations:

15. Professional Memberships of the organization:

16. Name of the Contact Person:

17. Contact Person's Email ID:

18. Contact Person's Mobile No:

19. Name & Designation of the Authorized Signatory:

Signature and Seal of Bidder



9.6 Appendix 'F' (Format for Bidders Experience)

[Bidders are required to provide details of relevant experiences in the format give below-

Project Experience in – Software Development Project

S. No.	Particular	Details	
1.	Citation Serial Number		
2.	Name of Project		
3.	Name of Client		
4.	Address of Client		
5.	Contact Person Name & Mobile/ Telephone		
6.	Total assignment value(Rs)		
7.	Value of Software Development Agency / Application Service Provider Work		
8.	Start & End Date	From:	To:
9.	Project Timelines/ Duration (in months)		
10.	Name of key team personnel involved and functions performed by them		
11.	Brief narrative description of Project		

Signature of Bidder (with official seal)

Date

Name

Designation

*** Testimonial would include Copy of Work order and Client (Experience / work completion) Certificate.**

9.7 Appendix 'G' (Format for Technical Solution)

The Bidder is required to submit the proposed Technical Solution in detail. Following should be captured in the explanation:

1. Understanding of the requirements and proposed solution:
 - Understanding of the requirements and value proposition.
 - Clear description of the proposed solution covering each module and how integration would be undertaken between modules.
 - Extent of compliance to technical requirements specified in the Section III of this RFP.
 - Strength of the Bidder to provide services including examples or case studies of similar solutions deployed for other clients.
 - Clear description of training methodology.
2. Detailed technical design of the system covering the following.
 - Technical and Solution Architecture to meet technical requirements specified in Section III of this RFP.
 - Approach & Methodology for Installation & Configuration of:
 - Computing (Server OS, etc.) infrastructure
 - Help Desk
 - Other infrastructure
 - Operations & Maintenance
 - Help Desk Services
 - System Maintenance & Management
3. Project Plan addressing the following:
 - Project Organization and Management Plan;
 - Proven Solution Implementation plan
 - Design and Development plan
 - User Acceptance Plan
 - Delivery and Installation Plan
 - Training Plan
 - Risk Management Plan
 - Change Management Plan
 - Support and Maintenance Plan
 - Quality assurance and Quality control plan
 - Task, Time, and Resource Schedules



9.8 Appendix 'H' (Proposed Resource Deployment)

Please provide details for each Core Project Team Member in following format:

S.N	Particulars	Details
	Name	
	Specify role to be played by him/her	
	Current Job Title	
	Date of Birth	
	Gender	
	Languages Known	
	Educational Background	
	Training/ Certifications	
	Total Years of Experience	
	Details of Experience	Name of Organization From Date To Date Role
	Current Job Responsibilities	
	Summary of Professional / Domain experience	
	Skill Sets	
	Highlights of assignments handled and significant accomplishments	Name of the Assignment Client Name Project Brief Role Played Period Activities Undertaken by the personnel

I, the undersigned, certify that above profiles correctly describe about qualifications and experiences about my staff to best of my knowledge. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

Date.....

Place.....

Signature and Seal of Bidder

9.9 Appendix 'I' (Format for Schedule of Costs)

Tables related to different cost calculation:

A. Details of IT Infrastructure Cost (INCLUDING LICENSING, INSTALLATION, CONNECTIVITY CONFIGURATION ETC.)

Sl. No.	Item	Unit Price (P)	Tax (t)	Total amount $T=(P+t)$	Total Qty (Q)	Total amount $T*Q$	Remarks
IT infrastructure at Dhanbad Municipal Corporation, its Circle and other offices / UD&HD, Ranchi							
1							
2							
3							
4							
5							
	Total IT infrastructure Cost						

Total Cost in Words.....

All the hardware and network and other items proposed above should be capable of running the proposed e-Governance Application Software.

Prices quoted for all the hardware e.g. Server, All-in-One Desktops, laptops, printers, scanners, should come with Licenses of System Software (e.g. Operating System, RDBMS, Third Party Application Systems, and Antivirus) and other Software required for running the proposed E Governance Application Software for a period of 3 years.

Note:

1. The cost of acquisition includes all statutory taxes, duties and levies.
2. The cost of acquisition includes 3 years warranty and comprehensive maintenance of all supplied Hardware and network items during entire contract period of the project as per RFP.
3. The cost of server hosting on the cloud for 6 months shall be given.
4. For Hardware (All-in-One Desktop & Laptop), Bidder/OEM must have a Good Greenpeace rating on e-waste criteria as published in the year 2012. Bidder/OEM should have a comprehensive e-waste policy with publicly announced.
5. Connectivity Cost (if any) should also be mentioned by the bidder.
6. UD&HD reserves the right to alter the scope (increase quantity / remove certain items) at any stage of the project.

B. Details of E Governance Application Software Cost

Sl. No.	Software Item	Initial Cost/Unit (A)	Tax (If any) (B)	No. of Units (C)	Capital Cost per Software item $(A+B)*C$
1.		INR 0.00			INR 0.00
2.		INR 0.00			INR 0.00



3.		INR 0.00			INR 0.00
4.		INR 0.00			INR 0.00
5.		INR 0.00			INR 0.00
6.		INR 0.00			INR 0.00
7.		INR 0.00			INR 0.00
8.		INR 0.00			INR 0.00
	Total Capital Cost for the Software				INR 0.00

Total Cost in Words.....

Note:

1. The cost of acquisition includes all statutory taxes, duties and levies.
2. The cost of integration of the software modules.
3. The cost of acquisition includes 3 years maintenance of the software.
4. The cost of e-Governance Application Software Cost should include STQC Certification".
5. The roll out scope will consider only for Centralised Application Software including Web GIS Application Module).

C.Details of Other System and Services Cost (Only for DMC)

FOLLOWING IS INDICATIVE QTY. SELECTED VENDOR NEED TO IDENTIFY ALL DETAIL AS PER REQUIREMENT

Sl. No.	Description of Items	Qty	Unit Rate	Total Amount	Taxes	Total
1	GIS mapping of City (data-collection + attaching geo attributes with spatial data) and integration with web GIS application	355.77 Sq. KMs Assume 360 Sq. KMs (Rounded)				
2	Other Cost					
	Total Cost					

Total Cost in Words.....

Note:

1. The cost of acquisition includes all statutory taxes, duties and levies.
2. The Satellite imagery shall be purchased by the bidder where UD&HD will assist in procuring the same if required.

D. Details of Video Conferencing Cost

Sl. No.	Description of Items	Qty	Unit Rate	Total Amount	Taxes	Total
1						
2	Other Cost					
	Total Cost					

Total Cost in Words.....

Note:

1. The cost of acquisition includes all statutory taxes, duties and levies.

**E. Details of Data digitization and Migration Cost**

Sl. No.	Service Categories	Volume of Records per year	Unit Value (per record)	Volume of Records for 8 Years	Total Cost
1.					
2.					
3.					
4.					
5.					
6.					
Total cost for Data digitization & migration (last 8 years since the start date of the project)					

Total Cost in Words.....

F. Detail of Manpower and Data Entry Operators (DEOs) Cost

Sl. No.	Locations	Number of manpower and DEOs	Unit Price (per Manpower) per Year	Cost for 3 Years	Total Cost
1.					
2.					
3.					
4.					
5.					
6.					
Total cost on Manpower and Data Entry Operators for 3 years					

Total Cost in Words.....

G.Details of Site Preparation Cost

Sl. No.	Name of Site	Description of Items	Qty	Unit Rate	Total Amount	Taxes	Total
1							
2							
3							
4							
5							
Total Cost							

Total Cost in Words.....

**H.Details of Manpower Cost for Helpdesk**

Sl.No.	Resource Details	Man month Cost in Rs.(A)	Service Tax (B)	No. of Months (C)	Total Cost
Total Capital Cost of the Manpower (for 3 Years)					

Total Cost in Words.....

I. Details of Training Cost

Following is the indicative qty. selected vendor need to identified all detail as per requirement

Training Type	Duration per day (A)	Number of People to be trained in one batch (B)	Number of Batch (C)	Cost per day per batch) (D)	Total Cost
Total Capital Cost of the Training/Workshop					

Note: Numbers of officials/staffs to be trained is approximately 200 (This number may vary in a later Stage).The number of staffs is given only for the purpose of cost estimation. Bidders are requested to provide the training plan, the breakup of the training related expenses. The actual training plan and content will be formulated with consultation of all the stake holders.

J. Details of Post Implementation Support Cost

Sl. No.	Description	Qty	Unit Cost	Total Amount	Taxes	Total
1	Post Implementation Support	3years				
	Total Cost					

Total Cost in Words.....

Note:

1. The cost of acquisition includes all statutory taxes, duties and levies.
2. The post implementation support will include, software maintenance, Help Desk Knowledge transfer etc for three years.

**K. Summary of Cost Components**

Sl. No	Item	Total Price in INR (Inclusive of all Taxes)	Total Price in words
A.	IT Infrastructure Cost		
B.	E-Governance Application Software Cost		
C.	Other Systems and Services Cost		
D.	Video Conferencing Cost		
E.	Data Digitization and Migration Cost		
F.	Manpower and Data Entry Operators Cost for 3 Years		
G.	Site Preparation Cost		
H.	Manpower Cost for Helpdesk for 3 Years		
I.	Training Cost		
J.	Post implementation Support for 3 Years		
	Total Cost		

Total Cost in Words

Note:

1. The cost of acquisition includes all statutory taxes, duties and levies.
2. The cost of acquisition includes 3 years warranty maintenance as per RFP.

Certified that the Cost of Acquisition include design, development, supply (FOR Destination basis), installation, testing & commissioning of all the components required for completion of the project as per RFP.

Name of company

Company seal

Signature:

Name:

Designation:

Date:

NOTE: Appendix 'I' should only be uploaded in Financial bid cover



9.10 Appendix 'J' – [Format for Certificate of OEM]

No.

Dated

To

The Director,
Municipal Administration, UD&HD
Project Building
Fourth Floor,
Dhurwa, Ranchi

Dear Sir:

We who are established and reputable manufacturers of having registered office at do hereby authorize -..... to submit a bid, negotiate and receive the order from you.

We hereby extend our full guarantee and warranty for the goods and services offered by the above firm.

Yours faithfully,

(Name)

(Name of manufacturers)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to bind the manufacturer. It should be included by the Bidder in its bid.



9.11 Appendix 'K' (Format for Bidders Experience)

Project Experience in - IT Sector/ Post Implementation Support:

[Bidders are required to provide details of relevant experiences in the format give below, highlighting years of experience in IT Sector. Use separate sheet for each citation]

S. No.	Particular	Details	
1.	Citation Serial Number		
2.	Name of Project		
3.	Name of Client		
4.	Address of Client		
5.	Contact Person Name & Mobile/ Telephone		
6.	Total assignment value(Rs)		
7.	Value of Software Development Agency / Application Service Provider Work		
8.	Start & End Date	From:	To:
9.	Project Timelines/ Duration (in months)		
10.	Name of key team personnel involved and functions performed by them		
11.	Brief narrative description of Project		

Signature of Bidder (with official seal)

Date

Name

Designation

*** Testimonial would include Copy of Work order and Client (Experience/ Successful Post**

Implementation Support) Certificate.



9.12 Appendix 'L' (Evaluation Criteria for Resource Deployment)

Sl. No.	Resource Category	Min. Qualification	Experience
1.	Project Management (To be deployed at Dhanbad Municipal Corporation)	BE/B Tech / MCA + MBA	Minimum 10 Years with minimum experience of 5 years as team lead for e-Governance project.
2.	Application development (Include both development and testing)	BE/B Tech / MCA	Minimum 3 Years in software application development or testing
3.	GIS Solution	BE/MCA/ BTech /MSC/ MTech	Minimum 5 years of experience in GIS solution
4.	System Integration	BE/B Tech / MCA/B Sc(Comp)/MSC(IT)	Minimum 3 Years in system integration
5.	Training and handholding	MBA	Minimum 5 Years
6.	Maintenance and Support	B Sc(Computer Science / IT)/BCA or above	Minimum 3 Years
7.	Database Administrator (DBA)	<ul style="list-style-type: none"> BE / B. Tech / MCA / M.Sc. (Computer Science IT) Relevant valid Certification of international Standard 	Minimum 3 Years in RDBMS platform

Note: The list of team to be deployed will be finalized after consultation with UD&HD.



9.13 Appendix 'M' (Functional Requirement Specifications FRS)

9.13.1 E-Municipality Portal

Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
e-Municipality Portal	There should be facility for user registration, capturing all the required details of the Citizen, staffs including the Aadhaar details		Essential
	User should be able to create user name and password		Essential
	There should be provision to change password and edit profile details		Essential
	There should be provision for retrieve Forgot Password / user name through secured measure		Essential
	The portal should be able to display all the news, events, advertisement, functions, and announcements.		Essential
	The portal should have provision to add the contents dynamically		Essential
	There should be facility to upload pictures, videos dynamically		Essential
	System should have the functionality to define different users such as employees, Vendors, Contractors, Citizens, Management and Government Agencies etc. and able to register with unique user name and password to access all the applications as per access rights		Essential
	The users should be able to make payment to the ULB through the payment gateway integrated into the portal		Essential
	Portal should have a scheduling module for all the users and facility to keep record of meeting notes, MoMsetc, viewable to respective attendees and notified over email and SMS for the		Essential



Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	department users		
	The scheduler should have facility to edit/update the schedule and accordingly the notification should be sent to the attendees via email and SMS		Essential
	Users should be mapped to the applications relevant to them. The portal will provide single sign on feature so that the end user need not individually logon to different applications		Essential
	System should have search facility, both metadata search , key word search as well as full text search		Essential
	System should allow user tracking for the portal. System should support web analytics to track the user behavior on the website		Essential
	System should allow personalization of content and interface of the portal for users.		Essential
	Portal should display the statistical reports in the form of dashboard according to the user logged into the system.		Essential
	Portal should have a dashboard based on project management tool to give a snapshot of various on-going projects (financial and physical status) w.r.t schedule, resources, milestones, cost and facility to drill down to transaction level (for certain users)		Essential
	Portal should have the facility to download manuals/ codes/ guidelines		Essential
	System should allow portal users to modify sections of website (content only), based on the authorization of the user.		Essential
	The Portal shall have downloadable application forms		Essential



Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	The portal should have provision to upload the relevant filled forms along with scanned copies of different supporting documents for different requests.		Essential
	The portal should have provision where the citizen/user can check her/his status of the application at any point of time.		Essential

9.13.2 Registration and Issue of Birth / Death Certificate (Integration from e-District Software)

9.13.3 Property Tax

Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
General	System should allow citizens to register their property on-line.		Essential
	Assign the unique property ID based on the Process defined in the ULBs.		Essential
	System should have interface with GIS system		Essential
	System should have facility to apply / deliver the service online & through CSC kiosks.		Essential
	Portal should have all the information including the processes and documents required for the convenience of citizen.		Essential
	System should have facility for online payment and through CSC.		Essential
	System should have facility to send the alerts through SMS and email		Essential
	Capture description of property like mutation number, number of floors, area covered, land owner, co-owner, correspondence & permanent address, built year, Category of holdings (Residential, Commercial or industrial, Mixed Use, Government/Semi-		Essential



Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	Government, Education Institutions, Others), category of road (Principal road, Main road, Other road), Access to water supply (with connection, within 400 yards, beyond 400/ no connection), Mode of collection, Contact number, individual room measurements.		
	Provide tax calculator for users to calculate the property tax on a particular holding at any given rate and with multiple combinations of variables		Essential
	Capable of exporting data stored in the database to excel as and when required by the user. Similarly, provision of data import from excel to the system should be there. System should support templates for defining the import and export structure		Essential
	Provision to make a qualitative and quantitative assessment of the tax paid and arriving at logical decisions that will help in decision making on which raids, inspections and imposition of penalties on the defaulters can be made possible		Desired
	Provision for creation all required Master data		Essential
Filling of Property Tax Returns	System should display all required information related to filling of property tax		Essential
	System should allow citizens to file their property returns on-line by filling the application on the portal or by downloading, filling and submitting e-Forms available for property tax returns.		Essential
	System should allow citizens to fetch details of previous years returned filled by them		Essential
	System should allow users to enter details of payment to be made through DD/Cheque/ Cash at ULB, Bank Branches or CSC.		Essential
	System should generate acknowledgement receipt regarding filling of property tax		Essential
	System should send intimation about the filling to the assesses through SMS and e-		Essential



Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	Mail		
Inclusion of New Assessee	Entering/ adding the applicant details for new assessment		Essential
	Entering / adding the details for existing holding`		Essential
	Generation of a new assessment application acknowledgment receipt		Essential
	Facility of modifying an existing record		Essential
	Entering of the revision petition application into the system		Essential
	Generation of the acknowledgement for the appeal petition application receive		Essential
Assessment of Property	System should calculate applicable tax liabilities for properties for which returns have been filled. And, flag those properties which have discrepancies.		Essential
	Calculation of Property Tax to be levied based on the building type, area, usage details etc.		Essential
	Property tax demands should be generated for those properties for which returns have not been filled and also for those properties against which less tax have been paid in the return		Essential
	Frequency of generation of Demand should be flexible. It should be user defined (defined at admin level) and could be quarterly, half-yearly or annually		Essential
	Generation of enter/ add the application details for exemption from property tax.		Desired
	Facility for citizen to raise the objection (if any) after getting the demand notice		Essential
	System should have the facility to send SMS alert to citizen for payment & due date.		Essential
	System should have the provision for online payment of house tax through portal & CSC.		Essential
	System should have all the irregularities in tax payment predefined; to automatically detect any suppression of fact and details on the part of the citizens in paying the tax. MIS should be generated listing suspect cases and reasons citing		Desired



Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	irregularities		
	System should have provision to make a qualitative and quantitative assessment of the tax paid and shall arrive at logical decisions that will help urban local bodies in decision making on which raids, inspections and imposition of penalties on the defaulters		Desired
	System should have the facility to analyze and forecast revenue trends based on tax collection.		Nice to Have
	For house tax assessment, the system should provide the complete flow of data of approval/rejection by Inspector, RO, EO etc.		Nice to Have
Property Mutation	System should allow online submission of application		Essential
	System should allow attaching documents of various types		Essential
	System should generate acknowledgment receipt after submission of application		Essential
	System should allow viewing of attached documents through the system		Essential
	System should allow capturing comments of concerned official		Essential
	System should allow forwarding of files to concerned officials		Essential
	System should allow generation of notice for the parties involved in the Mutation		Essential
	System should allow receipt of Mutation fee online		Essential
Change of Ownership / Mutation	Facility of entering/ adding the application details for title transfer of property.		Essential
	Facility of issuing an acknowledgement.		Essential
	System should ask for NOC from departments/sections before processing the service request		Essential
	Facility of modifying/ deleting an existing record.		Essential
	Facility of entering/ adding the field verification details for title transfer property.		Essential



Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	Facility of generating the endorsement for the title transfer property after the property is transferred and the fees is paid.		Essential
Collection of Property Tax	Change property tax computations and determine arrears/refunds etc.		Essential
	Generation of the details of Property Tax paid for the assessment.		Essential
	Generation of enter/ add the application details for exemption from property tax.		Essential
	Facility of entering/ adding the application details for write-off from property tax.		Essential
	Facility of issuing an acknowledgement.		Essential

9.13.4 Payment and Management of Utility Bills

Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
New water Connection / Re Connection	System should have the facility to apply and submit the online application for new water / sewerage connection / disconnection / reconnection.		Essential
	System should have the facility to upload documents along with the online application.		Essential
	System should have the facility to track the application/file status of the applicant.		Essential
	System should have workflow system to route the documents through the CSC and online approval / rejection process by authority		Essential
	System should have facility to send SMS / Email alerts if additional payment needs to be made by applicant after site inspection or for any other information.		Essential
	Generation of an application acknowledgment receipt.		Essential



Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
Payment of Water & Sewerage Bill	System should have the facility to enter/capture the meter reading as on date for metered-connections.		Essential
	System should have the facility fix ad-hoc amount as monthly rent for water and sewerage connection		Essential
	System should have facility to generate the water and sewerage Bills.		Essential
	System should have the facility to collect charges for other utility services like cess pool, community hall		Essential
	Citizens should be intimated by SMS and email alerts about the bill due dates and also confirmation after online payment/ Payment for the bills and charges.		Essential
	System should have the facility to make online Payment through Payment Gateway		Essential
	All the Required Masters to be maintained		Essential

9.13.5 Citizen Grievance Redressal

Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
General Requirement	System should make available, the entire data of all the complaints and the status of the complaints at any given time to ULB/UD&HD/Citizens (through portal), through simple queries and aggregation, with the ability to search, filter and sort.		Essential
	System should have search facility, both metadata search , key word search as well as full text search		Essential
	Intimation of grievance by citizen to municipality-possible modes		Essential
	Statuses of the grievances registered in the Municipality		Essential
	Maintain type of grievance caused to the citizens		Essential



Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	Track Dept/Section that needs to address it		Essential
	Maintain No of days within which it needs to be addressed		Essential
	Maintain Nature of grievance (financial or non-financial)		Essential
	Details of officers designated to redress grievances (mapped to the department-section)		Essential
	Map application with dept/section		Essential
	Maintain the Citizen Charter/Policies.		Essential
	Compensation details from officer responsible		Essential
Grievance registration	Accept applications of grievances caused		Essential
	System should allow citizens to enter the complaints directly into the portal. System should allow citizens to lodge a complaint without even registering themselves on the portal.		Essential
	The system should allow register grievance with photo / picture		Essential
	System should facilitate citizens to file complaints/provide feedback on account of services provided by the ULBs		Essential
	The system should allow the citizen to register the grievance through SMS (text and picture)		Essential
	Generate acknowledgement(with unique token number) and issue to applicant		Essential
	An SMS should be sent to the complainant with the registration code		
	System should allow citizens to view and escalate the complaint to higher levels, including UD&HD based on defined compliance rules		Essential
	System will escalate the complaint, in case it is not resolved in the specified time. However, the complainant may		Essential



Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	also choose to escalate, which can be allowed based on pre-defined rules.		
	Allow section heads to allot the grievance to the concerned officer responsible		Essential
	The system should register Grievance through medium like social media e.g, Facebook		Essential
	Update the status of registered grievance		Essential
	Allow the officer-in-charge to allot the grievance to an employee; update the status		Essential
	Integrate with other modules - Property Tax/Water Tax using and others Grievance ID		Essential
	Ability to provide status by supplying complaint number		Essential
	System should allow citizens to view and escalate the complaint to higher levels, including UDHD based on defined compliance rules The token number should be generated for all the complaints at every entry point.		Essential
	System should allow the citizens to - 1. Lodge complaints 2. Check status of complaints 3. Escalate complaints 4. Download registered complaints 5. Take print-out of complaints 6. Provide feedback on the resolution provided		Essential
	Integration with other systems: <ul style="list-style-type: none"> Interface with Mailing & Messaging System and SMS application Integration with Helpdesk for Citizen Integration with document and workflow management system. Integration with all other modules 		



9.13.6 E-Procurement

Sub-Module Name	Detailed Functionality	Bidder's Response	Implementati on Priority (Essential/ Desired/ Nice to Have)
Vendor Performance Rating	System should be able to calculate the Vendor performance based on the user defined weightage. The following calculations have to be done <ul style="list-style-type: none"> ▪ Calculate Quality of Material of Vendor over past 6 months ▪ Calculate Delivery Efficiency of Vendor over past 6 months ▪ Calculate Vendor Inactive Participation Percentage ▪ Vendor Bid responses & evaluations over past 6 months ▪ Calculate Vendor Price Performance Percentage ▪ Calculate Vendor Technical Performance Percentage ▪ Calculate Weighted Average Score based on user defined weightage ▪ Calculate overall percentile standing of all vendors, and group them as per user defined buckets 		Essential
	System should be able to generate a report based on the previous calculations and send it to the Inventory team for review and approval		Essential
General (Enabling Tendering on internet)	System should be able to take up all the processes related to tender electronically (through internet)-		Essential
Rate Contract Management	System should be able to take up processes related to rate contract – <ul style="list-style-type: none"> ▪ Goods be able to be procured on the basis of Rate contract list ▪ Electronic (Online) Rate Contract (RC) Catalogue be uploaded and maintained 		Essential
Enabling Auction on internet	System should be able to take up the process of dynamic pricing (Auction) (through Internet)		Essential
Vendor Registration	System should be able to capture the vendor registration details and documents from the website. Side Note: The website will not accept		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	<p>the form unless certain mandatory fields are filled and it will provide an option to the vendor to upload supporting documents. The website will send the vendor registration information into the system. The Vendor registration form will be a tabular format which will have the following Columns</p> <ul style="list-style-type: none"> ▪ Material Group, ▪ Sub Category I, ▪ Sub Category II, ▪ Item list, ▪ Item Specification, ▪ Brand & Manufacturer of Item etc. <p>The available list of Material group will be available on the website for vendor to choose from. If there is an item which the vendor can supply but is not available in the list, vendor can enter those as well in the registration form.</p>		
	System should allow the Vendor Management Supervisor to review the vendor registration details and send it for review and approval as per the work flow defined in the system		Essential
	<p>System should be able to generate a Vendor Registration Code and update the vendor master list</p> <p>Side note: Vendor code is linked to Item Classification so that when an item is selected the associated approved vendor list is prompted by system</p>		Essential
Purchase Process	System should allow the User Department to raise a Purchase Requisition for materials/services		Essential
	System should allow Head of Inventory and Warehouse to check codification used on the PR and Stock Availability before approving it.		Essential
	System should allow the Procurement Team to review and approve the PR as per the work flow defined in the process maps		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	System should allow the Assistant Head of Procurement to raise an RFQ and assign vendor from the Vendor Master List		Essential
	System should allow the Assistant Head of Procurement /User Department to conduct Commercial Evaluation & Technical Evaluation and capture the results of the Bids received for the RFQ		Essential
	System should allow the Assistant Head of Procurement to approve / reject the Vendor selected by the User Department		Essential
	System should allow the Assistant Head of Procurement to update any negotiations undertaken to reduce the price.		Essential
	System should allow the Assistant Head of Procurement to raise a Purchase Order and send it for review and approval as per work flow.		Essential
Expediting Process	System should generate report of upcoming PO's with promise date in next 2 weeks and send it to the Buyers Inbox		Essential
	System should generate report of outstanding PO's from promise date and send it to Buyer's inbox		Essential
	System should track the number of times PO has been expedited		Essential
Monitor Performance Metrics	<p>System should be able to capture the details mentioned in the process flow and generate a report to be sent to the Inventory & Procurement Manager. The details are:</p> <ul style="list-style-type: none"> ▪ Calculate number of PO's waiting for approval (category wise) ▪ Calculate number of PO's due for delivery (category wise) ▪ Calculate number of PO's waiting for Technical Evaluation (category wise) ▪ Calculate number of PR/RFQ/PO waiting with each Buyer awaiting processing & prepare aging report 		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	<ul style="list-style-type: none"> Calculate number of RFQ's under Technical Evaluation (category wise) Capture Stock Levels for items below safety stock & minimum stock Generate bar chart reports based on user inputs 		
	System should be able prepare Procurement Matrix Report at end of every month and send it to the Procurement Team Inbox		Essential
Pre-tendering Procedures - Preparation of Terms of Reference (TOR) / Scope of Work (SOW)	System should allow the Originating Department to prepare detailed TOR/SOW & PR and send it to Contracting Department for review and approval as per the work flow defined in the process maps		Essential
	System should allow the Contracts Engineer to allocate a unique task number to the PR request.		Essential
Pre-tendering Procedures - Preparation of Tender document	System should allow the Contracts Engineer to prepare the tender documents and send it for review and approval as per the work flow defined in the process maps.		Essential
Pre-tendering Procedures - Bidders List, Single Source Tendering & Approval of Tenders	System should allow the Originating Department to prepare valid reasons for single source tendering and suggest list of Bidders to the Contracts Engineer		Essential
Tendering Procedures - Tender Invitation, Collection/Dispatch Tenders	<p>System should allow the Tendering Officer to upload the Tender Documents onto ULB's Website for online purchase.</p> <p>Side Note:</p> <ul style="list-style-type: none"> While uploading the Tender, the Tendering Officer has to choose the type of Tender. If it's an open tender, the Tenders will be displayed on the ULB Website - Tenders Section. If it's a closed tender, it will generate a link & password to access the Tenders page, that will be mentioned on the Tender Invitation Letter Bidder logs into website and clicks on the Tender. It will take him to the 		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	<p>Mandatory Registration Page, where Bidder will enter his information & upload necessary documents. Then Bidder makes an online payment for the non refundable fee. Once the payment has been authorized by bank, Bidder will be able to download the Tender Document.</p> <p>▪ Website will send the Bidders Registration information & Payment information to System.</p>		
	System should allow the Contracts Engineer to prepare the Tender Invitation Letter as per template in system		Essential
	System should allow the Contracts Engineer to send the Tender Invitation Letter to all approved Vendors by Fax/email via the system ID. System should track and record all faxes and emails sent to the vendors.		Essential
	System should generate a list of all vendor who have purchased the tenders (open/closed) and send it to Tender Committee		Essential
Tendering Procedures - Site Visits & Pre-Tender Clarification Meetings	System should allow the Contracts Holder to receive requests & send an auto generated email to all Tenderer informing them about Site Visits using the Tender Email ID.		Essential
	System should allow Contracts Engineer to distribute the tender bulletin to convey content of meeting using the Tender Email ID.		Essential
	System should allow the Contracts Engineer to create an attendance list for Pre-Tender Clarification Meeting.		Essential
Tendering Procedures - Tender Period, Extension of Tender Period & Pre-Tender Clarifications	System should allow the Contract Holder to prepare the request to reduce the Tender Period to less than 2 weeks and send it for approval as per work flow.		Essential
	System should allow the Contract Holder to prepare the request to extend the Tender Period and send it for approval as per work flow.		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	System should allow Contracts Engineer to distribute the tender bulletin to convey content of meeting using the Tender Email ID.		Essential
Tendering Procedures - Submission of Tenders, Late Tenders & Tender Opening	System should allow the Tender Committee Secretary to receive the Bids via Tender Email ID.		Essential
	System should allow the Tender Committee Secretary to prepare the Tender Opening Protocol Form during the tender opening.		Essential
	System should allow the Tender Committee to review the list of all vendor who have purchased the tenders (open/closed) and match with all bids while reviewing.		Essential
Tendering Procedures - Tender Cancellation	System should allow the Contract Holder to prepare Tender Cancellation Request and send it for approval as per work flow		Essential
	System should allow the Contracts Engineer to send the cancellation notice to all Tenderer using the Tender Email ID & refund notification (wherever applicable)		Essential
Evaluation Procedures - Technical Evaluation, Commercial Evaluation & Final Evaluation Report	System should allow the Contracts Engineer to forward the Bids to Contract Holder for Technical Evaluation.		Essential
	System should allow the Contract Holder to generate a Technical Clarification Request & get clarification from the Bidder		Essential
	System should allow the Contract Holder to prepare the Technical Evaluation Report & send it for approval from Contract Owner.		Essential
	System should allow the Contracts Engineer to prepare the Commercial Evaluation Report & send it for approval from Head of Tendering & Contracting Manager.		Essential
	System should allow the Contract Holder to review both the Technical Evaluation Report & Commercial Evaluation Report and prepare a combined Final Evaluation Report with		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	recommendations.		
	System should allow the Contract Holder to send the Final Evaluation Report with recommendations to the Secretary of Concerned Committee (TC/EC) or Tender Board Focal Point for review and approval.		Essential
Evaluation Procedures - Technical & Commercial Evaluation	System should allow the Contract Holder to review the Technical Evaluation Report		Essential
	System should allow the Contract Holder to receive the Commercial Evaluation Report & send it for approval from Head of Tendering & Contracting Manager.		Essential
	System should allow the Contract Holder to review both the Technical Evaluation Report & Commercial Evaluation Report and prepare a combined Final Evaluation Report with recommendations.		Essential
	System should allow the Contract Holder to send the Final Evaluation Report with recommendations to the Secretary of Concerned Committee (TC/EC) or Tender Board Focal Point for review and approval.		Essential
	System should allow the Secretary of Concerned Committee (TC/EC) or Tender Board Focal Point to issue the Minutes of the Meetings for the review of the Final Evaluation Report and send it to all the concerned parties		Essential
Evaluation Procedures - Basis of Rejection of Bids	System should allow the Originating Department to reject the bids in case they do not conform to the material requirements		Essential
	System should allow the Originating Department to prepare a non conformance report & send it to respective committee for endorsement of rejection of bids.		Essential
Evaluation Procedures - Price	System should allow the Contract Holder to review the Final Evaluation Report & decide if a price negotiation or		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
Negotiation & Revised Proposals	revised proposal is necessary		
	System should allow the Originating Department to send the price negotiation request to the appropriate authority for approval.		Essential
	System should allow the Originating Department to send the revised proposal request to the appropriate authority for approval.		Essential
	System should allow the Originating Department to send the revised proposal to all Technically Qualified Tenderer.		Essential
	System should allow the Originating Department to prepare the Final Report with the following details: <ul style="list-style-type: none"> ▪ Original prices ▪ Revised prices at each stage of re-bidding ▪ Final prices before negotiation ▪ Final prices after negotiation ▪ Reason for elimination of some of the bidders from rebidding/negotiation, if applicable ▪ Detailed justification for rebidding or concluding negotiation. 		Essential
Evaluation Procedures - Extension of Tender Validity Period	System should allow the Contract Holder/Contracts Engineer to prepare a request for extension of Tender Validity Period and send it for necessary approval.		Essential
	System should allow the Contracts Engineer to send notification to the Tenderer informing them about the extension of the Tender Validity Period.		Essential
Contract Award Procedures	System should allow the Contracts Administrator to create Draft PO for awarding Letter of Award (LOA), and send it for review and approval.		Essential
	System should allow the Contracts Administrator to prepare draft LOA & send to focal Contracts Engineer, Tendering Head, and Originator & Contract Holder for review and approval.		Essential
	System should allow the Contracts		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	Administrator to send LOA to Contractor for acceptance and receive his acknowledgement		
	System should allow the Contracts Engineer to prepare Form & Agreement Document.		Essential
	System should allow the Tendering Officer to upload the Entire signed Contract Document into the database library		Essential
	System should allow the Contracts Administrator to update the Purchase Order & send it for approval from Contracting Manager		Essential
	System should allow the Contracts Administrator to Send purchase order to Contractor after approval from Contracting Manager		Essential
Contract Variations Procedures	System should allow the Contract Holder to prepare a Variation Order for any change in Quantity, Scope of work, Final Contract Value and send it to Contract Owner for review and approval		Essential
Contract Management - Invoice Management	System should allow the Contract Holder to receive the invoice from department, review and approve it and send it to the Finance Department		Essential
Contract Management - Extension of Time	System should allow the Contract Holder to receive Time Extension Request from Contractor review and prepare assessment report and send it for approval to the necessary Approval Authority.		Essential
	System should allow the Contract Owner/Contracts Engineer to intimate the Contractor about the outcome of the Time Extension Request.		Essential
Contract Management – Claims/Dispute Management	System should allow the Contract Holder to receive Claims/Dispute request from Contractors, review and send them to Contracts Engineer for action.		Essential
	System should allow the Contract Holder to prepare the Final Recommendations & Assessment		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	Report for settlement of Claims/Dispute and send them to Necessary Committee for review and approval.		
	System should allow the Contracts Engineer to issue Variation Order / Approval Letter to Contractor		Essential
Contract Management - Contract Termination	System should allow the Contract Holder to prepare a request for Contract Termination and send it to the relevant Committee for approval		Essential
	System should allow the Legal Manager to prepare the written notice of Termination/ Cancellation.		Essential
	System should allow the Contracts Engineer to forward the Termination Notice signed by authorized authority to the Contractor.		Essential
Contract Management - Contract Close out	System should allow the Contract Holder to determine when the contract can be closed and send intimation to contract engineer to close the contract.		Essential
	System should allow the Contracts Engineer to close the contract and send the closure notification to Contractor		Essential
Advance Payment Bonds	System should allow the Contracts Administrator to update the details of Advance Payment Bonds received from the Contractor.		Essential
	System should send a notification to the Contracts Administrator reminding them of upcoming expiry of the Advance Payment Bond. The reminder is to be set for a month before the expiry happens.		Essential
	System should allow the Contract Holder to prepare the Bond Release Request and send to Contracts Administrator for further dispersal to the Bank		Essential
	System should allow the Contract Administrator to prepare a bank letter with instructions & unrecovered amount & send it to the bank after due approval from finance.		Essential
	System should send a second		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	notification to the Contracts Administrator reminding them of upcoming expiry of the Advance Payment Bond. The reminder is to be set for 1 week before the expiry happens.		
	System should allow the Contract Administrator to prepare a bank letter with instructions to renew the bond for 3 more months & send it to the bank after due approval from Finance.		Essential
Performance Bonds	System should allow the Contracts Administrator to update the details of Performance Bonds received from the Contractor.		Essential
	System should send a notification to the Contracts Administrator reminding them of upcoming expiry of the Performance Bond. The reminder is to be set for a month before the expiry happens.		Essential
	System should allow the Contract Holder/Owner to prepare the Bond Release Request and send to Contracts Administrator for further dispersal to the Bank		Essential
	System should send a second notification to the Contracts Administrator reminding them of upcoming expiry of the Performance Bond. The reminder is to be set for 1 week before the expiry happens.		Essential
	System should allow the Contract Administrator to prepare a bank letter with instructions to renew the bond for 3 more months & send it to the bank after due approval from Finance.		Essential
Any other Contractual Bank Guarantees	System should allow the Contracts Administrator to update the details of Contractual Bank Guarantees received from the Contractor.		Essential
	System should send a notification to the Contracts Administrator reminding them of upcoming expiry of the Contractual Bank Guarantees. The reminder is to be set for a month before		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	the expiry happens.		
	System should allow the Contract Holder/Owner to prepare the Bond Release Request and send to Contracts Administrator for further dispersal to the Bank		Essential
	System should send a second notification to the Contracts Administrator reminding them of upcoming expiry of the Bank Guarantee. The reminder is to be set for 1 week before the expiry happens.		Essential
	System should allow the Contract Administrator to prepare a bank letter with instructions to renew the bond for 3 more months & send it to the bank after due approval from CFO		Essential
Record, Tracking & Reporting	System should monitor all accepted Advance Payment Bonds, Performance Bonds & any other contractual Bank Guarantees & generate a monthly report for all instruments expiring in that month and send report to the Contracting Manager.		Essential
Generic	System should follow the Work Flow for review and approval as defined in the Procurement Procedures Manual, Contracting Procedures Manual and the Process Maps.		Essential

9.13.7 Project Works & Management

Modules	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
Project Works	The system should maintain a Project Charter of the Project along with the Milestone Schedule.		Essential



Modules	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
	The system should maintain Detailed project plan by the concerned Department in a Project Management System - schedule, payment milestones, resources, effort loading with resources, risk, issue, risk response planning and deliverables. The detailed Project Management Plan should also be managed as a file in the system.		Essential
	The system should help and allow departments to prepare a budget and send it for approval to respective officers/ different committees as per the defined workflow. Provision of approval/rejection of the budget along with comments provided by each officer/member of committee should also be available.		Essential
	The system allow preparation of draft proposal for works		Essential
	The system should allow departments to submit their utilization certificate against each scheme		Essential
	The system should allow and help the Junior Engineer (JE) with all adequate information required to prepare the bill for a completed assignment.		Essential
	The system should facilitate to forward the bill prepared by JE to higher authorities for their review and approval as per the defined work flow.		Essential
	The system should have provision where respective users can update the field visit report and measurement book.		Essential
	The system should have provision to check budget utilization information department wise and scheme wise for current as well as for last 5 years.		Essential
	The system should have provision to monitor the availability of budget against each head and scheme for tracking any overspending by departments		Essential
	The system should have provision to send notification to concerned officials if there is any overspending in a project		Essential



Modules	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
	The system should have provision to prepare draft budget of the ULB and send it for approval to respective committees as per the defined workflow. Provision for the committee members to provide their comments should also be available.		Essential
	The system should have provision to prepare budget estimate for the next financial year and revised estimates for current financial year.		Essential
	The system should have provision where transfer of fund from one head to another if required on approval from competent authority can be done.		Essential
	The system should allow preparation and submission for approval of different plans to be prepared by ULBs. Every application should be assigned a unique identification, which will be used for all transactions, tracking and follow-up.		Essential
	The system should allow the respective user to upload the AutoCAD file or other similar s/w used for designing layouts (Departments like Works, Engineering etc can submit the layout plans).		Essential
	The system should allow the respective user to verify the Building plan through AutoCAD based tool. This should conform to Building bye laws and highlights discrepancy if any, in plan submitted (self approval test). On successful passing through self approval test the applicant should be able to submit for review and approval of higher authority as per the defined workflow		Essential
	The system should have provision to open the submitted plan and approve/reject the layouts with adequate comments and also auto escalate by sending mails/SMS to respective authorities as per the defined work flow if approval/rejection not provided within stipulated time.		Essential
	The system should have provision to interface with Property Tax Management System for tax collection upon issuance of Completion Certificates		Essential



Modules	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
	The System should facilitate the Engineering Department to prepare the TOR and have it approved by the Planning Department/ concerned department.		Essential
	The System should facilitate the Engineering Department/ concerned department to prepare the RFP and have it approved by the Contracts Department. The entire process of Bid evaluation, Work Order issue and agreement signing need to be implemented in the System.		Essential
	The System should facilitate the Contractor to prepare and manage their Milestone Schedules in a Project Management System and the Project Management Plan as a file. It should provide appropriate authorization and authentication to the engineering department		Essential
	The system should provide authentication and authorization for access of Contractor and engineering department. The Contractor can create a project Plan, re-baseline as and when required; while the project department to review and enter specific information on % complete and approve the Project schedule.		Essential
	The system should allow authoring and storing methodologies or project plan templates and allow to selecting, combining and tailoring them while developing a specific project plan.		Essential
	The project performance should be entered in the system and project metrics derived. The system should also provide a dashboard of ongoing multiple projects. The VOWD need to be calculated monthly basis and same is reviewed by engineering department.		Essential
	The system should provide a geographic visualization of the project locations and their progress status in the form of a dashboard. The data for the same can be sent from field through hand-held devices by redlining completed work.		Desired
	The system should provide the status of		Essential



Modules	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
	the project performance of the previous two weeks and plan for the next four weeks. In case, there is a schedule slip beyond three months, Weekly Look Ahead Report may need to be prepared.		
	The System should re-baseline the project plan when there is schedule slip beyond three months.		Essential
	The system should account for risk management and re-baseline the Project schedule and cost. It may need to undergo a workflow for approval process through reviews by engineering department.		Essential
	The system should account for issue management and re-baseline the Project schedule and cost. It may need to undergo a workflow for approval process through reviews by engineering department.		Essential
	The System in integration with Asset Management should facilitate hand-over of the Assets and closure of project.		Desired
	System in integration with Finance and Contract Department should allow payment release process to contractor.		Essential
	The system should have provision using which the citizen can apply for NOC online.		Essential
	The system should have provision to verify there is no tax due on the land/premise and the approved plan for the land is available		Essential
	The system should have provision to generate acknowledgement along with tentative date of service request resolution on successful registration of NOC		Essential
	The system should have provision to forward the request as per the defined workflow		Essential
	The system should allow the JE to upload the site visit report against a particular service		Essential
	The system should have provision using which the officers can approve/reject a service and provide their comments		Essential



Modules	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
	The system should have provision to sent notification including reason to citizens using SMS service in case of approval or rejection of the service		Essential
	The system should have provision to calculate the development charges and on approval of development charges by the respective officer (as per the defined workflow) the SMS notification to be sent to intended parties.		Essential
NOC for peripheral Infrastructure Development	The system should have the feature of online submission of the application by the applicant		Essential
	The system should have the feature of uploading of soft copy of supporting documents by the applicants		Essential
	The system should facilitate the JE in preparation of field inspection report by providing a standard template		Essential
	The system should have the feature of forwarding and reviewing of the report by the concerned authorities		Essential
	The system should have the facility of online fee payment through payment gateway		Essential
	The system should have the facility to generate online as well as SMS acknowledgement on successful payment		Essential
	The system should have the facility to generate the receipt on successful payment, having save as pdf & print facilities		Essential



9.13.8 Building Plan Approval

Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
General	System should have interface with GIS system		Essential
	System should have facility to categorize the building plan under Cinemas, Multiplexes, Marriage Halls, Commercial complex, Housing and Hospital, etc. categories.		Essential
	System should have facility to deliver the service online & through CSC.		Essential
	The portal should have all the information including the processes and documents required for the convenience of citizen.		Essential
	System should have the facility to apply online and through CSC.		Essential
	System should have facility for online payment and through CSC.		Essential
	System should have facility to send the alerts through SMS and email.		Essential
	System should track delays in approval steps and maintain an audit log of the approval process steps.		Essential
	System should have search facility, both metadata search , key word search as well as full text search		Essential
Empanelment of Architects	System should have facility to capture the empanelment process for the Architects.		Essential
	System should maintain the records of empanelled architects for all the ULBs.		Essential
	System should allow Architects to make payment online for empanelment		Nice to Have
	System should allow de-listing of any of the empanelled Architects from the list		Essential
Sanction of Building Plan	System should have facility for uploading the soft copy of the building plan along with the application.		Essential
	System should allow uploading other necessary document along with the application.		Essential



Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	System should allow municipal officials and empanelled architects to access/download the same for verification of particulars.		Essential
	Facilitate checking of the documents submitted by the applicant for building plan approval. Based on these an acknowledgement should be generated and given to the applicant.		Essential
	System should generate application reference for Building Plan Application/ Layout Application for the applicant and facilitate online tracking of the status of the application.		Essential
	System should sent e-mail/SMS notification to the applicant and empanelled architects to whom that application has been sent		Desired
	System should allow architects to approve/reject plans and give comments on the same		Essential
	System should have provision to generate digitally signed notice and communicate the same through SMS/Email.		Essential
	System should link Holding Tax and Utility data with Building plan ID.		Essential
Issuance of Completion Certificate	System should have provision for inspector to lodge the details of the site visit. Following which the documents needs to be approved by the document management system		Essential
	System should have provision to generate digitally signed notice and communicate the same through SMS/Email.		Essential



9.13.9 Licensing

Sub-Module Name	Detailed Functionality	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
General	System should have interface with GIS system		Essential
	System should have facility to deliver the service online & through CSC.		Essential
	System should be able to issue new licenses and renewal of licenses issued		Essential
	System Should have facility to issue new category of licenses that may be introduced in future		Essential
	Portal should have all the information including the processes and documents required for the convenience of citizen.		Essential
	System should have the facility to apply online and through CSC.		Essential
	System should have facility to send the alerts through SMS and email.		Essential
	System should have the facility to download form, online filling and submission of form.		Essential
	System should have Facility to create/edit/update the deficiency/Inspection report against the application.		Essential
	System should allow printing the license, sending the license through e-mail.		Essential

9.13.10 Solid Waste Management

Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
System should allow allocation of vehicles against Ward/ULB Ward/Private Ward		Essential
System should have provision for allocating shift against a vehicle		Essential
It should Map Predefined routes using GIS Technologies		Essential



Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
It should be able to create, edit & delete <ul style="list-style-type: none"> Vehicle Route GPS Device ID Vehicle ID Geo Fenced Bins 		Essential
It should be able to capture <ul style="list-style-type: none"> Real-time data transmitted from GPS Devices Vehicle Position Vehicle Speed Geo Fenced Bins Info 		Essential
System should have provision for allocating more than one collection points against a vehicle		Essential
System should allow management of dumping zone		Essential
System should have the provision for providing auto generated status of Bins Picked/ Bins unpicked		Essential
System should have the mechanism to record the volume of land fill sites		Essential
It should be able to capture vehicle data		Essential
The system should have provision to get connected with the Weighment bridge and collect required information.		Desired
System should have provision for maintaining of Ward no. ULB Ward, Private Ward		Essential
System should have provision for capturing the details of the municipal area, population, category wise volume of garbage collected and disposed etc to effectively schedule the collection of garbage		Essential
System should allow allocation of number of labor against each Ward and vehicle		Essential
System should have provision for issuance of Job card		Essential
Job Card should display whether Express service is opted for or not		Essential
System should have provision for facility to identify the garbage beans and link the same in the process of garbage collection to track the status of any bean		Essential
System should generate vehicle usage report		Essential
System should allow request for express service online		Essential
System should allow creation of express service online by the concerned official		Essential
The system should allow the contractor to update its daily register and the sanitary inspector should		Essential



Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
be able to approve/reject the same on daily basis.		
System should have provision using which the Ward officer or the Corporater can provide the performance certificate.		Essential
The system should have provision using which the sanitary inspector can update the garbage lifting register		Essential
System should have the provision using which log book and dumping yard register can be updated		Essential

9.13.11 Financial Accounting

Sub-Module Name	Requirement	Bidders Response	Implementation Priority (Essential/ Desired/ Nice to Have)
General Ledger, Cash & Payments Module	Chart of Accounts		
	Support the following structure of chart of accounts:		Essential
	Funds		Essential
	Function		Essential
	Functionaries		Essential
	Field		Essential
	Accounting Code		Essential
	Facility to define account and account groups,		Essential
	Collect cash, cheques and drafts on a daily basis		Essential
	Prepare a Daily Collection Register at the end of the day		Essential
	Able to do multi-point collection and prepare point-wise Collection Register		Essential
	Feed above details into the Cash Book		Essential
	Point-wise Collection Register should be able to be consolidated at the ULB level and a consolidated Daily Collection Register prepared		Essential
	Consolidated as the Cash Book should post itself in the General Ledger		Essential
	Track the deposit and dishonour of cheques		Essential
	Connect with the revenue modules and collect the amount against bills issued		Essential
	Should be linked with other municipal functions e.g. sale of forms, tender feed, etc. and on-account from debtors		Essential
	Support journalizing functionality		Essential
	Journals need to be validated on-line during journal entry (verification of the account codes and checking the debit and credit amounts)		Essential



	Recording payables and receivables shall be accounted for by using the Journal Entry		
	Facility to consolidate and finalize the accounts on a periodical basis e.g. monthly, and take out various reports like Receipts and Payments Account, Income and Expenditure Account, Trial Balance and Balance Sheet		Essential
	Facility to give reports such as Income and Expenditure Account and Balance Sheet for Field, Fund and Function codes		Essential
	Automatically carry forward the opening balances in the next period		Essential
	The system should have an inbuilt bank reconciliation module		Essential
	Vouchers:		Essential
	Should have separate vouchers for receipts, payments, contra (cash to bank and vice-versa), debit note, credit note and journal entry		Essential
	Support narration in vouchers through user defined editable LOV (List of Values)		Essential
	Control features:		Essential
	Security features like no backdating		Essential
	Approval process		Essential
	Access control		Essential
	Password protected		Essential
	Backdating shall be allowed for specific people for finalisation of accounts		Essential
	Approval features:		Essential
	The System should have Maker and Checker relationship		Essential
	Enter the administrative expenditure		Essential
	Book the liability on entry of these amounts		Essential
	Appropriate entry should be made based on double entry accrual based Accounting principles		Essential
	Book the liability on entry of Provident Fund, Income Tax, Professional Tax, GIS etc. Employee-wise		Essential
	Appropriate entry should be made based on double entry accrual based Accounting principles		Essential
	Payment voucher is prepared in Accounting System and is sent to Approving Authority/or designated authority for approval through Accounting System		Essential
	Approving Authority/ or designated authority should be notified through Accounting System for approval		Essential
	Approving Authority should be able to approve the voucher through Accounting System		Essential
	Notification after approval should be sent to the accountant, through Accounting System		Essential
	System should adjust liability booked earlier and an appropriate entry should be made based on double entry accrual based accounting principles		Essential
	The payments should be linked to the various individual bills/invoices.		Essential



	Employee database and calculation of salary and statutory (PF, PT etc.) payments for each employee and department to be accessed from the Personnel Mgmt System		Essential
	The accountant will enter the consolidated salary and statutory (PF, PT etc.) payment amounts for each department in the Accounting System		Essential
	The Accounting System to do the following		
	Maintain with unique codes details of each party		Essential
	enter the payments		Essential
	calculate the Sales Tax and TDS		Essential
	Record the liability on entry of the Bills and an appropriate entry should be passed based on double entry accrual based accounting principles		Essential
Receipts Module	For commercial properties receivable is raised at the time of demand creation through a consolidated journal entry in Accounting System		Essential
	Intimation is sent to the accountant when the money is deposited to the bank account		Essential
	In case net Grant has been released after adjustments, the gross entry shall be recorded to take into account all deductions		Essential
	Need for Grant monitoring mechanism is met through ledgers		Essential
	Receipt of Security Money and Earnest Money needs to be maintained party wise and linked to main individual accounts, as it has to be adjusted in case of payments		Essential
	The collection under these categories is done without raising of a bill; when the money is collected the entry recognizing the receipt as a liability is made in the Accounting System		Essential
	In case a discount is given by the appropriate authority which has the necessary powers, an entry will be made in Accounting System through a Journal		Desired
	The entries of discount will be based on double entry accrual basis accounting principle		Essential
	In case a reassessment is given by the appropriate authority which has the necessary powers, an entry will be made in Accounting System through a Journal		Essential
	In case a reassessment is given to a particular party only, then the party details will be entered in the narration of the entry		Essential
	The entries of reassessment will be based on double entry accrual basis accounting principle		Essential
Assets Module	Maintain a Fixed Assets Register with following details:		
	Asset Number		Essential
	Location		Essential
	Person responsible		Essential
	During purchase of any fixed asset, the account code selected will hit the General Ledger		Essential



	During sale of any fixed asset, the account code selected for the specific asset along with profit/ loss on sale of the asset shall be posted in the General Ledger.		Essential
	Calculate the Depreciation of Assets, based on useful life calculation and straight line method		Essential
	Provision of revaluation, scrap, write-off and sale of assets		Essential
Budgeting Module	The budgets shall be prepared as per the Chart of Accounts in the Accounting System		Essential
	Display warning messages in case the budgetary limits are exceeded		Essential
	Provision for variance analysis between budget and actual with percentage		Essential
	Provision to capture ward-wise budgets		Essential
	Provision to monitor the budget on a timely basis		Essential
	Allow for multiple budget periods and provide for monthly/quarterly/half-yearly breakup of the actual/ budget forecasts		Essential
Reportage	Incorporating all formats for reporting and books of accounts as prescribed in the National Municipal Accounts Manual		Essential
	Incorporation of existing formats of registers in specific ULBs		Essential
	Financial Statements:		
	• Balance Sheet		Essential
	• Income and Expenditure Account		Essential
	• Receipts and Payment Account – Showing the receipts and payments of cash major head wise along with schedules		Essential
	• Cash Flow – Showing the receipts and payments of cash bifurcated into operating, investing and financing activities		Essential
	Books of Accounts:		
	• Vouchers		Essential
	• Cash Book		Essential
	• Ledger Book		Essential
	• Journal Book		Essential
	• Day Book		Essential
	• Trial Balance		Essential
	Regular Registers:		
	• Abstract Register of Receipts and Payments		Essential
	• Register of Adjustment		Essential
	• Register of Investments		Essential
	• Advance Ledger		Essential
	• Deposit Ledger		Essential
	• Loan Register		Essential
	• Fixed Assets Register		Essential
	• Appropriation Register		Essential
	• Register of unpaid bills		Essential
	• Register of dishonoured cheques		Essential
	• Budget		Essential
	MIS Reports:		



• Borough/ Zone/ Ward wise Accounts		Essential
• Ageing Reports for both debtor and creditor, (Ageing report should be user defined)		Essential
• Variance Analysis of Budget Vs Actual		Essential
• Party wise Statement		Essential
• Ratio analysis reports		Essential
• Revenue trend analysis statement		Essential
• Bank Reconciliation Statement		Essential

9.13.12 Personnel Information System

Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
Personal Information	System should have capability to maintain personal information like		
	Employee ID		Essential
	Name (with capability to capture change of name with effective dates)		Essential
	Primary Name		Essential
	Father's name		Essential
	Mother's name		Essential
	Spouse name,		Essential
	Address (with capability to capture change of name with effective dates)		Essential
	Permanent address,		Essential
	Mailing address,		Essential
	Any other address		Essential
	Phone numbers,		Essential
	Email ids,		Essential
	Blood group,		Essential
	Gender,		Essential
	Religion,		Essential
	Category (SC/ST/OBC/Gen/Ex-Service etc.)		Essential
	Physically handicapped class		Essential
	Date of birth,		Essential
	Marital status/date,		Essential
	Educational qualification,		Essential
	Professional qualifications with subjects, institute etc		Essential
	Prior work experience		Essential
	Languages known		Essential



	Mother tongue		Essential
	Dependent data,		Essential
	Details of relatives in the organization including dependents and their relationships		Essential
	Health data,		Essential
	Employee photo, signature, finger prints		Essential
	Bank account information,		Essential
	Emergency contact details,		Essential
	Exit date		Essential
	Mode of exit		Essential
	Death date		Essential
	System should have capability to maintain Job information like		
	Appointment date		Essential
	Place of first Appointment		Essential
	Ex Serviceman Class		Essential
	Entry Cadre, Pay and Grade of Joining		Essential
	Entry Stream – Operating, Commercial, Technical etc.		Essential
	Current Cadre		Essential
	Current Designation		Essential
	Department Joining Date		Essential
	Office Joining Date		Essential
	Current Basic		Essential
	Date of Execution of Service Agreement		Essential
	Entry Designation		Essential
	Seniority Position		Essential
	Seniority position in previous cadre		Essential
	Employee Class		Essential
	Department,		Essential
	Job code/designation,		Essential
	Grade/cadre,		Essential
	Deputation indication		Essential
	Promotions		Essential
	Transfers		Essential
	Deputation		Essential
	Increments		Essential
End of Service/Termination	System should have the capability to issue termination letter by Head of Department to concerned employee		Essential



	System should have the capability by which the HR can initiate the resignation of concerned employee		Essential
	System should have the capability to define the authorized workflow and execute and update accordingly.		Essential
	System should have the capability to update the approvals of different departments		Essential
	System should have the capability to maintain the date of termination/end of service		Essential
	System should have the capability to maintain details regarding the termination/end of service		Essential
Miscellaneous	System should have capability to maintain Job information		Essential
	System should have capability to maintain all job and personal information with effective dates		Essential
	System should have facility to maintain concurrent jobs for employees with additional responsibilities / special duties in addition to regular responsibilities		Essential
Introduction of New Job Grading/ Salary Structure Review/ Salary Advances	System should have capability to maintain various salary plans, salary grades and link it to the employees		Essential
	System should have capability to carry out automatic salary processing either in case of time-bound increments or merit linked increments		Essential
	System should have the ability of associating invoices/ bills/ documents during the re-imbursement process.		Essential
			Essential
	HRMS should be accessible via intranet & internet.		Essential
	Capability to introduce new Job Grade in the system should be there.		Essential
	System should have the provision to make changes in the master data in case of a salary review		Essential
	System should have the ability to do salary fitment on promotion.		Essential



	System should support master building, adjustments and statements of different types of advances/ loans		Essential
	System should be able to capture repayment conditions (no. of installments, rate of installment)		Essential
	System should allow definition of hierarchical workflows for approval of salary advances		Essential
Increments and Bonus	System should be able to scrutinize salary advance applications based on the checks such as available allocation of funds, Basic Pay of individual, duration of service, number of times advance is availed.		Essential
	System should have the ability to do the calculation regarding Increments & Bonus on the basis of performance ration.		Essential
	System should have the capability to define the authorized workflow, execute and update accordingly.		Essential
	System should have the capability to send notification to concerned employees.		Essential
	System should have the ability to do the calculation of promotional Increments on the basis of predefined rule.		Essential
Payroll Processing	System should have the capability to calculate salary for employees		Essential
	System should have the capability to maintain a single central payroll depository and be able to run and access payroll from any location in a centralized or decentralized manner		Essential
	System should support configuration and parameterization of different pay components including facility to add/modify/delete pay components		Essential
	System should support Pay outs (remittances) of all type of deductions		Essential



	System should support generation of different MIS, ratio calculations		Essential
	System should be able to print payroll in a predefined format		Essential
	System should allow users to define allowances eligibility as per the group & grade		Essential
	System should allow hierarchical approval to application for allowances		Essential
	System should have linkage with attendance records as per "Leave & Attendance" module for calculation of allowances		Essential
	System should be able to define various types of allowances as mentioned in the Jharkhandkhnd municipal act		Essential
	System should allow users to define allowances eligibility as per the group & grade		Essential
	System should allow hierarchical approval to application for allowances		Essential
Employee Relations & Disciplinary Actions- Employee Initiated	System should allow to view personal grievances data		Essential
	System should have provision to define the categories of misconducts		Essential
	System should have the ability to define additional rules specific to service in terms of suspensions, disciplinary actions.		Essential
	System should be able to track & generate status review of Performance Assessment of employees at multiple stages		Essential
	System should have the Ability to define the competencies / skills required at the higher level so as to perform an evaluation		Desired
Workforce Performance	System should be able to generate performance ration of employees as well as Departments separately		Essential



Management and Ranking Exercise Promotions	The system should be able to generate final ranking for each employee as per the defined rules		Essential
	System should have the facility to create various competencies and categories them into various competency types like Ability, Skill, Knowledge, etc		Essential
	System should have the facility to create multiple rating models (evaluation scale) and attach the same to the competencies		Essential
	System should have the ability to define standard proficiency examples and benchmarks for the competency		Essential
	System should have the ability to define roles in the organization (in terms of Position, Job code, Job task)		Essential
	System should have the ability to link specific competencies to the roles and define minimum required proficiency to fulfill the requirements of these roles.		Essential
	System should have the ability to define competency clusters (combination of multiple competencies of similar nature and its minimum proficiency requirement) and attach the same to roles.		Essential
	System should have the ability to assess the employee on the competencies required for his current job and planned jobs and update the actual proficiency on the competencies		Essential
	System should have the ability to carry out a "Role to Person" and "Person to Role" match to identify employee's fitment to roles		Essential
	The system should have authorized workflow for granting 'outstanding' rating to an employee		Essential



	System should record employee representation to 'Adverse Comment'		Desired
	System should provide time bound system reminders for disposal of appraisals with 'Adverse' remarks		Essential
	System should generate timely triggers indicating the employees due for promotion		Desired
Salary Alignment And Annual Training Plan	System should be integrated with "Employee Records Management" for Updation of employee's grade & pay-scale details resulting due to promotion decisions		Essential
	System should record details of promotion declined		Essential
	System should have ability in identifying employees who are eligible for promotion the based on the criteria		Essential
	System should have provision for generating ratings, Seniority list and the inputs for promotion process.		Essential
	System should be able to integrate seniority lists of employees from different departments eligible for same selection post		Essential
	System should have the facility to intimate employees of promotion / rejection through mail / workflow / letters		Essential
	System should have the facility to create a waiting list of employees for promotions		Desired
	System should have the facility to create offer letter on promotion		Essential
	System should have the facility to generate reports and communications to employees concerned and Controlling Offices about Employees not taking over on promotion		Essential



	System should have the capability for cancellation of promotion orders as a result of above requirement		Essential
	System should be able to define norms for promotion to higher posts		Essential
	System should be able to retrieve employment details of the identified employee		Essential
	System should be able to generate seniority list		Essential
	System should handle posting / transfer of employees upon their promotions		Essential
	System should be capable of making analysis of person profile and job requirement		Essential
	System should support preparation of yearly (or user defined) training calendar		Essential
	System should have provision for tracking payments made to training sessions		Essential
	System should generate training needs based on appraisal inputs, career development plans and other inputs.		Essential
	System should track information about employee training.		Essential
	System should identify competencies that employees gain from completing a course		Essential
	System should provide for automatic updation of employee competency inventory		Essential
	System should have the capability to maintain training budgets at employee level, department level, senior management level		Essential
	System should track training budgets for budget periods.		Essential
	System should track training costs for employees.		Essential



	System should generate and email training letters to employees, including course confirmation, cancellation, and rescheduling.		Essential
	System should maintain training history of all employees with effective dates.		Essential
	System should have the facility to record test results conducted as a part of the training certification.		Essential
	System should maintain feedback from employees as well as instructors on training for assessment of training effectiveness and impact		Essential
	System should be capable of maintaining the information on budgeting and accounting		Essential
Training Execution	System should have ability to define short / long terms goals for employees and provide a framework to assess and update completion of the same		Essential
	System should track and schedule courses for both in-house and external courses.		Essential
	System should maintain and track instructors, training facilities, contract vendors, standard equipment required for courses, and equipment available at training facilities.		Essential
	System should have facility to receive "Training Needs Analysis" forms from various divisions / Departments for the purpose of creating a training plan.		Essential
	System should allow planning and schedule course sessions		Essential
Unplanned Training and Training Payment	System should have provision for various types of course enrollments		Essential
	System should have provision to enroll at individual level as well as at group level		Essential



	System should have provision to maintain minimum and maximum number of students per course and create waiting lists if enrollments exceed maximum number of students.		Essential
	System should have provision to auto enroll waitlisted students		Essential
	System should have provision for an employee to create his/her development plan		Essential
	System should have provision to store training details (w.r.t conceptualizing, programs design, target group profiling, nominations and conduction of program) of customized/ special programs.		Essential
	System should maintain training programs/ institutes data- bank.		Essential
	System should support to identify training needs from the Performance Appraisal system on the basis of the development areas identified		Essential
	System should have the ability for the entire Appraisal process to be workflow enabled.		Essential
	System should allow supervisor and employee with agreement to set goals for the employee.		Essential
	System should be able to identify the courses that instructors are qualified to teach based on match between competency requirements to conduct the course vis-à-vis actual instructor competencies		Essential
	Provision for job profile and competency matching needs to be there		Essential
	System should have the ability to identify the strength and development areas for an employee and link the development areas to the training plan		Desired
	System should have the ability to		Desired



	leverage a common, reusable framework to describe learning objectives, defines competencies attained by learner, automatically update competency profiles, and create comprehensive learning paths.		
	There should be provision in the system to prepare proposal for change of responsibility for a particular employee.		Essential
Manpower Budgeting And Time Attendance	The system should be capable of performing Manpower estimation from existing and new positions created in the organization		Desired
	System should allow to capture attendance of employees In days, In shifts, Time in, Time out		Essential
	System should have provision for approval of time sheet of an employee by his/her supervisor.		Essential
	System should allow attendance update		Essential
	System should allow non sensitive personal data update		Essential
	System should allow to view personal financial and benefits data		Essential
	System should allow to apply for loans and advances		Essential
Leave Management	System should allow definition and maintenance of leave calendars for different types of leave depending upon the scales of the employee		Essential
	System should be able to maintain Leave register-containing records of all types of leave, employee-wise		Essential
	System should support provision to maintain all types of leave like casual leave, Earned Leave, Half pay Maternity Leave etc.		Essential



	System should have the ability to maintain leave eligibilities for each type of leave depending on the rules specified in the Jharkhand Municipal Act.		Essential
	System should have the ability to record actual leaves taken		Essential
	System should have the ability to calculate actual leave balance at any point in time		Essential
	System should allow maintenance of record of unauthorized absence		Essential
	System should have provision to prepare sanction order		Essential
	System should have provision to prepare absentee statement by branch officer.		
	System should link leave management to payroll and employee history		Essential
	System should have provision for accounting of leave including automatic credit of leave and also provision with manual credit / debit / modification / cancellation etc.		Essential
	System should support leave cancellation and leave extension/ amendments advancement, postponement of leave		Essential
	System should support online application, approval, intimation and management of leaves		Essential
	System should have the ability to manage Holidays		Essential
	System should allow employees to view their own records		Essential
	System should allow users to apply for leave under different applicable and eligible categories		Essential
	System should allow definition of hierarchical workflows for approval of leaves		Essential



	System should be able to record the approval/ rejection of applied leaves and update the employee leave account accordingly		Essential
Compensator y Leave	The system should have provision for request of Compensatory leave.		Essential
Recruitment Process	System should have provision to generate recruitment requirement as per the comparison of sanctioned and actual staff. This should also take into account the tentative retirements, progressions etc.		Essential
	System should have the facility to automatically intimate vacancies to internal employees through mail, notices		Essential
	System should be configured so as to attach documents / credentials in soft form as a part of the application		Essential
	System should have provision to capture detailed information of applicant/candidate.		Essential
	System should have the facility to define the eligibility criteria of the vacancy in terms of qualifications, work experience, location considerations, skills/competencies required, additional certifications / professional qualifications, etc.		Essential
	System should be equipped for the maintenance of various types of tests and maintain a question / answer database of each type of test (medical, psychometric, analytical, etc.) to be administered as a part of the selection process		Essential



	System should be able to generate system driven call letters (Interview/test), regret letters and offer / appointment letters through both manual as well as electronic modes		Essential
	System should have the facility to automatically transfer applicant information into employee information for candidates joining.		Essential
	System should have the facility to generate and allot Employee ID to all employees		Essential
	Provision to create new vacancy should be available in the system. Features like position to be filled, no of openings to be recruited, competencies required and the levels, additional competencies etc should also be there.		Essential
Man Power Planning	System should have provision to define requirement plans (periodic) in terms of specific skills, Qualifications, experience, designation, etc.		Essential
	System should support in analyzing the department –wise staff strength – sanctioned/ working strength and the gap for which recruitment is required.		Essential
	System should have the facility to allow receipt of projected manpower from Departments and create a finally approved manpower plan.		Essential
	System should have ability to prepare annual forecasting of talent requirements for next 3 years on the basis of organization vision and plan.		Essential
	System should have the capability to save or submit a request.		Essential
	System should have the capability to update saved requests till it is submitted.		Essential



	System should have the provision to provide justification for approval/rejection of request at each and every step of the workflow.		Essential
	Approval of certain requests needs to go for parallel approval and once approved by one of the approver the system should get updated accordingly the 2 nd approver along with other user as per the defined workflow needs to be notified.		Essential
	System should have the capability to send auto generated mails to the requester and the concerned authorities according to the work flow on each step of approval/rejection of the request.		Essential
	System should have the capability to display the status of each and every request at any point of time.		Essential
	System should have the capability to send alerts to the concerned authorities according to the work flow.		Essential
	System should have the capability to send reminder or escalation mails/alerts to concerned authorities on non approval/rejection of a particular request within the specified time defined in the work flow.		Essential
	System should have the provision to display the alerts in the system as well as in outlook to the user.		Essential
	System should have defined interfaces for data interchange with different departments.		Essential
	The system should have the capability of producing customized reports		Essential
	System should have the capability to define the authorized workflow, execute and update accordingly for all types of request.		Essential



	System should have the capability to define, execute and update alternate workflow for all types of request.		Essential
Transfer	System should have capability to provide for various types of transfers like: Inter departmental and corporation to corporation		Essential
	System should have capability to initiate transfer at employee request		Essential
	System should have capability to initiate transfer on promotion		Essential
	System should have capability to initiate transfer on disciplinary grounds		Essential
	System should have capability to maintain Transfer history		Essential
Quarter Allotment	System should have provision to define quarter inventory		Essential
	System should accept application for quarter from employees		Essential
	System should allow users to allocate a quarter to an employee based on his application, seniority, eligibility etc.		Essential
	System should maintain waiting list of employees who are seeking a quarter		Essential
	Provision for out of turn allotment of quarter should be available in the system.		Essential
	Entitlement details for allotment of staff quarters should be available in the system.		Essential
Pension	Pension is admissible to permanent employees who are retired with a qualifying service as defined by pension rule book by UD Department, government of Jharkhand		Essential
	System should have provision for handling different types of pension cases		Essential



9.13.13 Assets and Land Management

Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
Asset Planning	The system should have provision to prepare demand projection and send it for review and approval as per the work flows.		Essential
	The system should allow a user to record target service levels.		Essential
	The system should forecast future service levels and asset replacement needs.		Essential
	The system should estimate capital operating and whole life cost.		Essential
	The system should be able to capture the risk profile of asset groups and their criticality.		Essential
	The system should be able to record Asset lifecycle plans.		Essential
	The system should allow the user to record AM Policy, Strategy & Objectives & Monitor AM System		Essential
	The system should allow the user to record and Define Asset Delivery Strategy & Plan		Essential
Asset Creation	The system should allow the user to Manage Acquisition & Transfer of Land for Asset by recording this information: <ul style="list-style-type: none"> Final Land acquisition data Request for acquiring land for BMC assets Ownership transfer & other legal formalities related data. 		Essential
	The system should allow the user to Monitor Asset Delivery progress by recording this information: <ul style="list-style-type: none"> Project Plan Project Status reports submitted by Contractor Project Outputs created & submitted by Contractor Project Site Inspection Reports Project Escalations & Action points 		Essential
	The system should be able to record, review & approve Handover Plan & Acceptance criteria.		Essential
	The system should be able to record process for Handover Acceptance, Monitoring of Asset		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
	Handover & compliance with hand over plan, Rectification of snags and non-compliances identified during asset handover.		
	System should have provision to display the Asset description for associated asset code in the user interface		Essential
	The system should be able to record the following: (a)Operation Budgets (b)Operation Plan Output (c)Validation Comments/ Feedback		Essential
	The system should be able to record and monitor the below mentioned points against asset operational Objectives & KPIs (a)Asset Operational Performance (b) Improvement Plans and Recommendations		Essential
Asset Maintenance	The system should be able to record the list of Spares/ Consumables and provide Spares Procurement Recommendations		Essential
	The system should be able to check if the spares and consumables list is within the approved plans & budget		Essential
	The system should have the entire technical document associated to the Asset. A link should be available to open the document		Essential
	The system should be able to capture details of all the Lands (Owned or Managed) by the ULB		Essential
	The system should be able to record the list of Assets to be considered for disposal/ renewal/ upgrade & asset valuations with respect to the Master Plan.		Essential
	The system should be able to record the (a)Asset Disposal Plan (b)Asset Decommissioning status (c)Audit/ Inspection for Asset Disposal		Essential
	Monitor Asset Renewal or Upgrades. The system should allow the user to monitor and review the asset renewal and upgrade.		Essential
	The system should be able to record High Level Maintenance Objectives and generate KPIs for performance tracking.		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
	The system should be able to record the following: (a) Maintenance Budgets (b) Maintenance Plan Output (c) Validation Comments/ Feedback		Essential
	The system should be able to record and monitor the below mentioned points against asset Maintenance Objectives & KPIs (a) Asset Maintenance Performance (b) Improvement Plans and Recommendations		Essential
Asset Operation	System should have capability of linking Asset register with Asset management strategy to provide guidelines on Asset operation and maintenance		Essential
Asset Disposal	New Asset Codification should be implemented and the entire legacy Asset Data should be migrated to the new system as per the new asset codes.		Essential
	System should allow user to customize and generate reports on need basis		Essential
Asset Register	The system should have provision to provide a unique number to each asset. The same Asset numbering approach should be followed in order to create uniform Asset numbers.		Essential
	The system should have provision to store and display whenever required a short meaningful description to quickly recognize the asset		Essential
	The system should have provision to store and display whenever required current condition of a particular asset		Essential
	The system should have provision to store and display whenever required current criticality of a particular asset		Essential
	The system should have provision to store and display whenever required type and duty of Asset		Essential
	The system should have provision to store and display whenever required manufacturer serial number (the number maintained by manufacturer) and code (the number maintained by ULB against a particular manufacturer) to identify and track asset with manufacturer		Essential
	The system should have provision to store and display whenever required supplier serial number (the number maintained by supplier) and code (the number maintained by ULB against a particular		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
	supplier) to identify and track asset with the Supplier.		
	The system should have provision to store and display whenever required the date on which the asset is installed.		Essential
	The system should have provision to store and display whenever required the date on which the asset has been commissioned.		Essential
	The system should have provision to store and display whenever required person responsible for custody and maintenance of asset		Essential
	The system should have provision to store and display whenever required warranty coverage period and expiry date; for further details a link to Content Management/DMS where the detail document pertaining to the warranty of the particular asset is maintained.		Essential
	The system should have provision to store and display whenever required person/position responsible for Maintenance of Asset. Maintenance history including date and type of maintenance, next due date for maintenance, repercussion (if any), downtime required, action taken, labour required, expenses		Essential
	The system should have provision to store and display whenever required <ul style="list-style-type: none"> ▪ Original life ▪ Expired life/ Expected Date of Disposal ▪ Original remaining life ▪ Revised remaining life ▪ Replacement due date ▪ Date asset life last reviewed ▪ Any evidence of impairment 		Essential
	The system should have provision to store and display whenever required Historic cost or initial valuation if historical cost is not known		Essential
	The system should have provision to store and display whenever required amortization method, rate and amount;		Essential
	The system should have provision to store and display whenever required Book value of an Asset		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
	The system should have provision to store and display whenever required Method of disposal, asset "disposed off" date		Essential
	The system should have provision to store and display whenever required possible return or scrap value		Essential
	The system should have provision to store and display whenever required asset to maintain GL transaction information like control account, cost adjustment account, shrinkage cost account, invoice price variance, currency variance, purchase price variance, receipt variance etc.		Essential
	The system should allow for the use of sub ledger accounting accruing costs (materials, labour, and other services) for the maintenance done. These sub ledgers can accrue the costs by asset, location, project and custodian		Essential
	The system should allow maintaining segment, Length, location and linkage with engineering design.		Essential
	The system should have provision to store and display whenever required failure class associated with the Asset Register. Failure data is an element of a failure hierarchy. A failure consists of date of occurrence, problems, causes and remedies.		Essential
	The system should have provision to store and display whenever required contractual information, Standards, Procedures, Manuals, Specification of the Asset and others maintained in Content Management / Document Management System.		Essential
	The system should have provision to add an item number, a current balance (different than zero) and its instances to allow it to be used in different locations. Each part should cover where used and when retiring and specific jobs – inspection, overhaul and others		Essential
	The system should have provision to store and display whenever required inter cost center temporary transfer of asset		Essential
	The system should have provision to store and display whenever required key Performance Indicators		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
	The system should have provision to store and display whenever required the structure records into organized hierarchies which would help easily locate records and ensure that records are not duplicated unintentionally		Essential
	The system should have provision to store and display whenever required the risk associated with the asset and assessment- mitigation and contingency measures		Essential
	The system should have provision to store and display whenever required the Hazards and Precautions, Lockout tag out and others		Essential
	The system should have provision to store and display whenever required all documentations pertaining to the asset managed in a central inventory with a link to the asset		Essential
	The system should have provision to store and display whenever required design parameters, diameters, material, drawings and others		Essential
Vehicle Management (Purchase) (Hiring of Vehicle)	The system should have provision for vehicle purchase agenda preparation by providing generic template		Essential
	The system should have provision for online uploading the resolution passed by the council		Essential
	The system should have provision for review and forward the resolution by concerned authorities		Essential
	The system should have provision to request and receive Performa invoice from the vendors		Essential
	The system should have provision for online review and approve of the Performa invoice by different concerned authorities		Essential
	The system should have provision for online application submission by the vendors, along with the feature of uploading of supporting documents		Essential
	The system should have provision for online review, forward and approve of the application by the concerned authorities		Essential
	The system should facilitate the preparation of work order by providing the standard template		Essential
Vehicle Operation & Maintenance	The system should have the facility to allocate driver to particular vehicle		Essential
	The system should have provision for keeping record of the log book of the vehicle		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/Nice to Have)
	The system should have provision for upload the bill receive from the service centre		Essential
	The system should have provision for forwarding and approval of the bills by appropriate authority based on the amount of the bill		Essential

9.13.14 Inventory Management

Detailed Functionality	Bidder's Response	Implementation Priority (Essential/Desired/ Nice to Have)
System should have provision for review /forward/approve etc options for the respective actors		Essential
System should have provision of preparing stock requirement estimation for the next year		Essential
System should have an inspection template to be filled up every time new materials is received and inspected.		Essential
System should have a provision for customizable reports as per user requirements.		Essential
System should have a Rejection Note template that will be filled up every time new materials are rejected.		Essential
System should allow the user to generate MRR (monthly recurring revenue) on receipt of material.		Essential
System should allow the user to generate MRR for materials under Direct Charge with the appropriate code on receipt of material.		Essential
System should be able to capture the bin / storage Location in Material Receipt Report.		Essential
System should be able to capture the Direct Charge Store Location in Material Receipt Report.		Essential
System should have a Non-Conformity Report template to be filled up every time new materials are rejected.		Essential
System should be able to follow the workflow as dictated by the Approval Matrix.		Essential
System should be able to track the time taken by the user department to inspect the material and give its result.		Essential
System should be able to allow the warehouse keeper to assign the group that needs to inspect the received materials.		Essential
System should be able to generate material issue number & stock issue vouched for Direct Charge items		Essential



Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
System should be able to generate Journal Voucher about receipt of material & send to respective GL Account of Finance System. While updating the GL Account, the MRR number should also be mentioned in the GL for backward tracking.		Essential
System should send an automated trigger to the warehouse assistant for the half-yearly check for the preservation of material.		Essential
System should have provision to generate request of issuance of materials by users from respective depts.		Essential
System should be able to evaluate the stock availability and authorize concerned officer for providing issuance approval		Essential
System should be able to generate a Material Issue number.		Essential
System should be able to issue a Stock Issue Number.		Essential
System should allow the User Department to raise the Non Conformity report and send for approval according to the Work Flow.		Essential
System should generate a journal voucher when stock levels get updated and send that to GL account of Finance System		Essential
System should allow the user department to fill up the New Item Creation form and send it for processing.		Essential
System should allow the Stock Analyst to generate a new item code and update the stock parameters		Essential
System should check for duplication of items. If duplicates are found, it should merge them after approval from Head of Inventory & Warehouse		Essential
System should allow the User Department to raise request for material receipt from Internal Customers / Projects		Essential
System should be able to generate a journal voucher for receipt of material and send to appropriate GL account in the Finance System		Essential
System should allow the concerned Department to raise request for material return.		Essential
System should be able to accept material back into stock & generate a journal voucher for return of material and send to appropriate GL account in the Finance System		Essential
System should monitor individual stock ROP's, Safety Stock Levels, EOQ's Current balance and generate a report for Inventory team for review		Essential
System should allow the user to group items as per category and raise PR for the entire category.		Essential
System should prepare the Stock Aging report and send to Stock Analyst.		Essential
System should allow the Stock Analyst to prepare the Stock Disposal Item list & send for approval as per work flow.		Essential



Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
System should allow the Warehouse Keeper to update stock with disposed item and generate journal voucher and send to GL account of Finance System		Essential
System should allow the Head of Inventory and Warehouse to review the inventory parameters and send to Head of User Department for an annual review.		Essential
System should be able to generate the following monthly reports and should send it to the respective departments. The reports mentioned are indicative only as follows: <ul style="list-style-type: none"> Inventory Balance Report for all Warehouses Department wise issue report for all Warehouses Inventory Transaction Report Shelf Life Report 		Essential

9.13.15 Legal Management System

Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
Legal Case Monitoring	System should have the functionality to register new cases		Essential
	System should allow defining various case types		Essential
	System should have search facility, both metadata search , key word search as well as full text search		Essential
	System should have search facility based on Legal/Court Case file no. as well		Essential
	System should allow attaching various documents w.r.t the case		Essential
	System should allow to update the status of a case		Essential
	The system should have the feature of writ petition, by providing a standard template		Essential
	The system should have the feature of preparing para wise comment against the notice		Essential
	System should allow attaching documents (Entry of hearing details) against the status of case.		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	System should send alert w.r.t hearing date of case		Essential
	System should have provision to define the priority of cases		Essential
	System should allow managing empanelled list of advocate		Essential
	System should have provision for assigning case to an empanelled advocate		Essential
	System should intimate the advocate regarding the confirmation of assignment against a particular case		Essential
	System should allow to choose and prepare the list of stakeholders to appear in the court		Essential
	System should have provision for capturing details of payment made to the advocate		Essential
	The system should have interactive calendars dockets and calendar reports		Essential
	Users should be able to open multiple cases, names/parties at one time		Essential
	System should have provision for capturing judgment of case		Essential
	System should act as a repository for various acts and provision with ability to search		Essential
	System should be able to generate "Court Wise" report		Essential
	System should be able to "Case Type Wise" report		Essential
	System should be able to generate " Case Priority Wise" Report		Essential
	System should be able to generate " Case Hearing Date Wise" Report		Essential
	System should be able to generate report w.r.t to "Case own/lost/appeals made"		Essential
	System should be able to generate report w.r.t to "Payments made to Legal Advisor"		Essential



9.13.16 Geographic Information System (GIS)

Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
GIS General Functionalities	The system should be OGC (Open Geospatial Consortium) compliant		Essential
	The system should have versioning capability		Essential
	The system should have relationship establishing capability		Desired
	The system should have data Validation capability		Essential
	The system should have error Listing capability		Desired
	The system should have Integration Capability with other modules		Essential
	GIS Engine-Capability to work in all industry standard cross-platforms		Essential
	Should have custom functionality addition to application		Desired
	Should have software based functionality extensions to application		Essential
	Unique no. Allocation capability of Software should be available		Essential
	The system should have database editing flexibility		Essential
	The system should have database editing flexibility		Essential
	The system should have color graphic Display of System Network		Essential
	The system should have geographic attributes Query in GIS software		Essential
	The system should have capability for dynamic attribute query of any object in GIS software		Essential
	The system should have capability for representation of objects in different colors		Essential
	The system should have dimensioning capabilities		Essential
	The system should have moving and copying capabilities		Essential
	The system should have real length specifying capability		Essential
	The system should have capability to save & restore views/layouts		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	The system should have capability to provide citizen details ward wise		Essential
	The system should have capability for Dynamic Configuration of system		Essential
	Database security provisions in system should be available		Essential
	Provision of version management of Data should be available		Essential
	Provision of multi-tiered architecture should be available		Essential
	System should have capability of supporting seamless data access		Essential
	GIS software should have Data import/Export capability		Essential
	The system should have capability to export data into XML format		Essential
	The system should have capability to import Satellite Imagery Data		Essential
	The system should have capability for importing & displaying color raster images		Essential
	The system should have capability for opening / attaching standard format files without importing to mapping system		Essential
	The system should have capability to provide query builder		Desired
	The system should have capability to support sorting /filtering of records		Desired
	The system should have capability to save queries in text format		Desired
	The system should have capability to highlighting user specified attributes		Desired
	The system should have capability to support web enablement		Desired
	The system should have capability to store CAD & GIS data		Desired
	The system should have capability to support data validation		Desired
	The system should have capability to translate geospatial data sets		Desired
	The system should have capability for Updation of RDBMS attribute data on spatial changes		Desired
	The system should have capability to support distributed databases		Desired



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	The system should have capability to modify asset data		Desired
	The system should have capability to support all industry standard RDBMS		Desired
	The system should have capability of multipoint editing permissibility		Desired
	The system should have capability to serve database directly to internet mapping server & desktops		Desired
	The system should have capability to support raster images & operations		Desired
	The system should have capability to enable map browsing in folders & DB		Desired
	The system should have capability to preview map & table data		Desired
	The system should have capability to manage data sources		Desired
	The system should have capability to manage coordinate systems		Desired
	The system should have capability of DMS to permit users to manage features		Desired
	The system should have capability for Layer Creation		Essential
	The system should have capability Group Layer creation		Essential
	The system should have capability Layer storage		Essential
	The system should have capability for preset Layer configuration permissibility		Essential
	The system should have Data previewing capability		Essential
	The system should have capability for different types of Report Generation		Essential
	The system should have capability of creating bookmark		Essential
	The system should have capability of spatial querying engine		Essential
	The system should have capability of transparency of data to user when queried		Essential
	Availability of out of box tool for addressing queries.		Essential
	Software ability to enable point & click access to data		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	The system should have capability to adopt to variety of clients		Essential
	The system should have ability to perform cluttering & de-cluttering of data details		Essential
	Image Edge matching facility in GIS software		Essential
	Software capability to create & store standard displays at system & user level		Essential
	The system should have capability to create a new network		Essential
	The system should have capability open an existing network		Essential
	The system should have capability to merge two networks		Essential
	The system should have capability to cut and paste part of the network		Essential
	The system should have capability to display a partial network of the area of the interest		Essential
	The system should have capability to delete a network		Essential
	The system should have capability to create, maintain and save a geometric network using designated features or by adding features to an empty geometric network.		Essential
	The system should have capability to connect/ disconnect a network feature		Essential
	The system should have capability for Network impedance criterion		Essential
	The system should have capability to export of network analysis product		Essential
	The system should have capability to handle network problems		Essential
	The system should have capability to track changes		Essential
	The system should have capability to keep track of changes in citizen attributes		Essential
	The system should have capability to perform QA/QC on data created		Essential
	The QA/QC tool must perform QA/QC based on the following,		Desired



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	Attribute level QA/QC, Connectivity rule-QA/QC, Relationship rule-QA/QC, Contingent Validity Rule-QA/QC, Citizen/Applicant Validation Rule-QA/QC,		
	The system should have capability to check availability of locator tool in GIS System		Desired
	The system should have capability of location Display facility		Desired
	The system should have capability of location Tracking		Desired
	The system should have capability to permit composite object modeling		Desired
	The system should have capability of permissibility for templates		Desired
	The system should have capability of creation of Favorites & Mass attribute updates		Desired
	The system should have capability of system permissibility for creation of favorites		Desired
	The system should have ability to save Favorites & allow mass attributes update		Desired
	The system should have ability of system permissibility of storing predefined layout display		Desired
	The application should support a customizable graphical user interface.		Essential
	The system should have the capability where the user will be able to create hyperlinks to any document or URL and store the hyperlinks with data in an attribute field.		Essential
	The system should have capability to save a map in a thumbnail image		Essential
	The system should have capability to store data using different paths.		Essential
	The system should have capability to create, store and maintain map templates.		Essential
	The system should have capability to store true 3-D features (X, Y & Z coordinates).		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	Display Properties		Essential
	The system should have capability to use of specified projections.		Essential
	The system should have capability where a variety of data sources can be displayed.		Essential
	The system should support the ability to set background and symbols.		Essential
	The system should support the ability to supports the manipulation of symbols.		Essential
	The system should support the ability to label layers.		Essential
	The system should support Interaction Tools		Essential
	The system should have the capability of providing a list of map interaction tool.		Essential
	The system should have the capability to describe the hot linking capabilities.		Essential
	The system should support the ability to locate features.		Essential
	Provision for the user to create and save spatial bookmarks should be available.		Essential
	The system should provide the ability to control map drawing.		Essential
	The system should provide a magnifier window that can be changed to any desired percentage and represent the magnified view as a snapshot.		Essential
	The system should have the facility to create an overview window which can be resized and moved such that it affects the active data frame.		Essential
	The system should have the facility to display the results of attribute queries in graphic format. This may include graphics for a single record or an entire query result. Zoom to selected features.		Essential
	The system should have the facility to display the Vector Data		Essential
	The system should support the ability		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	to label definition and position		
	The system should provide a display threshold for vector layers		Essential
	The system should allow user to focus on an area of interest.		Essential
	The system should have the capability to create tool tips for toolbar buttons.		Essential
	The system should have the capability to customize the selections.		Essential
	The system should have the ability to manipulate map features.		Essential
	The system should have the ability so that a definition filter based on an SQL expression can be set up.		Essential
	The system should have the capability to change Image brightness, contrast, and transparency		Essential
	The system should have the capability for re-sampling of geometric transformations and for converting grids to other resolutions.		Essential
	The system should have the capability to query data using a number of different expressions.		Essential
	The system should allow query expressions to be saved and loaded.		Essential
	The system support querying against a set of features, which are the result of executing a previous query.		Essential
	The system should allow features to be selected for data editing in the following ways, Geographic window; Selection by mouse; Selection by SQL query.		Essential
	The system should allow to use the NOT qualifier applied to any spatial operator.		Essential
	The system should have the provision to display or plot the query results in user-defined symbology.		Essential
	The system should have the provision where the query results can be easily formatted in a report. The report		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	writer should have forms-driven user interface for the interactive definition and formatting of the report		
	The system should have the provision where the user can assign values to attributes (scaling)		Essential
	The system should have capability to support symbol classification		Essential
	The system should have capability to support color ramps for symbols		Essential
	The system should have capability to support label text		Essential
	The system should have capability to perform statistics		Essential
	Interactive map symbol display capabilities are provided.		Essential
	The system should have capability to support transparency function of attributes.		Essential
	The system should provide capability of symbol management.		Essential
	The system should have capability to support symbol stretches.		Essential
	The system should have the ability to adjust brightness, contrast and transparency.		Essential
	The system should have the ability using which the user can predefine feature characteristics, such as line style, weight, color, symbol and angle, for features and text for the system to use as a default when displaying features		Essential
	The system should have the capability to display attribute-based symbology.		Essential
	The system should have the capability of symbol Editing and Management		Essential
	The system should have the ability using which the user can create templates and map series		Essential
	The system should have the capability for TrueType font support		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	The system should support EMF and BMP formats		Essential
	The system should provide symbol-editing support		Essential
	The system should provide the ability to create and edit symbols.		Essential
	The system should support gradient fills.		Essential
	The map production system generates point symbols based on any attribute associated with a point. The software supports a variety of point symbols, including both system default and user-specified symbols.		Essential
	The map production system generates line symbols based on any attribute associated with a line. The software supports a variety of line symbols, including more complex line symbols and the custom creation of user-defined line styles (including color, pattern and width).		Essential
	The map production system generates polygon shade symbols based on any attribute associated with a polygon. The software supports a variety of shade characteristics for each polygon shade symbol, such as shade line colors, angles, patterns, line widths and separations.		Essential
	The system should support automatic Labeling		Essential
	The system should support Conflict detection		Essential
	The system should support labeling of multiple layers.		Essential
	The system should support to place Interactive text on a map		Essential
	The system should support annotation stored with a map as a group or stored separately in a file or database.		Essential
	The system should support feature linked annotation		Essential
	The system should allow users to		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	position and orient labels and graphics in a data frame or position map elements on the layout		
	The system should support transparency layers.		Essential
	The system should support predefined label styles		Essential
	The system should support for label display of a subset of features		Essential
	The system should support symbols as labels		Essential
	The system should have the ability where Labels can be stored in a graphic layer.		Essential
	Manual placement of feature labels should be supported.		Essential
	The system should allow for scalable fonts that allow changes to font type, height, width, color, etc.		Essential
	The system should support multiple lines of text with full justification options available. Justification options include, top left, top center, top right, center left center, center right, bottom left, bottom center, and bottom right		Essential
	The system should support text as graphics		Essential
	The system should support different graphic shapes		Essential
	The system should support graphic editing		Essential
	The system should support graphic placement and manipulation.		Essential
	The system should support moving, rotating, and ordering graphics		Essential
	The system should support feature Editing		Essential
	The system should support to create new features		Essential
	The creation of features at an x, y coordinate location should be supported.		Essential
	The system should support to create features at a specified length or angle		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	The system should support the creation of segments using angles from existing segments.		Essential
	The system should support to create true curves		Essential
	The system should support copying a line at a specified interval.		Essential
	The system should support creation of a buffer around a specific feature.		Essential
	The system should support to create mirror images from existing features.		Essential
	Merging features from the same layer into one feature should be supported.		Essential
	The system should support combining features from different layers into one feature.		Essential
	The system should support the creation of a feature with common areas.		Essential
	The system should support to create a new polygon with shared parts		Essential
	The system should have the ability to modify existing shapes.		Essential
	The system should have the ability to split a line or polygon		Essential
	The system should support trimming a line, line extensions, flipping a line		Essential
	The system should support the modification of existing features		Essential
	The system should provide topological editing capabilities		Essential
	The system should support a comprehensive snapping environment		Essential
	The system should support copying and pasting attributes		Essential
	The system should have the ability to create relationships between features and attributes		Essential
	The system should have the ability to support validation rules		Essential
	The system should have the ability to provide digitizer support.		Essential
	The system should support Undo/Redo framework		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	The system should support a fully customizable editing environment		Essential
	The system should have the ability while entering new data, it should display a listing of features types to be selected, while automatically setting layer, attribution and symbology		Essential
	The system allow attribute data to be interactively entered or edited using default field values (such as ownership) or user-defined values at the time of entry (such as by equipment identification number).		Essential
	The system should provide domains (pre-defined listings of valid values for a particular attribute) for graphic/ attribute integrity checking.		Essential
	The system can automatically update attribute values based upon changes to a feature's geometry, changes to other attributes, or the creation of a new feature, thus ensuring database integrity.		Essential
	The system should support the manipulation of sets of features, such as deleting, moving, querying and updating attributes.		Essential
	The system should support the interactive merging of two identified lines with and without an attribute comparison,		Essential
	The system should support the interactive editing of topological edges and nodes, allowing vertices to be added, deleted, or moved on an edge (an edge, shared by two features, that is modified allows both features to share the modification).		Essential
	The system should provide "heads-up" digitizing capabilities, including the ability to load raster and vector data as a background on the screen over which vector graphics can be traced using the cursor.		Essential
	The digitizing process should include		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	interactive rubber sheeting, as well as the ability to snap to points during placement and editing.		
	The system should support digitization for key-in by coordinate geometry		Essential
	The system should allow the user to place construction points / lines when placing elements.		Essential
	The system should support "on-the-fly" digitizing techniques, such as line following and attribution during digitizing.		Essential
	The system should support for the automatic generation of points At the midpoint of a feature; At the endpoint of a feature; Projected (and vertex-inserted) onto a feature; Perpendicular to and from a feature; At a distance along a feature; At a distance from a given point in a given direction; at the centered of an area feature		Essential
	The system should support the development of specialized feature placement methods		Essential
	Bidder should list the vector formats supported and editable by the proposed solution		Essential
	Bidder should list the raster formats supported by the proposed solution		Essential
	Bidder should list the formats in which the product can export data		Essential
	The system should allow data to be input from the following sources : Hardcopy maps; Digital coordinate ASCII files; Batch processing (to load attribute data)		Essential
	The system should allow ASCII data (both coordinate and attribute information) to be loaded as features, which are optionally linked to attribute records. An interface for ASCII format definition, modification and loading is provided		Essential
	The system should have the ability to		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	view data in a table		
	The system should support table data selection and editing		Essential
	The system should support to define aliases in tables		Essential
	The system should support to calculate field values		Essential
	The system should provide the ability to find and replace functions in tables		Essential
	The system should provide the ability to freeze columns during display		Essential
	Bidder should list the different chart formats the application supports.		Essential
	The system should have the capability to edit Graphics and charts		Essential
	The system should have the capability to create buffers		Essential
	The system should have the capability to output buffers		Essential
	The system should have the capability to merge and join Data		Essential
	The system should have the capability to use data compilation tools for using data that is obtained in multiple formats		Essential
	The system should have the capability to use projection management tools to standardize data from multiple projections.		Essential
	The system should have the capability to use boundary creation tool. Need the ability to clump areas together from different layers (I.e. counties, zip codes) and create one area/polygon on a new layer with its own attributes. Also require manual boundary modification tools.		Essential
	The system should have the capability to use geo-coding Tool for objects based on street addresses.		Essential
	The system should have the capability to support Page Template properties		Essential
	The system should have the capability to use tools for navigating		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	large maps		
	The system should have the capability for Schematic layout of compound objects		Essential
	The system should have the capability for customized representation of entities/ objects/ elements like point, line, polygon, text, colour hash pattern, line style (dashed, dotted, etc.), font, point shape (round, square, user defined, etc.)		Essential
	The system should have the capability to capture all attributes while digitizing		Essential
	The system should support automatic scaling of graphics		Essential
	The system should have the capability to create spatial database		Essential
	The system should have the capability of Layer specifying		Essential
	System readiness after digitization		Essential
	The system should have the capability support raster images		Essential
	The system should have the capability for land base representation		Essential
	The system should have the Text Editing Ability		Essential
	The system should have the capability to place new equipment in geographic maps		Essential
	The system should support GUI availability to perform graphic operations		Essential
	System ability to provide information using GUI		Essential
	The system should have the Error generation capability		Essential
	The system should have the capability to attach scanned drawing		Essential
	The system should have the capability to search & zoom in any drawing		Essential
	The system should have the capability of project administration		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	features		
	The system should have the capability of Layer Mgmt. features		Essential
	The system should have the capability of task management features		Essential
	The system should have the capability of different accessing modes of area (Coordinate, user specific, area, map sheet number (index for map sheet shall be created), polygon or any shape of interest, etc.)		Desired
	The system should have the capability to create relationship between network components		Desired
	The system should have the capability to create multiple features easily		Desired
	The system should have the capability of zooming facility in drawing		Desired
	The system should have the capability of zoom sensitive layer control		Desired
	The system should have the capability to Connect to ODBC data sources		Desired
	The system should have the capability to draw automatically from database		Desired
	The system should have the capability to exhibit data		Desired
	The system should have the capability of pictographic representation of assets		Desired
	The system should have the capability of stencil features		Desired
	The system should have the capability of status display facility on GUI		Desired
	The system should have the capability of GUI ability to accept query & provide result data on diagram		Desired
	The system should have the provision		Desired



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	for data entry after dragging objects to map		
	The system should have the capability print object data		Desired
	The system should have the capability to find element on drawing		Desired
	The system should have the capability to draw a section of drawing		Desired
	The system should have the capability to represent internals		Desired
	The system should have the capability to use report creation Tools		Desired
	The system should have the capability to accept user defined symbols		Desired
	Provision of extensive library of symbols should be there		Desired
	The system should have the provision for on screen digitization		Desired
	The system should have the provision for Multi-user digitization in single network		Desired
	The system should have the provision for validation of digitization		Desired
	The system should have the provision for library of validations		Desired
	The system should have the provision for list of validations		Desired
	The system should have integration capability with other modules of BMC		Essential
	The system should have the provision for interface package for integration		Essential
	The system should have the capability to interface with industry standard analysis tools		Essential
	The system should have the capability of cross platform support for internet mapping software		Essential
	The system should have the capability of web Server support for internet mapping software		Essential
	The system should have the capability for Scalability & reliability		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	of Internet Mapping software		
	The system should have advanced cartographic capability		Essential
	The system should have the capability of advanced Client side functionalities for Internet Mapping software		Essential
	Integration of local & internet data		Essential
	The system server architecture should be highly scalable		Essential
	IMS capacity to function even if new servers are added or removed		Essential
	The system should have the capability to Print network vector map alone, raster map alone and network superimposed over raster.		Desired
	The system should have the capability to help the user to print the features required by him/her.		Essential
	The user shall have the capability to print the complete or a part of the map in a given size of paper.		Essential
	The user should be able to print complete or part of the map on given scale in multiple sheets of specified size.		Essential
	The system should support print preview feature as well as various drivers.		Essential
	The system should support postscript.		Essential
	The system should support WYSIWYG Plotting and Printing of graphical areas		Desired
	The system should support placement of own legend, various texts styles in plotting template.		Essential
	The system should support map insets that allow the user to designate a portion of the map in a source frame and show a zoomed version of the source in a destination frame to enable printing and plotting cluttered areas.		Essential
	The system should allow Generation		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	of user defined Map grids, coordinate systems and preparation of Map-books automatically. System should also allow scheduling of plotting activity. A map grid is a set of map sheets that can be plotted.		
	The system should provide users with the capability to store a map layout for consistent look and feel during map production.		Essential
	The system should support map production tools that allow users to create map books and map sets. It shall be possible to schedule the plot / print of the map books.		Essential
	The system should support the map production system to automatically orient text (i.e. along the axis as opposed to horizontally).		Essential
	The system should support the map production system plots labels for point, line and polygon features using any attribute (alpha or numeric). Labels are plotted in a variety of text fonts, sizes, colors and angles.		Essential
	The system should provide the functionality to automatically create titles, legends and other margin data and store them in templates that are transportable.		Essential
	The system should support the map production system to be able to create markers and line sizes that vary automatically by the scale of the map.		Essential
	The system should support the map production system to save layouts and or templates.		Essential
	The system should support the map production system to include the optional application of standard drawing frames and editable title blocks.		Essential
	The system should support storage of predefined templates for plotting		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	This module should have the facility to print and display different reports, some of the indicative reports are mentioned below		Essential
	Report showing number of objects for a particular symbol with different attribute data on the basis of selected attribute.		Essential
	The system should support ability to create reports and report templates.		Essential
	Bidder should list the report tools available with the proposed solution.		Essential
	The system should be capable of generating reports from the results of batch query sets.		Essential
	The reports should be user-format table and full-page when output to a printer.		Essential
	Graphic reports should be generated from within the system.		Essential
	The system should have the facility for online help context based and also on line tutorials.		Desired
	A query builder to generate adhoc queries by user, who have no skills on SQL commands, shall be provided.		Desired
	Context based and user-friendly help should be available.		Desired
	Help should be available at different levels : novice, expert etc.		Desired
GIS Based Town Planning & Property Tax	The system should have both desktop (editing, for dept users) and web based (viewing, for citizen) interfaces		Essential
	The system should support in Maintaining the properties location and owner details		Essential
	The system should support in maintaining the parameters details for the valuation of the properties which depend on various methods of valuation		Essential
	The system should support in facilitating transfer, separation and amalgamation of properties and subsequent adjustment to the tax-		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	bills, if required		
	The system should support in maintaining the historical records of the properties		Essential
	The system should support in recording the rent details of the properties, if any		Essential
	The system should support in calculating the applicable rates including rebates, if applicable		Essential
	The system should support in calculating the tax for individual user and generation of bills		Essential
	The system should support in accepting the objections against any valuation (done by ULB) and finalization of the same through a hearing process		Essential
	The system should support in accepting the advance payment and its subsequent adjustment against the tax bills		Essential
	The system should support in Facility to issue 'No Dues Certificate' online		Essential
	The system should support in refunding any excess payment, on approval of the appropriate authority		Essential
	The system should support in allowing rebate when paid within the rebate-period and impose penalty/interest on overdue bills, if applicable		Essential
	The system should support in charging for out-stationed cheques, dishonor cheques (including subsequent effect to the corresponding tax-bills)		Essential
	The system should support in tracking and monitoring of defaulters and taking subsequent regulative measures		Essential
	The system should support most of the commonly used raster and vector formats as on date		Desired
	Following operations must be present for varied usage within the		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	application: Retrieval of Map generalization, Map abstractions, Map sheet manipulation, Buffer generation, Polygon overlay and dissolve Measurements, Digital terrain analysis, and Network analysis		
	The system should have both desktop (editing, for dept users) and web based (viewing, for citizen) interfaces		Essential
	The system should support in getting online information from other departments (Building and License departments) which are related to the valuation of a property		
Assessment and Allocation of land	The system should prompt department user to geo-reference the image as soon as it is imported into the application.		Essential
	The system should have facility to overlay geo-referenced image over other geo-referenced base maps or vector diagrams.		Essential
	The system should prompt user to vectorize the raster image of scanned map/plan		Desired
	The system should prompt for entering attribute information soon after a feature is drawn		Desired
	The system should be able to run predefined queries against the newly created features in order to carry out a neighborhood analysis in order to ascertain attribute information (as provided by user) matches with the feature or part of feature present on the master plan		Essential
	The system should support predefined queries to highlight whether the newly created feature meets the set requirements of land as per master plan that is to be taken over		Essential
	The system should be able to let the		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	user know whether similar feature is present or absent on the master plan		
	The system should have the provision to save the query so that when user forwards the report to concerned department, they too can run the query in order to ascertain facts		Essential
	The system should have provision to trigger a mail and assign viewing rights to concerned department / GoJ official (in case of ULB/Govt of Jharkhand)		Essential
	Individual property should have unique property ID		Essential
	Features should be named and numbered scientifically.		Essential
	Property details like plinth area, building structure, built up area, ownership details, occupant details and tax details etc. should be captured as attribute details		Essential
	The system should have provision to run predefined queries against the newly created features in order to carry out a neighborhood analysis in order to ascertain attribute information (as provided by user) matches with the feature or part of feature present on the master plan		Essential
NOC for peripheral infrastructure development	System should have capability of automated raster to vector conversion		Essential
	The System should be able to calculate development charges based on feature and its attributes-automatically		Essential
Works management System- Asset mapping	Linear referencing systems should be used for linear features, such as highways, city streets, rivers, and pipelines as well as water and sewer networks		Essential
	“Asset Registry” (AR) and “Work Management” (WM). The AR should store, retrieve, manipulate, display and version		Essential



Sub-Module Name	Detailed Functionality	Bidder's Response	Implementation Priority (Essential/ Desired/ Nice to Have)
	assets. The WM component should receive the service requests, associate it to the related assets (via connecting to AR), manage supply needs as soon as a work order is issued		
	Each asset type should be based on ownership and maintenance responsibility, and should fall under a certain division. Geo-database point of view-different asset types need to communicate with each other properly. For e.g. Streetlight pole needs to be replaced, all responsible parties for the assets attached to that particular pole (such as traffic signal, traffic sign and so on) should be notified of this action. This business requirement encourages introducing relationship classes between feature classes (assets) and ensures that proper communication is performed when a certain action takes place.		Essential
Works management System-Estimation support tool	The system Should be able to provide an estimate of any new construction or repair activity of road/or any other asset, taking into consideration the attributes (in case of existing features) and attributes of proposed features (created as proposed features, so that estimation can be done). Estimation takes into account different parameters as defined		Essential

9.14 Appendix 'N' (Service Level Agreement for Service Support)

This is only an Indicative and not exhaustive SLA to be signed on non judicial stamp paper.

1. ServiceLevelAgreement(SLA) isthecontractbetweenURBAN DEVELOPMENT & HOUSING DEPARTMENT, UD&HD, JHARKHANDandthesuccessfulbidderbased onguidelinesforNationalMissionModeProjectunderJNNURM.SLAdefinesthetermsofthe Successfulbidder'sresponsibilityinensuringthetimelydeliveryofthedeliverablesandthe correctness of the same based on the agreed Performance Indicators as detailed in the Agreement.ThissectiondefinesvariousServiceLevelIndicatorswhichwillbeconsideredby UD&HD/DMC in the ServiceLevel Agreement withSuccessfulbidder.

The service levels to be established for the Services offered by the Bidder to the State. The Bidder shall monitor and maintain the stated service levels to provide quality service to the State.

Definitions:

- **“Scheduled Maintenance Time”** shall mean the time that the System is not in service due to a scheduled activity as defined in this SLA. The scheduled maintenance time would not be during 16X7 timeframe. Further, scheduled maintenance time is planned downtime with the prior permission of the department.
- **“Scheduled Operation Time”** means the scheduled operating hours of the System for the month. All scheduled maintenance time on the system would be deducted from the total operation time for the month to give the scheduled operation time. The total operation time for the systems and applications within the Data Center and critical client site infrastructure will be 24X7X365.
- **“System or Application Downtime”** means accumulated time during which the System is totally inoperable within the Scheduled Operation Time but outside the scheduled maintenance time and measured from the time the State and/or its employees log a call with the Bidder team of the failure or the failure is known to the Bidder from the availability measurement tools to the time when the System is returned to proper operation.
- **“Availability”** means the time for which the services and facilities are available for conducting operations on the state system including application and associated infrastructure. Availability is defined as: $\{(\text{Scheduled Operation Time} - \text{System Downtime}) / (\text{Scheduled Operation Time})\} * 100\%$
- **“Helpdesk Support”** shall mean the 16x7 basis support centre which shall handle Fault reporting, Trouble Ticketing and related enquiries during this contract.



- **“Incident”** refers to any event / abnormalities in the functioning of the Data Centre Equipment / Services that may lead to disruption in normal operations of the Data Centre, System or Application services

Interpretations:

- The business hours are 9:00 AM to 6:00 PM on all working days (Mon-Sat) excluding Public Holidays or any other Holidays observed by the State. The Bidder however recognizes the fact that the State offices will require to work beyond the business hours on need basis.
- "Non-Business Hours" shall mean hours excluding “Business Hours”.
- 16X7 shall mean hours between 05:00AM - 9.00 PM on all days of the week.
- The SLA parameters shall be monitored on a monthly basis as per the individual SLA parameter requirements. However, if the performance of the system/services is degraded significantly at any given point in time during the contract and if the immediate measures are not implemented and issues are not rectified to the complete satisfaction of the state/UD&HD/DMC or an agency designated by them, then the state will have the right to take appropriate disciplinary actions including termination of the contract.
- A Service Level violation will occur if the Bidder fails to meet Minimum Service Levels, as measured on a Quarterly basis, for a particular Service Level. Overall Availability and Performance Measurements will be on a monthly basis for the purpose of Service Level reporting. An “Availability and Performance Report” will be provided by the Bidder on monthly basis in the State suggested format and a review shall be conducted based on this report. A monthly Availability and Performance Report shall be provided to the State at the end of every month containing the summary of all incidents reported and associated Bidder performance measurement for that period. The monthly Availability and Performance Report will be deemed to be accepted by the UD&HD upon review and signoff by the UD&HD and the Bidder where required, some of the Service Levels will be assessed through audits or reports e.g. Utilization reports, measurements reports, etc., as appropriate to be provided by the Bidder on a monthly basis, in the formats as required by the state. The tools to perform the audit will need to be provided by the Bidder. Audits will normally be done on regular basis or as required by the state and will be performed by the state or the state appointed third party agencies.
- EMS system as specified in this RFP shall play a critical role in monitoring the SLA compliance and hence will have to be customized accordingly. The 3rd party testing and audit of the system shall put sufficient emphasis on ensuring the capability of EMS system to capture SLA compliance correctly and as specified in this RFP. The selected SDA (BIDDER)



must deploy EMS tool and develop additional scripts (if required) for capturing the required data for SLA report generation in automated way. This tool should generate the SLA Monitoring report in the end of every month which is to be shared with the State on a monthly basis. The tool should also be capable of generating SLA reports for a quarter. The State will audit the tool and the scripts on a regular basis.

- The Post Implementation SLAs will prevail from the start of the Operations and Maintenance Phase. However, SLAs will be subject to being redefined, to the extent necessitated by field experience at the ULB offices and the developments of technology practices globally. The SLAs may be reviewed on an annual/bi-annual basis as the State decides after taking the advice of the Bidder and other agencies. All the changes would be made by the State in consultation with the Bidder.
- The Bidder is expected to provide the following service levels. In case these service levels cannot be achieved at service levels defined in the tables below, it shall result in a breach of contract and invoke the penalty clause. Payments to the Bidder are linked to the compliance with the SLA metrics laid down in the tables below. The penalties will be computed and calculated as per the computation explained in this Annexure. During the contract period, it is envisaged that there could be changes to the SLA, in terms of addition, alteration or deletion of certain parameters, based on mutual consent of both the parties i.e. the UD&HD and BIDDER.
- Following tables outline the key service level requirements for the system, which needs be ensured by the Bidder during the operations and maintenance period. These requirements shall be strictly imposed and either the State or a third party audit/certification agency shall be deployed for certifying the performance of the Bidder against the target performance metrics as outlined in the tables following sections.

Violations and Associated Penalties

The primary intent of Penalties is to ensure that the system performs in accordance with the defined service levels. A three monthly performance evaluation will be conducted using the quarterly reporting periods.

Penalty Calculations - The framework for Penalties, as a result of not meeting the Service Level Targets is as follows:

Violation	Penalty
High	2 % of scheduled payment for the respective quarter
Medium	1 % of scheduled payment for the respective quarter
Low	0.5% of scheduled payment for the respective quarter

- The performance will be measured for each of the defined service level metric against the minimum / target service level requirements and the violations will be calculated accordingly.
- The number of violations in the reporting period for each level of severity will be calculated and used for the calculation of Penalties.
- If SDA(Bidder) feels that penalty imposed on him during a particular period is unjustified/ attributed to uncontrollable reasons, then the bidder will have the liberty to approach the UD&HD for arbitration/ waiver. Till the time, the decision is taken, it will be considered as a penalty only. In process, if bidder has to pay some extra amount, the same would be adjusted during consequent payments.
- Decision of the UD&HD will be deemed final in any such, above mentioned arbitrations
- Penalties applicable for not meeting a high (H) critical performance target in two consecutive Quarter on same criteria shall result in additional deduction of 5% of the respective scheduled payment to the bidder. Penalty shall be applicable separately for each such high critical activity
- Penalties applicable for not meeting a medium (M) critical performance target in two consecutive Quarter periods on same criteria shall result in additional deduction of 3% of the respective scheduled payment to the bidder. Penalty shall be applicable separately for each such medium critical activity
- Penalties applicable for not meeting a low (L) critical performance target in two consecutive quarterly periods on same criteria shall result in additional deduction of 2% of the respective scheduled payment to the bidder. Penalty shall be applicable separately for each such medium critical activity.
- It is to be noted that if the overall penalty applicable for any of the review period during the contract period exceeds 25% or if the overall penalty applicable for any of the successive quarter during the contract period is above 15%; then UD&HD shall have the right to terminate the contract.

Post-Implementation Phase of SLAs

- Non Production Systems: The failure or disruption has no direct impact on the UD&HD's ability to help ULB offices perform critical back-office functions or direct impact on service delivery system for citizens.
 - Helpdesk and EMS infrastructure & applications.
 - email



- State level application suite Components: The failure or disruption has a direct impact on the UD&HD's ability to service its ULB's offices, ability to perform critical back office functions or service delivery system for citizens.
- Non Enterprise Applications Components: The failure or disruption has no direct impact on the UD&HD's ability to service its ULB's offices, ability to perform critical back office functions or service delivery system for citizens.
- These service levels will be monitored on a monthly basis.

The below tables gives details on the Service Levels the Bidder should maintain.

Service Level Description	Measurement								
Infrastructure Availability of the Computing Hardware and Network equipments at ULB.	<p>Availability of systems shall be at least 97%. Severity of Violation: Medium</p> <table> <tr> <th>Availability over the three-month period</th><th>Penalty Multiplier</th></tr> <tr> <td>< 97% & >= 96%</td><td>1X i.e. 1 %</td></tr> <tr> <td>< 96% & >= 95%</td><td>2X i.e. 2%</td></tr> <tr> <td>< 95%</td><td>3X i.e. 3%</td></tr> </table> <p>The Above availability will be calculated on each of the Component separately and penalty will be calculated accordingly. The availability will be checked based on the EMS tool client version installed at the location.</p>	Availability over the three-month period	Penalty Multiplier	< 97% & >= 96%	1X i.e. 1 %	< 96% & >= 95%	2X i.e. 2%	< 95%	3X i.e. 3%
Availability over the three-month period	Penalty Multiplier								
< 97% & >= 96%	1X i.e. 1 %								
< 96% & >= 95%	2X i.e. 2%								
< 95%	3X i.e. 3%								
Application Availability	<p>Availability of State Level Software solution components measured within the Data Center shall be at least 98% Severity of Violation: High This service level will be monitored on a monthly basis.</p> <table> <tr> <th>Availability over the three-month period</th><th>Penalty Multiplier</th></tr> <tr> <td>< 98% & >= 96%</td><td>1X i.e. 2 %</td></tr> <tr> <td>< 96% & >= 94%</td><td>2X i.e. 4%</td></tr> <tr> <td>< 94%</td><td>3X i.e. 6%</td></tr> </table>	Availability over the three-month period	Penalty Multiplier	< 98% & >= 96%	1X i.e. 2 %	< 96% & >= 94%	2X i.e. 4%	< 94%	3X i.e. 6%
Availability over the three-month period	Penalty Multiplier								
< 98% & >= 96%	1X i.e. 2 %								
< 96% & >= 94%	2X i.e. 4%								
< 94%	3X i.e. 6%								



Service Level Description	Measurement								
Application Availability	<p>Availability of non-enterprise solution like email, helpdesk, document management components measured within the Data Center shall be at least 97%</p> <p>Severity of Violation: Medium</p> <p>This service level will be monitored on a monthly basis.</p> <table> <tr> <th>Availability over the three-month period</th><th>Penalty Multiplier</th></tr> <tr> <td>< 97% & >= 96%</td><td>1X i.e. 1 %</td></tr> <tr> <td>< 96% & >= 95%</td><td>2X i.e. 2%</td></tr> <tr> <td>< 95%</td><td>3X i.e. 3%</td></tr> </table>	Availability over the three-month period	Penalty Multiplier	< 97% & >= 96%	1X i.e. 1 %	< 96% & >= 95%	2X i.e. 2%	< 95%	3X i.e. 3%
Availability over the three-month period	Penalty Multiplier								
< 97% & >= 96%	1X i.e. 1 %								
< 96% & >= 95%	2X i.e. 2%								
< 95%	3X i.e. 3%								

Handholding Support: Application Support

- Level 1 Defects: The failure to fix has an immediate impact on the UD&HD's ability to help ULB offices perform critical back-office functions or direct impact on service delivery system for citizens.
- Level 2 Defects: The failure to fix has an impact on the UD&HD's ability to help ULB offices perform critical back-office functions or direct impact on service delivery system for citizens that while not immediate, can cause service to degrade if not resolved within reasonable time frames.
- Level 3 Defects: The failure to fix has no direct impact on the Purchaser's ability to help ULB offices perform critical back-office functions or on service delivery system for citizens.
- The severity of the individual defects will be mutually determined by the State and SDA(Bidder).
- This service level will be monitored on a monthly basis.

The below tables gives details on the Service Levels the Bidder should maintain



Service Level Description	Measurement								
Application Support Performance	<p>95% of the Level 1 defects shall be resolved within 4 business hours from the time of reporting details.</p> <p>Severity of Violation: High</p> <p>This service level will be monitored on a monthly basis.</p> <table> <tr> <th>Availability over the three-month period</th><th>Penalty Multiplier</th></tr> <tr> <td>< 95% & >= 90%</td><td>1X i.e. 2 %</td></tr> <tr> <td>< 90% & >= 85%</td><td>2X i.e. 4%</td></tr> <tr> <td>< 85%</td><td>3X i.e. 6%</td></tr> </table>	Availability over the three-month period	Penalty Multiplier	< 95% & >= 90%	1X i.e. 2 %	< 90% & >= 85%	2X i.e. 4%	< 85%	3X i.e. 6%
Availability over the three-month period	Penalty Multiplier								
< 95% & >= 90%	1X i.e. 2 %								
< 90% & >= 85%	2X i.e. 4%								
< 85%	3X i.e. 6%								
Application Support Performance	<p>95% of the Level 2 defects shall be resolved within 24 hours from the time of reporting details.</p> <p>Severity of Violation: High</p> <p>This service level will be monitored on a monthly basis.</p> <table> <tr> <th>Availability over the three-month period</th><th>Penalty Multiplier</th></tr> <tr> <td><95% & >=90%</td><td>1X i.e. 2 %</td></tr> <tr> <td><90% & >=85%</td><td>2X i.e. 4%</td></tr> <tr> <td><85%</td><td>3X i.e. 6%</td></tr> </table>	Availability over the three-month period	Penalty Multiplier	<95% & >=90%	1X i.e. 2 %	<90% & >=85%	2X i.e. 4%	<85%	3X i.e. 6%
Availability over the three-month period	Penalty Multiplier								
<95% & >=90%	1X i.e. 2 %								
<90% & >=85%	2X i.e. 4%								
<85%	3X i.e. 6%								
Application Support Performance	<p>100% of the Level 3 defects shall be resolved within 48 hours from the time of reporting details.</p> <p>Severity of Violation: High</p> <p>This service level will be monitored on a monthly basis.</p> <table> <tr> <th>Availability over the three-month period</th><th>Penalty Multiplier</th></tr> <tr> <td>< 100% & >=95%</td><td>1X i.e. 2 %</td></tr> <tr> <td><95% & >=85%</td><td>2X i.e. 4%</td></tr> <tr> <td><85%</td><td>3X i.e. 6%</td></tr> </table>	Availability over the three-month period	Penalty Multiplier	< 100% & >=95%	1X i.e. 2 %	<95% & >=85%	2X i.e. 4%	<85%	3X i.e. 6%
Availability over the three-month period	Penalty Multiplier								
< 100% & >=95%	1X i.e. 2 %								
<95% & >=85%	2X i.e. 4%								
<85%	3X i.e. 6%								

Handholding Support: Helpdesk Support

- This service level will be monitored on a monthly basis.
- The scheduled operation time for the Helpdesk shall be 16X7

The below tables gives details on the Service Levels the SDA(Bidder) should maintain.



Service Level Description	Measurement																
Technical Support Service: Response Time - means time taken (after the request has been logged at the Helpdesk and escalated to the vendor's support staff) by the respective support staff in responding to the call and updating the status of the call in the Help desk system. The Response time will include a) Call diagnosis b) Categorization into problem request / defect fixing etc.	<p>98% of the incidents responded within time of 60 minutes.</p> <p>Severity of Violation: High</p> <p>This service level will be monitored on a monthly basis.</p> <table border="1"> <thead> <tr> <th>Availability over the three- month period</th><th>Penalty Multiplier</th></tr> </thead> <tbody> <tr> <td>< 98% & >= 90%</td><td>1X i.e. 2 %</td></tr> <tr> <td>< 90% & >= 80%</td><td>2X i.e. 4%</td></tr> <tr> <td>< 80%</td><td>3X i.e. 6%</td></tr> </tbody> </table>	Availability over the three- month period	Penalty Multiplier	< 98% & >= 90%	1X i.e. 2 %	< 90% & >= 80%	2X i.e. 4%	< 80%	3X i.e. 6%								
Availability over the three- month period	Penalty Multiplier																
< 98% & >= 90%	1X i.e. 2 %																
< 90% & >= 80%	2X i.e. 4%																
< 80%	3X i.e. 6%																
Technical Support Service: Resolution Time - this means the time taken by the vendor to troubleshoot and fix the problem from the time the call has been logged till the delivery / resolution of the solution to the ULB successfully and updates the status.	<p>90% of the Level 1 Incidents shall be resolved within 24 hours from call received / logged whichever is earlier.</p> <p>Severity of Violation: High</p> <p>This service level will be monitored on a monthly basis.</p> <table border="1"> <thead> <tr> <th>Availability over the three- month period</th><th>Penalty Multiplier</th></tr> </thead> <tbody> <tr> <td>< 90% & >= 85%</td><td>1X i.e. 2 %</td></tr> <tr> <td>< 85% & >= 80%</td><td>2X i.e. 4%</td></tr> <tr> <td>< 80%</td><td>3X i.e. 6%</td></tr> </tbody> </table> <p>90% of the Level 2 Incidents shall be resolved within 48 hours from call received / logged whichever is earlier.</p> <p>Severity of Violation: High</p> <p>This service level will be monitored on a monthly basis.</p> <table border="1"> <thead> <tr> <th>Availability over the three- month period</th><th>Penalty Multiplier</th></tr> </thead> <tbody> <tr> <td>< 90% & >= 85%</td><td>1X i.e. 2 %</td></tr> <tr> <td>< 85% & >= 80%</td><td>2X i.e. 4 %</td></tr> <tr> <td>< 80%</td><td>3X i.e. 6 %</td></tr> </tbody> </table>	Availability over the three- month period	Penalty Multiplier	< 90% & >= 85%	1X i.e. 2 %	< 85% & >= 80%	2X i.e. 4%	< 80%	3X i.e. 6%	Availability over the three- month period	Penalty Multiplier	< 90% & >= 85%	1X i.e. 2 %	< 85% & >= 80%	2X i.e. 4 %	< 80%	3X i.e. 6 %
Availability over the three- month period	Penalty Multiplier																
< 90% & >= 85%	1X i.e. 2 %																
< 85% & >= 80%	2X i.e. 4%																
< 80%	3X i.e. 6%																
Availability over the three- month period	Penalty Multiplier																
< 90% & >= 85%	1X i.e. 2 %																
< 85% & >= 80%	2X i.e. 4 %																
< 80%	3X i.e. 6 %																



Service Level Description	Measurement	
	90% of the Level 3 Incidents shall be resolved within 72 hours from call received / logged whichever is earlier. Severity of Violation: Medium This service level will be monitored on a monthly basis.	
	Availability over the three-month period	Penalty Multiplier
	< 90% & >= 85%	1X i.e. 1 %
	< 85% & >= 80%	2X i.e. 2 %
	< 80%	3X i.e. 3 %

Availability of manpower:

Service Metric Description	Availability of the manpower provided
Service level Requirement	100% availability of all manpower provided
Measurement of Service Level Parameter	Bidder will have to maintain record of daily attendance of the resources provided by the bidder. Department has the right to check the attendance at any given point of time.
Penalty for non-achievement of Service level	The bidder will not be paid the cost for the manpower for the period that the resource is absent. In addition, the bidder will be penalized with double the amount due for that period if the resource is absent for more than 7 days per quarter. A maximum of 5 days leave per quarter will be allowed per resource apart from the scheduled holiday of the department.

9.15 Appendix 'O' Bill of Material (BoM)

9.15.1 Detailed Bill of Material for Data Center, UD&HD and Dhanbad Municipal Corporation

The detailed Bill of Material for the Hardware components to be installed in Data Center (cloud) and the Dhanbad Municipal Corporation (including the HQ and all its circle offices), MADA offices and UD&HD, Ranchi has been listed below.

Note: Bidder should purchase bare minimum licenses for the first six months for the Co-Hosted location as per the requirement and whenever the migration takes place in the State Data Center (SDC) from the Co-Hosting location, licenses should also be deployed in the State Data Center.

1	System Software & Hardware	
A	OS Server	As per the Number of Server Proposed
B	RDBMS (Enterprise)	As Per the Overall License Required
C	Mail Server	As per Number of Server and Licensing Requirement
D	Content Management Software	As per Number of Server and Licensing Requirement
E	SLA and Help-Desk Management Software	As per Number of Server and Licensing Requirement
F	LDAP Directory Software with single sign on	As per Number of Server and Licensing Requirement

Components at UD&HD, Ranchi

SI No	Description	Quantity
1.	Hardware Infrastructure Components	
A	Laptop	3
B	All in One Desktop PCs	5
C	Laser Jet Printer	2
D	UPS 5 KVA (Online 1 hr backup)	1
F	Network Printer/Scanner/Fax (Multifunction Device)	1
2.	Security Infrastructure Components	Quantity
A	Antivirus Client	8
3.	System Software	Quantity
A	Mail Client	8
B	Enterprise Level Office Suite Latest Edition	8
4.	Server	Quantity
A	Primary Server (Co-Hosted Location)	1
B	Secondary Server (Co-Hosted Location)	1
5.	Network Infrastructure Components	Quantity
A	24 Port LAN Switch	1
B	24 Port Jack Panel	1
C	CAT-6 Patch Cord 2 Mtrs	As required



D	Rack (9 U)	1
6.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	8
B	Low back working chair (revolving)	5
C	Long back executive chair (revolving)	3

Components at the Dhanbad Municipal Corporation (HQ)

1.	Network Infrastructure Components	Quantity
A	Router	1
C	Leased Line Modem (Pair) / MLLN NTU	1
D	LAN switch	4
E	UTP Cable Box	6
F	24 Port Jack Panel	4
G	CAT-6 Patch cable 2 mtrs	As required
H	CAT-6 Patch cable 1 mtr	As required
I	Rack (9U)	4
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	25
B	Laptop	4
C	Laser Jet Printer	8
D	Network Printer/Scanner/Fax (Multifunction Device)	2
E	UPS 10 KVA (Online 1 hr backup)	2
F	25KVA DG Set	2
G	GPS Device	50
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	29
4.	System Software	Quantity
A	Mail Client	29
B	Enterprise Level Office Suite Latest Edition	29
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	29
B	Low back working chair (revolving)	25
C	Long back executive chair (revolving)	4

Components at the MADA HQ, Dhanbad

1.	Network Infrastructure Components	Quantity
A	LAN switch	1
B	UTP Cable Box	1
C	24 Port Jack Panel	1
D	CAT-6 Patch Cord 1 Mtr	As required
E	CAT-6 Patch Cord 2 Mtr	As required
F	Rack (9U)	1
G	Optical Fiber Cable	As required
2.	Hardware Infrastructure Components	Quantity



A	All in One Desktop PCs	5
B	Laser Jet Printer	1
C	UPS 5 KVA (Online 1 hr backup)	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	5
4.	System Software	Quantity
A	Mail Client	5
B	Enterprise Level Office Suite Latest Edition	5
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	5
B	Low back working chair (revolving)	5

Components at the MADA Other Office, Dhanbad

1.	Network Infrastructure Components	Quantity
A	LAN switch	1
B	UTP Cable Box	1
C	24 Port Jack Panel	1
D	CAT-6 Patch Cord 1 Mtr	As required
E	CAT-6 Patch Cord 2 Mtr	As required
F	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	2
B	Laser Jet Printer	1
C	UPS 5 KVA (Online 1 hr backup)	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	2
4.	System Software	Quantity
A	Mail Client	2
B	Enterprise Level Office Suite Latest Edition	2
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	2
B	Low back working chair (revolving)	2

Components at the Dhanbad Circle

1.	Network Infrastructure Components	Quantity
A	Router	1
B	Leased Line Modem (Pair) / MLLN NTU	1
D	LAN switch	1
E	UTP Cable Box	1
F	24 Port Jack Panel	1
G	CAT-6 Patch Cord 1 Mtr	As required
H	CAT-6 Patch Cord 2 Mtr	As required



I	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	10
B	Laptop	1
C	Laser Jet Printer	2
D	Network Printer/Scanner/Fax (Multifunction Device)	1
E	UPS 5 KVA (Online 1 hr backup)	1
F	10 KVA DG Set	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	11
4.	System Software	Quantity
A	Mail Client	11
B	Enterprise Level Office Suite Latest Edition	11
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	11
B	Low back working chair (revolving)	10
C	Long back executive chair (revolving)	1

Components at the Jharla Circle

1.	Network Infrastructure Components	Quantity
A	Router	1
B	Leased Line Modem (Pair) / MLLN NTU	1
D	LAN switch	1
E	UTP Cable Box	1
F	24 Port Jack Panel	1
G	CAT-6 Patch Cord 1 Mtr	As required
H	CAT-6 Patch Cord 2 Mtr	As required
I	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	10
B	Laptop	1
C	Laser Jet Printer	2
D	Network Printer/Scanner/Fax (Multifunction Device)	1
E	UPS 5 KVA (Online 1 hr backup)	1
F	10 KVA DG Set	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	11
4.	System Software	Quantity
A	Mail Client	11
B	Enterprise Level Office Suite Latest Edition	11
5.	Non IT Infrastructure	Quantity



A	Computer Tables / Cubicles	11
B	Low back working chair (revolving)	10
C	Long back executive chair (revolving)	1

Components at the MADA Water Supply Office, Jharla

1.	Network Infrastructure Components	Quantity
A	LAN switch	1
B	UTP Cable Box	1
C	24 Port Jack Panel	1
D	CAT-6 Patch Cord 1 Mtr	As required
E	CAT-6 Patch Cord 2 Mtr	As required
F	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	2
B	Laser Jet Printer	1
C	UPS 5 KVA (Online 1 hr backup)	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	2
4.	System Software	Quantity
A	Mail Client	2
B	Enterprise Level Office Suite Latest Edition	2
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	2
B	Low back working chair (revolving)	2

Components at the MADA Health Office, BhulanBarari, Jharla

1.	Network Infrastructure Components	Quantity
A	Router	1
B	Leased Line Modem (Pair) / MLLN NTU	1
C	LAN switch	1
D	UTP Cable Box	1
E	24 Port Jack Panel	1
F	CAT-6 Patch Cord 1 Mtr	As required
G	CAT-6 Patch Cord 2 Mtr	As required
H	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	2
B	Laser Jet Printer	1
C	UPS 5 KVA (Online 1 hr backup)	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	2
4.	System Software	Quantity
A	Mail Client	2



B	Enterprise Level Office Suite Latest Edition	2
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	2
B	Low back working chair (revolving)	2

Components at the MADA Health Office, Jharia Bazar

1.	Network Infrastructure Components	Quantity
A	Router	1
B	Leased Line Modem (Pair) / MLLN NTU	1
C	LAN switch	1
D	UTP Cable Box	1
E	24 Port Jack Panel	1
F	CAT-6 Patch Cord 1 Mtr	As required
G	CAT-6 Patch Cord 2 Mtr	As required
H	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	2
B	Laser Jet Printer	1
C	UPS 5 KVA (Online 1 hr backup)	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	2
4.	System Software	Quantity
A	Mail Client	2
B	Enterprise Level Office Suite Latest Edition	2
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	2
B	Low back working chair (revolving)	2

Components at the Sindri Circle

1.	Network Infrastructure Components	Quantity
A	Router	1
B	Leased Line Modem (Pair) / MLLN NTU	1
D	LAN switch	1
E	UTP Cable Box	1
F	24 Port Jack Panel	1
G	CAT-6 Patch Cord 1 Mtr	As required
H	CAT-6 Patch Cord 2 Mtr	As required
I	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	10
B	Laptop	1
C	Laser Jet Printer	2



D	Network Printer/Scanner/Fax (Multifunction Device)	1
E	UPS 5 KVA (Online 1 hr backup)	1
F	10 KVA DG Set	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	11
4.	System Software	Quantity
A	Mail Client	11
B	Enterprise Level Office Suite Latest Edition	11
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	11
B	Low back working chair (revolving)	10
C	Long back executive chair (revolving)	1

Components at the Chhatatand Circle

1.	Network Infrastructure Components	Quantity
A	Router	1
B	Leased Line Modem (Pair) / MLLN NTU	1
D	LAN switch	1
E	UTP Cable Box	1
F	24 Port Jack Panel	1
G	CAT-6 Patch Cord 1 Mtr	As required
H	CAT-6 Patch Cord 2 Mtr	As required
I	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	5
B	Laptop	1
C	Laser Jet Printer	2
D	Network Printer/Scanner/Fax (Multifunction Device)	1
E	UPS 5 KVA (Online 1 hr backup)	1
F	10 KVA DG Set	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	6
4.	System Software	Quantity
A	Mail Client	6
B	Enterprise Level Office Suite Latest Edition	6
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	6
B	Low back working chair (revolving)	5
C	Long back executive chair (revolving)	1

Components at the Katras Circle



1.	Network Infrastructure Components	Quantity
A	Router	1
B	Leased Line Modem (Pair) / MLLN NTU	1
D	LAN switch	1
E	UTP Cable Box	1
F	24 Port Jack Panel	1
G	CAT-6 Patch Cord 1 Mtr	As required
H	CAT-6 Patch Cord 2 Mtr	As required
I	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	10
B	Laptop	1
C	Laser Jet Printer	2
D	Network Printer/Scanner/Fax (Multifunction Device)	1
E	UPS 5 KVA (Online 1 hr backup)	1
F	10 KVA DG Set	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	11
4.	System Software	Quantity
A	Mail Client	11
B	Enterprise Level Office Suite Latest Edition	11
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	11
B	Low back working chair (revolving)	10
C	Long back executive chair (revolving)	1

Components at the MADA Health Office, Katras

1.	Network Infrastructure Components	Quantity
A	LAN switch	1
B	UTP Cable Box	1
C	24 Port Jack Panel	1
D	CAT-6 Patch Cord 1 Mtr	As required
E	CAT-6 Patch Cord 2 Mtr	As required
F	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	2
B	Laser Jet Printer	1
C	UPS 5 KVA (Online 1 hr backup)	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	2
4.	System Software	Quantity



A	Mail Client	2
B	Enterprise Level Office Suite Latest Edition	2
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	2
B	Low back working chair (revolving)	2

Components at the MADA Water Supply Office, Katras

1.	Network Infrastructure Components	Quantity
A	Router	1
B	Leased Line Modem (Pair) / MLLN NTU	1
D	LAN switch	1
E	UTP Cable Box	1
F	24 Port Jack Panel	1
G	CAT-6 Patch Cord 1 Mtr	As required
H	CAT-6 Patch Cord 2 Mtr	As required
I	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	2
C	Laser Jet Printer	1
D	UPS 5 KVA (Online 1 hr backup)	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	2
4.	System Software	Quantity
A	Mail Client	2
B	Enterprise Level Office Suite Latest Edition	2
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	2
B	Low back working chair (revolving)	2

Components at the MADA Health Office, Putki

1.	Network Infrastructure Components	Quantity
A	Router	1
B	Leased Line Modem (Pair) / MLLN NTU	1
D	LAN switch	1
E	UTP Cable Box	1
F	24 Port Jack Panel	1
G	CAT-6 Patch Cord 1 Mtr	As required
H	CAT-6 Patch Cord 2 Mtr	As required
I	Rack (9U)	1
2.	Hardware Infrastructure Components	Quantity
A	All in One Desktop PCs	2



B	Laser Jet Printer	1
C	UPS 5 KVA (Online 1 hr backup)	1
3.	Security Infrastructure Components	Quantity
A	Antivirus Client	2
4.	System Software	Quantity
A	Mail Client	2
B	Enterprise Level Office Suite Latest Edition	2
5.	Non IT Infrastructure	Quantity
A	Computer Tables / Cubicles	2
B	Low back working chair (revolving)	2

9.15.2 Detailed Bill of Material (For Video Conferencing)

The detailed Bill of Material (BoM) for video conferencing facility is as below -

SI No	Description	Quantity
1.	High Definition Video Conferencing Endpoint	2
2.	40 inches HD Professional LED Display	2

9.16 Appendix 'P' Hardware Specifications

9.16.1 Specification of Server Hardware

Specification of Rack Mounted Server (Primary & Secondary):

Chassis	2 U Rack Mountable	Compliance (Y/N)
CPU	2 Nos X86 based Processor with 64 bit Extensions (EM64T). Processor Core Per CPU should be minimum six. The Frequency should be 2.0 GHz or more.	
Motherboard	OEM Mother Board to support the above features	
Memory	128 GB DDR3 RAM with ECC memory expandable up to 256 GB	
HDD Bays	Minimum 5 Hot Plug 2.5" hard disk bays/ 5 Hot Plug 3.5" hard Disk Bays + CDRom/DVD Bay	
Optical drive Bay	One optical drive bay to install DVD	
Server Monitor	TFT Monitor (minimum 17 Inches)	
Hard disk drive	4 X 600 GB SAS minimum 10K rpm with Raid 1	
Clustering	Should have Cluster support for high availability	
Controller	PCIe 3.0 based SAS Raid Controller	
Networking features	Server should have the following: 1Gb 4-port network adaptor in clustering,	
Ports	USB 2.0 support with minimum 5 ports	
Bus Slots	Minimum Two PCI-Express slots	
Optical drive	DVD RW drive	
Power Supply	Redundant	
Fans	Redundant Fans hot swappable	
Industry Standard Compliance	ACPI 2.0 Compliant, PCIe 3.0 Compliant, USB 2.0 Support	
Security	Power-on password Serial interface control. Administrator's password	
OS Support	Microsoft Windows Server, Microsoft Windows Server Hyper-V, Red Hat Enterprise Linux (RHEL), Red Hat Enterprise Linux Virtualization, SUSE Linux Enterprise Server (SLES), SUSE Linux Enterprise Server with XEN	
Warranty	3 year warranty. Pre failure alert on CPU, and Hard Disks	

9.16.2 Specification of Computing Hardware

Specification of All in One Desktop

Features	Specifications	Compliance (Y/N)
Processor	Intel Core i5 Processor or equivalent Quad core AMD processor, 2.9GHz or More	



Memory	4 GB DDR3 1333 MHz	
HDD	500 GB or higher	
Optical Drive	DVD R/W Drive	
Ethernet	10/100/1000 on board integrated	
Wi-Fi	Integrated 802.11.b/g/n	
Monitor	20" HD	
Ports	Standard USB 2.0/3.0 Port	
Graphics	Integrated	
Web Camera	At least 0.9 MP VGA Camera	
Card Reader	At least 3-in-1 card reader	
Operating System	Pre-loaded Windows 7 professional/Linux, with all necessary plug-ins & Drivers in CD Media	
Software	ANTIVIRUS: Latest version with 3 years up gradation validity with media.	Mention Name of Antivirus
Warranty	3 years onsite comprehensive warranty.	

9.16.3 Specification of Laptops

Features	Specifications	Compliance (Y/N)
Processor	Intel Core i-5 Processor or equivalent Quad core AMD processor, 1.8 GHz or higher, 3-MB cache	
Motherboard	OEM Mother Board	
Memory	4 GB DDR3 RAM	
Hard Drive	500 GB SATA	
Removable drive	Integrated DVD R/W	
LAN Network	Integrated 10/100/1000 Mbps Ethernet Adapter (RJ-45), PXE support	
Wireless Support	Integrated 802.11 b+g 54 MBPS Wireless LAN adapter, Integrated Bluetooth	
Key board	Integrated minimum 86 key keyboard, touchpad, Function Keys	
Display	14" WXGA Active TFT (1280X800)	
Interface	3 USB 2.0, 1XLine in and 1X MIC (either separately or combo), 1XRJ45 LAN, 1X External VGA , 1X DC In	



Power	AC power supply Adapter	
Battery	6 Cell Li Ion Battery	
OS Certification	Windows 7 Professional/Linux	
OS	Preloaded OS	
Carry Case	To be Provided	
Antivirus	Preloaded Standard Symantec/MacAfee/CA/Similar version with three year update	
Warranty	3 Year comprehensive at Onsite	

9.16.4 Specification of Laser jet printer

Features	Specifications	Compliance (Y/N)
Print speed	Up to 22 ppm A4 & letter	
Resolution	Up to 600 x 600 dpi	
Duty Cycle	2000 ppm	
Memory	2 MB RAM	
Paper Handling Tray	<ul style="list-style-type: none"> 150-sheet adjustable main input tray 100-sheet output bin Manual two-sided printing 	
Paper Size	<ul style="list-style-type: none"> A4 letter legal 	
Interfaces	Hi-Speed USB 2.0 port, 10/100 Ethernet port	
Operating Systems support Required	Windows, Linux	
Power	220 to 240 volts (±10%), 50/60 Hz (±2 Hz) Input Power port with required English power chord	

9.16.5 Specification of Network Printer, Copier, Scanner in one device

Features	Specifications	Compliance (Y/N)
Print speed	Up to 27 ppm letter	
Resolution	<ul style="list-style-type: none"> Printing: up to 1200 x 1200 dpi Copying: up to 600 x 600 dpi 	



Features	Specifications	Compliance (Y/N)
	<ul style="list-style-type: none"> Scanning: up to 1200 x 1200 dpi 	
Printing Features	<ul style="list-style-type: none"> Manual duplex and booklet printing N-up printing Collation Watermarks Economic mode for toner savings 	
Copying Features	<ul style="list-style-type: none"> 1 to 99 multiple copies reduce/enlarge from 25 to 400% 2-up or 4-up allowing 2 or 4 pages to be copied onto 1 page Contrast (lighter/darker) resolution copy quality (draft, text, mixed) 	
Scanning Features	<ul style="list-style-type: none"> Flatbed scanner up to letter, A4 size; supported file types: JPEG, TIFF, PDF, GIF, and BMP Should be able to scan Legal Documents 	
Control panel	<ul style="list-style-type: none"> LCD text display Asian character support 16-character display menu and navigation buttons copy control buttons cancel button 	
Memory	32 MB RAM	
Paper Handling Tray	<ul style="list-style-type: none"> 10-sheet priority input tray, 250-sheet multipurpose input tray, 125-sheet output bin, manual two-sided printing 	
Paper Size	<ul style="list-style-type: none"> 76 x 127 mm (3 x 5 inches) to 216 x 356 mm (8.5 x 14 inches); 	



Features	Specifications	Compliance (Y/N)
	<ul style="list-style-type: none"> letter, legal, index cards, postcards; A4, A5 	
Interfaces	<ul style="list-style-type: none"> Hi-Speed USB 2.0 port, Ethernet port 	
Operating Systems Support Required	Windows , Linux	
Power	220 to 240 volts ($\pm 10\%$), 50/60 Hz (± 2 Hz) Input Power port with required English power chord	

9.16.6 Specification of 5 KVA Online UPS

Parameter	UPS Specifications	Compliance (Y/N)
General	5 KVA On-Line UPS System (single module)	
Topology	True On-Line Double Conversion Architecture with PWM-IGBT technology	
Capacity	5 KVA / 4 KW @ 0.8 p.f.	
ELECTRICAL CHARACTERISTICS – INPUT		
AC Input Voltage Range	160 V – 280 V	
Input Frequency	50Hz $\pm 10\%$	
ELECTRICAL CHARACTERISTICS – OUTPUT		
AC Output Voltage	230 V AC, 1-phase	
Output Voltage Stability	$\pm 1\%$	
Output Frequency	50 Hz ± 0.05 Hz	
Output Waveform	Sinusoidal (Sine Wave Output)	
Output Power Factor	0.8 lag to unity	
Inverter Efficiency	Better than 90%	
Overload Capacity	110% for 10 minutes 200% for 5 Cycles	
Crest Factor	> 3:1	
Harmonic Distortion	Less than 3%	
Transient Recovery	Within 3 Cycles	



Parameter	UPS Specifications	Compliance (Y/N)
Ambient Conditions	Operating Temp: 0 – 50 Degrees C Storage Temp: 0 – 60 Degrees C Relative Humidity: 95% Max. non-condensing	
Noise Level	Less than 55 dB at 1 meter from the machine	
Indications & Audible Alarms	Mains On, Inverter On, Overload, Load On Mains, Load On Battery, Battery Low	
Auto-Restart Facility	The UPS should automatically restart, upon restoration of mains supply, after the UPS has shut down due to low battery condition (due to an extended power failure) without any user intervention.	
Digital Metering	LCD display for measurement of AC Voltage, Battery voltage, Load Current, Output frequency.	
Degree of protection	IP20	
BATTERY		
Battery Type	Sealed, lead-acid, maintenance-free	
Battery Runtime	The system must be capable of providing 60 minutes of battery back-up time. Total number of batteries offered should be clearly mentioned. Voltage of each battery offered should be clearly mentioned. Ampere-Hour rating of each battery offered should be clearly mentioned. Total Volt-Ampere-Hour rating of the Battery Bank Offered should be clearly mentioned.	
Certification	ISO 9001	

9.16.7 Specification of 10 KVA Online UPS

Parameter	UPS Specifications	Compliance (Y/N)
General	10 KVA On-Line UPS System (single module)	
Topology	True On-Line Double Conversion Architecture with PWM-IGBT technology	
Capacity	10 KVA / 8 KW @ 0.8 p.f.	
ELECTRICAL CHARACTERISTICS – INPUT		
AC Input Voltage Range	160 V – 280 V	
Input Frequency	50Hz \pm 10%	
ELECTRICAL CHARACTERISTICS – OUTPUT		
AC Output Voltage	230 V AC, 1-phase	
Output Voltage Stability	\pm 1%	



Parameter	UPS Specifications	Compliance (Y/N)
Output Frequency	50 Hz \pm 0.05 Hz	
Output Waveform	Sinusoidal (Sine Wave Output)	
Output Power Factor	0.8 lag to unity	
Inverter Efficiency	Better than 90%	
Overload Capacity	110% for 10 minutes 200% for 5 Cycles	
Crest Factor	> 3:1	
Harmonic Distortion	Less than 3%	
Transient Recovery	Within 3 Cycles	
Ambient Conditions	Operating Temp: 0 – 50 Degrees C Storage Temp: 0 – 60 Degrees C Relative Humidity: 95% Max. non-condensing	
Noise Level	Less than 55 dB at 1 meter from the machine	
Indications & Audible Alarms	Mains On, Inverter On, Overload, Load On Mains, Load On Battery, Battery Low	
Auto-Restart Facility	The UPS should automatically restart, upon restoration of mains supply, after the UPS has shut down due to low battery condition (due to an extended power failure) without any user intervention.	
Digital Metering	LCD display for measurement of AC Voltage, Battery voltage, Load Current, Output frequency.	
Degree of protection	IP20	
BATTERY		
Battery Type	Sealed, lead-acid, maintenance-free	
Battery Runtime	The system must be capable of providing 60 minutes of battery back-up time. Total number of batteries offered should be clearly mentioned. Voltage of each battery offered should be clearly mentioned. Ampere-Hour rating of each battery offered should be clearly mentioned. Total Volt-Ampere-Hour rating of the Battery Bank Offered should be clearly mentioned.	
Certification	ISO 9001	

9.16.8 Specification of 10 KVA Silent Diesel Generator Set

Sl. No	Feature	Specifications	Compliance (Yes/ No)
1	Engine:	Engine to be confirming to IS 10001, BS 5514, DG set confirming to ISO 8528	
		- Emission complaint approved by ARAI	



	- Air cooled		
	Four Stroke- Vertical ,4-stroke,compression ignition		
	- 2*16 BHP multi cylinder or comparable		
	Mounting Arrangement – Engine and alternator should be mounted on a Common Mild Steel (MS) fabricated base frame with AVM pads		
	- Starting system-12 /24 VDC electric starter, battery charging alternator		
	- MICO-Fuel pump with mechanical Governor-A2 class		
	- Fuel Filter-MICO		
	- Residential Silencer		
	- Air Cleaner-Paper element type-Mahle		
	- Shut off coil with safeties for LLOP/HCT		
	- Flywheel Housing		
	- First fill of lube oil		
	- Fuel feed pump with Mechanical Governor -A2 Class		
2	Alternator	Output: 10 kVA	
	Power factor: 0.8 pf lagging suitable for 50 Hz		
	Voltage: 240 V, Single phase		
	Type: Synchronous alternator of continuous operation		
	Speed: 1500 rpm		
	Overload capacity: Permissible overload 10 % for 1 Hr in 12 Hrs of duration		
	Excitation: Self excited, self regulated through an AVR		
	Permissible voltage		
	Variation: +/- 1.5% voltage regulations (Max)		
	Enclosure IP23 Enclosure		
Make (Brand)	Reputed makes - (Ex - Emerson/ Jackson/ Greaves/ Ashok Leyland/ Cummins/ Mahindra/ etc)		
Service Centers	At least 3 service points across the state.		

9.16.9 Specification of 25 KVA Silent Diesel Generator Set

Sl. No	Feature	Specifications	Compliance (Yes/ No)
1	Engine:	Engine to be confirming to IS 10001, BS 5514, DG set confirming to ISO 8528	
		- Emission complaint approved by ARAI	
		- Air cooled	
		Four Stroke- Vertical ,4-stroke,compression ignition	
		- 4*16 BHP multi cylinder or comparable	



		Mounting Arrangement – Engine and alternator should be mounted on a Common Mild Steel (MS) fabricated base frame with AVM pads	
		- Starting system-12 /24 VDC electric starter, battery charging alternator	
		- MICO-Fuel pump with mechanical Governor-A2 class	
		- Fuel Filter-MICO	
		- Residential Silencer	
		- Air Cleaner-Paper element type-Mahle	
		- Shut off coil with safeties for LLOP/HCT	
		- Flywheel Housing	
		- First fill of lube oil	
		- Fuel feed pump with Mechanical Governor -A2 Class	
2	Alternator	Output: 25 kVA	
		Power factor: 0.8 pf lagging suitable for 50 Hz	
		Voltage: 240 V, Single phase	
		Type: Synchronous alternator of continuous operation	
		Speed: 1800 rpm	
		Overload capacity: Permissible overload 10 % for 1 Hr in 12 Hrs of duration	
		Excitation: Self excited, self regulated through an AVR	
		Permissible voltage	
		Variation: +/- 1.5% voltage regulations (Max)	
		Enclosure IP23 Enclosure	
Make (Brand)		Reputed makes (Ex - Emerson/ Jackson/ Greaves/ Ashok Leyland/ Cummins/ Mahindra/ etc)	
Service Centers		At least 3 service points across the state.	

9.16.10 Specification of Router at Circle Office

Sl. No.	Specifications	Compliance (Y/N)
A.	Architecture	
1	Should be chassis based & modular architecture for scalability and should be a single box configuration for ease of management.	
2	Should have support for hardware based IPSEC VPN.	
3	Should have adequate RAM and Flash Memory for proper functioning of the router with all the features enabled without any service degradation	
B.	Interface Requirements	
1	2 x 10/100/1000 Base T interface.	
2	1 x V.35 interfaces	



3	One free slot to accommodate additional interface modules / cards	
C.	Performance	
1	Should support high performance traffic forwarding with concurrent features like Security, Voice enabled	
2	Should support variety of interfaces like V.35 Sync Serial (2 Mbps), E1, ISDN-BRI for remote office aggregation	
3	Should support 3G GSM / WCDMA WAN interface module	
4	Should hardware based encryption / compression with IPSEC throughput of 30 Mbps and minimum 300 VPN tunnels.	
5	Should have at least 150 Kbps forwarding performance	
6	Should have USB 2.0 ports for storing OS images	
D.	High Availability	
1	Should support redundant connection to LAN	
2	Should support Non-Stop forwarding for fast re-convergence of routing protocols	
3	Should support boot options like booting from TFTP server, Network node	
4	Should support multiple storage of multiple images and configurations	
5	Should support VRRP or equivalent	
E.	Protocols	
1	Should support Routing protocols like RIP ver1 & 2 , OSPF ver2, BGP4, IS-IS	
2	Multicast routing protocols support : IGMPv1,v2 , PIM-SM (RFC2362) and PIM-DM, M-BGP	
3	Should have full IPv6 features from day 1.	
4	Should have RIPng and OSPFv3 for IPv6.	
5	Should have MPLS Features: MPLS VPN, MPLS TE, DiffServ-Aware TE	
F.	QoS Features:	
1	Classification and Marking: Policy based routing, DSCP or equivalent.	
2	Congestion Management: WRED, Priority queuing, Class based queuing	
3	Traffic Conditioning: Committed Access Rate/Rate limiting	
4	Signaling: RSVP	
5	Link efficiency mechanisms: LFI, MLPPP or equivalent	
6	Traffic Shaping and Policing for QoS	
G.	Security Features:	
1	Support for GRE Tunneling, NAT,	
2	Support for MD-5 route authentication for RIP, OSPF, IS-IS and BGP	
3	Shall support multi-level of access	
4	Support for SNMPv3 authentication, SSHv2	
5	AAA support using Radius and/or TACACS	
6	Support for PAP and CHAP authentication for P-to-P links	
7	Multiple privilege level authentications for console and telnet access through Local database or through an external AAA Server.	



8	Time based & Dynamic ACLs for controlled forwarding based on time of day for offices	
9	IEEE 802.1x support for MAC address authentication	
H.	Management	
1	Shall have support for Web based management, CLI, Telnet and SNMPv3	
2	Shall support Secure Shell for secure connectivity.	
3	Shall support Out of band management through Console or external modem for remote management	

9.16.11 Specification of LAN switch

Sl. No.	Specifications	Compliance (Y/N)
	Architecture	
1	The switch should have 24 x 10/100/1000BaseT ports plus 2 x 1000BaseX ports	
2	Should support 1000 Base-SX, LX Mini-GBICs	
3	Should have a minimum of 14 Gbps switching capacity	
4	Should have switching throughput of 20 million pps	
5	MAC Address table size of 8,000 entries	
6	All the switch ports Should offer non-blocking, wire speed performance	
	Resiliency and high availability	
1	Should support IEEE 802.3ad Link Aggregation Control Protocol (LACP)	
2	Should support IEEE 802.1s, IEEE 802.1d STP & IEEE 802.1w RSTP	
	Layer 2 switching	
1	Should support IEEE 802.1Q VLANs, up to 256 port-based VLANs	
2	Should support GVRP or equivalent	
	Security	
1	Should support MAC and IP-based ACLs and Time-based ACLs	
2	Should support IEEE 802.1X user authentication	
3	Should support Web-based authentication & MAC-based authentication	
4	Should support management access securely encrypted through SSL and SNMPv3	
	Convergence and QoS	
1	Should support IEEE 802.1AB Link Layer Discovery Protocol (LLDP) or equivalent	
2	Should support LLDP-MED or equivalent	
3	Should support IEEE 802.1p Traffic prioritization	
4	Should support IP multicast (data-driven IGMP) to automatically prevent flooding of IP multicast traffic	
5	Should support rate limiting	
	Manageability	



1	Should support SNMPv1/v2c/v3	
2	Should support Web Interface for switch configuration	
3	Should support Port mirroring	

9.16.12 Specification of Video End Point

Specifications
Video Standards & Protocols:
<ol style="list-style-type: none"> 1. H.264 2. H.263 / H.263+ / H.263++
People Video Resolution:
On IP H.323 should deliver:
<ol style="list-style-type: none"> 1. 1080p@ 30fps from 1920 kbps onwards 2. 720p@ 60fps from 1920 kbps onwards 3. 720p@30fps from 768 kbps onwards
Content Video Resolution:
<ol style="list-style-type: none"> 1. HD Content 2. Up to HD 1080p
Camera Specifications:
<ol style="list-style-type: none"> 1. 1080p Camera 2. - 1/3 CMOS 3. 12x optical zoom 4. 70 deg FOV at min zoom 5. 1920 X 1080 resolution
Audio Standards & Protocols:
<ol style="list-style-type: none"> 1. Stereo Surround 2. G.711, G.722, G.722.1, MPEG4 AAC-LD 3. Automatic Gain Control 4. Automatic Noise Suppression
Network:
Interface:
<ul style="list-style-type: none"> - 1-port 10/100/1000 auto NIC switch, RJ45 connectors • H.323, SIP up to 6 Mbps
Video and Audio inputs and outputs
Minimum 2 Video Inputs:
<ol style="list-style-type: none"> 1. Main HD Camera (HDMI/HDCl/DVI) 2. Content (DVI-I)
Minimum 2 Video Outputs:
<ol style="list-style-type: none"> 1. Monitor 1 (DVI-I/HDMI) 2. Monitor 2 (DVI-I/HDMI)
Minimum 3 Audio Inputs:
<ol style="list-style-type: none"> 1. 2 X Microphone Input in direct or in array. 2. 1 X Mini Stereo or RCA for PC Audio
Minimum 2 Audio Outputs:
<ol style="list-style-type: none"> 1. 1X RCA for Main Audio 2. 1 x RCA/ minijack for line out (stereo)

9.16.13 Specification of System Software

Specification of Mail Messaging Software

The basic architecture should be as follows:

- The messaging server must be able to route messages using SMTP or other better protocols to other servers
- E-mail messages must not get lost in the middle of a server or client crash
- Should provide support for POP3, IMAP4, SMTP ,NNTP & HTTP based Protocols
- Web interface for accessing the mails through browser. Browser should be User friendly. Web interface should provide the following options
 - Inbox
 - Outbox
 - Sent Items
 - Calendar
 - Tasks
 - Rules/Change of password etc.
 - Junk mails
 - Address Book
 - Address should be displayed in alphabetical order
 - Address should be searched through display name, last name
- Support for standards like MIME / SMIME on Client & Web Access
- Browser based software should use compression techniques in order to reduce the network bandwidth consumption and thus, improve client performance on high-latency networks or dial-up connections.
- Policy-based management should provide for centralized, targeted control over user settings, so a change in one place can update users in any scope from an individual to a group or to an entire organization.
- Support Spam mail Prevention
- The Email solution should integrate with the State Level Software application for generating alerts.
- The e-mail solution should be accessed over mobile phone platforms using mobile browsers.
- Back end Email server & Front end server for Https service over internet.
- The Email solution should run preferably in Linux/Windows.

Mail Box Features

- Maintaining local copies of the mailbox at a user's workstation for offline access
- Ability to synchronize the local copy of the mailbox with the original mailbox located in the server either periodically or as and when required
- Availability of web-based mail client that provides remote access to a user's mailbox for all mail operations, address books and for setting up mail preferences
- Ability to designate authorized personnel to manage more than one mailbox



- Ability to configure the maximum quota of mailbox size beyond which the user is prompted to delete / archive mails to make the space available in the mailbox
- Ability to configure different quota of mailbox size for different users
- Availability of standard directories / folders in the mailbox pertaining to mails received , mails sent, mails in draft shape, mails deleted, mails waiting to be purged etc
- Creation of new directories / folders or their deletion / modification by the user for storage of specific types of mails that he / she needs to segregate from other mails
- Creating sub-directories / sub-folders inside a directory / folder
- Availability for a user to perform comprehensive text search on all contents of the mailbox
- Availability of an archive mailbox into which mails can be selectively or periodically archived by a user

Address Book Features

- Grouping the entries in the address books based on departments, designations, etc
- Ability to create mailing lists at server level through an online mailing list manager
- User defined personal address books and mailing lists

Mail Feature

- Availability of text editing features such as fonts, justification, bulleted and numbered lists, tables, etc at the time of creating a new mail
- Attaching any type of file to an outgoing mail (word, pdf, ppt, excel, Images, Drawings, .dbf, etc)
- Categorizing an outgoing mail as urgent, high priority, confidential etc
- Marking an outgoing mail with requirement of delivery or read receipt confirmation
- Saving mails in incomplete / draft status for sending at a later point in time
- Spell check on the mails before sending them off
- Type ahead display of e-mail addresses of contacts in the “send to” field of a new mail created or forwarded
- Address book lookup sorted by departments for selecting contacts to send a mail to
- Ability to read the content of mail attachments received even if the application for that attachment is not installed on the client machine
- Forwarding a mail received or sent earlier
- Multiple options for replying to a mail , e.g. Replying with or without history, replying at once to all contacts marked by the sender, etc
- Limiting the size of the outgoing or incoming mails by domain, by server, or by mailbox.
- Deleting mails individually or in a group
- Dragging and dropping mails into desired directory / folder
- Ability to track a discussion thread of mails, i.e., a trail of all emails linked to each other
- Should allow the user to move to the next or previous message without having to return to the inbox view

Mail Preference Feature

- Option for insertion of user defined logos for the stationery of the outgoing mails



- Automatically adding legal disclaimers at the Server level to each mail going out.
- Mailing features such as text editing, mail categorization, spell check, address book lookup, sending invitation for meeting, etc
- Mail preferences for logos, icons, signatures, vacation notification, out of office auto alert, automatic forwarding, etc
- Setting up addition of automatic signatures for each mail sent by a user
- Setting up “Vacation / Not Available” notifications for specific durations
- User ability to specify the number of mails that can be seen on the screen at a time
- Setting up automatic forwarding of mails to another email address
- Optionally setting up the display of total messages and number of unread messages in a user’s mailbox
- Automatically checking for new mail and popping up a screen notification or sound notification of new mail receipt
- The software should allow the user to create to-do items that can be assigned to another user or group of users.
- Displaying icons against each mail received and sent mail based on whether the mail is a normal mail, an urgent mail, or a confidential mail
- User should be able to select the priority of the follow-up (low, normal, urgent), indicated by a flag in the inbox. Additionally, user should be capable of setting an alarm as a reminder of a follow-up action, like marking an e-mail for follow-up.
- Message aging features shall be supported
 - Messages shall be automatically removed based on set number of ‘aging’ criteria
 - Message aging based on date of arrival
 - Messaging aging based on folders (e.g. Trash - 1 day, Inbox - never, Faxes – 30 days)
- Quota control features shall be supported:
 - Quota control based on size of mailbox
 - Quota control based on number of messages
 - Quota control based on size of messages
 - Quota control based on type of messages (e.g. email, fax, voice)
 - Full configuration of all quota controls
 - Shall provide a configurable grace period before rejecting email due to over-quota
- Users should be provided with a similar look & feel of the Email Web Interface to reduce the learning curve.

Security Features

- Password and data level encryption of local as well as server copies of mailbox
- System administration access availability with only limited set of users
- Encryption for all messaging components including local store of data
- Availability of encryption feature to secure the mailbox and the mail content
- Automatic virus scanning of all mail traffic and the attachments in the mails
- Availability of an Anti-Spam solution
- Complete Audit Trail of all mailing actions



- Ability to send “Copy Protected” mail that cannot be forwarded, printed, or cut/copy and paste
- Prohibit unauthorized access to specific features and/or functions
- (e.g. Unauthorized access to the core messaging functions, modifications to related message files, meta databases or other materials)

Reporting Features

- Automatically generating reports based on various mail traffic parameters
- Generating e-mail server status reports showing number of mailboxes, mailbox volumes, etc
- Reporting features such as Audit trails, error reporting, traffic logs, user statistics, event monitoring, alarms, etc
- Availability of online mail traffic monitoring tools

9.16.14 Specification of Database

Details:

Database should have the capability to store data types, like ASCII, Hexadecimal, Binary, Geo Spatial etc.
It must have ability to define & store Large Objects in tables and retrieve them with the flexibility to place Large Objects separately from the Rest of the Data in Tables and queried using simple SQL functions.
Database should support the dynamic memory management mechanism for performance improvements.
The database should have the capability to support encryption of data at the column, table and table space level.
Database should have support for spatial data storage, spatial data & functions and access and analysis of spatial data.
Maximize performance with various indexing schemes
Database should natively support Unicode character sets
The database should be able to interface directly with High Availability Clustering Software on UNIX, Linux & Windows etc.
Users should be able to take Complete Database Backup Online and in Parallel.
The restoration or recovery of the Complete Database should be possible in Parallel
Enhanced table space management features.
Database should support for self-tuning feature.
Database must support Schemas, Roles Based Privileges & Authentication
Privileges assigned to a Group must automatically flow to the members of the Group rather than individually assigning them.
Database must have support for JDBC & ODBC.
Should support execution of Stored Procedures & User defined functions on the server-side instead of the client-side.
Should allow users to store XML document in database in its native format
Database should support creation of an index on the column of the table which stores XML in its native format.
No free version of open source database should be offered. If the bidder is offering open source database, that should be latest enterprise label licensed version.



Database should support data export capability into XML format
The RDBMS should incorporate mechanisms to ensure data integrity, security and distribution as well as to retain historical information. The database shall have password protections with varying degree of access definable by the administrator. The security shall be adequate considering web-enabled usage.
RDBMS should be able to maintain the relationships between different tables of the application
The solution should be able to interoperate with multiple industry standard RDBMS platforms SQL Server, Oracle, DB2, Sysbase or any other RDBMS conforming to ANSI/ISO SQL-200n standards and should be built on WS* based open specifications.

9.16.15 General Features of GPS System

GPS System general features:

- Provisioned for vehicle mounting preferably in Dashboard
- Should be suitably concealed to prevent tampering
- Should be able to locate vehicle location using GPS with an accuracy of less than 10 meters
- Transmit location/date time, speed, distance and digital signals via reliable GSM/CDMA data network
- Store location and event data in non GPRS coverage zone and send to server when comes back in coverage zone
- Should be able to power by vehicle battery
- Should be complete with all enclosures and fittings
- SIM card of the service provider to be embedded
- Inbuilt safety devices for power surge etc.
- 49 GPS channel for quick and accurate positioning (10 meters)
- Transmission components should conform to international standards for radio transmission

Integration features with central monitoring station

- Integration with central GIS maps in .shp, .shx and other standard multiplatform GIS data formats
- Facility to identify vehicle by vehicle no. as tag to vehicle symbol
- Facility to fetch other relevant vehicle data by clicking on the vehicle symbol on map
- Facility to differentiate vehicle proceeding to dumping ground from those released after release of waste

Technical features:

GSM:

- Quad Band: 850/900/1800/1900MHz
- GPRS Data range: 43 Kbps Uplink / 86 Kbps Downlink
- Internal On Board antenna

GPS:

- Type: Active – Built in
- Channel: 16 Channels with SBAS
- Positional accuracy: < 2.5 M cep

Interface:

- Digital inputs: 4
- Digital Outputs: 4
- Analog Inputs: 4
- RS-232 serial ports: 2
- Power, GSM and GPS status LED's
- Over the air configurable
- Internal GPS and GSM antenna

9.16.16 Specification of Helpdesk and SLA Monitoring Software

The proposed integrated management solution must consist of the following technologies to deliver a comprehensive and automated management platform:

Client Automation Management

- The proposed solution shall provide a comprehensive client automation solution that provides the following functionality –
 - Hardware / Software inventory
 - Software delivery of operating systems, applications and patches
 - Remote administration of desktops/laptops
- The proposed solution shall provide reporting, tracking and management capabilities across an extensive list of platforms.
- The proposed solution shall provide a single agent (with multiple-plug ins) for specific functionality such as inventory management, software delivery and remote control.
- The proposed solution shall generate hardware inventory by detecting and reporting on detailed inventory factors such as serial numbers, CPU information, total RAM, internal and peripheral disc drives, OS versions and service packs, network settings, and power settings.
- The proposed solution shall provide appropriate software detection methodologies that allow detection of all applications and software programs, including virtualized applications, with a higher level of accuracy than traditional software inventory scanning solutions.
- The proposed solution shall provide detailed and accurate information about the OS, including version, language settings, service packs, and patches installed and so on, to allow quick remediation when patching OS for desktops.
- The proposed solution shall provide a scripting language that allows changing settings, including registry information, on any desktop from a central location, increasing efficiency.
- The proposed solution shall centrally control and manage installing, reinstalling, configuring and uninstalling software on the full range of enterprise devices.
- The proposed solution shall allow any number of computers and/or users to be grouped together in a distribution group
- The proposed solution shall allow creation of dynamic distribution groups based on relevant criteria.
- The proposed solution shall provide a simple, task-oriented, user interface that combines with a web-based reporting portal to provide the controls and information needed to administer the patch management process.



- The proposed solution shall provide chat and file transfer for all active sessions.

Network Discovery and Reporting

- The proposed solution must automatically discover manageable elements connected to the infrastructure and map the connectivity between them.
- The proposed system must support multiple types of discovery
- The system should provide discovery & inventory of heterogeneous physical network devices like Layer-2 & Layer-3 switches, Routers and other IP devices and do mapping of LAN & WAN connectivity.
- The system must be able to support mapping and modeling of the infrastructure grouped by network connectivity, physical location of equipment and user groups or departments
- The system must provide visualization tools to display network topology and device to device connectivity. The system must also be able to document connectivity changes that were discovered since the last update.

Configuration Management for Network Devices

- The system should be able to clearly identify configuration changes
- The proposed fault management solution must able to perform real-time or scheduled capture of device configurations
- The proposed fault management solution must able to store historical device configurations

Service Desk Functional Specifications

- The proposed solution shall provide a web based service support system to automate incident, problem, change, knowledge management, interactive support, self-service and advanced root cause analysis
- The proposed solution shall support request management, problem management, configuration management and change order management.
- The proposed solution shall provide end-users the flexibility of logging, viewing, updating and closing service requests and incidents using a web-based interface.
- The proposed solution shall provide administrators (service desk analysts) the ability to use a fully-functional web-interface and should provide capability to view help for frequently used functions.
- The proposed helpdesk solution must have the ability to track work history of calls to facilitate troubleshooting.
- The proposed solution shall provide the facility to register incidents via e-mail.
- The proposed solution shall provide classification to differentiate the incident via multiple levels/tiers of categorization, priority levels, severity levels and impact levels.
- The proposed solution shall provide a web-based knowledge base that assists in finding, organizing, and publishing knowledge articles that aid in self-service & faster turn-around time.



- The proposed solution shall allow analysts to create knowledge articles based on resolved incidents/problems and shall also allow end-users to submit knowledge for consideration (after appropriate approvals).
- The proposed solution shall provide status of registered calls to end-users over email and through web.
- The proposed solution shall provide a fully functional CMDB (Configuration Management Database) as an integral part of the service desk and should be accessible from the same interface.
- The proposed solution shall allow the IT team & Change Advisory Board to visualize CI relationships with a specified number of relationships on single window.
- The proposed solution shall support version control for defined Configuration Items.
- The proposed solution shall provide multiple CI families, classes and relationships out-of-box to reduce implementation time.
- The proposed solution shall provide agent-less Remote System Resource Monitoring (chat, software / hardware inventory, file transfer, registry and file system editing, screenshot capture, remote control, and reboot / reconnect) to the analyst for faster resolution of desktop related incidents.
- The proposed solution shall automatically log all the remote desktop sharing activities into the service desk request/incident.
- The proposed solution shall provide a distributed and scalable architecture that caters to growth in number of analysts, end-users and call volumes.

Integrated End-to-End Service level Management Solution

- The proposed solution must provide Dashboard-based SLA performance management.
- The proposed solution must provide an Integrated Dashboard integrated with the SLA Management module shall be available within the SLM tool
- The system must provide the capability to calculate the current and contractual level near real-time. The system must also enable features around collaborative communication, e.g. like notes (private and shared), comments, history of actions, etc
- The SLM Dashboard should provide user based reports and dashboard elements and enables the configuration of individual threshold levels.
- The proposed solution must enable creating and managing end-to-end business driven SLAs for managing and ministering an efficient IT service delivery.
- The proposed solution must be User-friendly. Business users with little technical knowledge shall be able to manage SLAs & metrics (Service Level Obligations and Service Level Indicators) using a user-friendly graphical user interface
- The proposed solution must provide an SLA repository / End-to-End SLA Management. Solution must be able to provide a common repository for all agreements across organization, whether they are customer facing SLAs, internal SLAs/OLAs, or vendor underpinning contracts.
- The proposed solution must Support SLA Lifecycle Management including support for Version Control, SLA Status, SLA Effectively and Audit Trail. The proposed Solution shall manage the SLA state in the life cycle (e.g. draft, current, etc.) and be able to support

Effectively dates (SLA start date and end dates) as well as periodical revisions to the SLA (new targets, new metrics etc.).

- The proposed system shall track all changes made and allow users to go back to a previous version of a SLA.
- The proposed help desk solution should have achieved certification on Gold Level ITIL Process Compliance for Incident, Problem, Change, Request Fulfillment, and Service Asset and Configuration Management by the OGC ISS

9.16.17 Specification of Content Management Software

The Software should have following functionality:

- Ability to interface/integrate with standard software tools, graphing and charting tools
- Ability to retrieve/import images; image formats graphics; graphic formats etc.
- Ability to extract/retrieve/import content from databases
- Ability to interface with other platforms
- Ability to interface/ integrate with desktop publishing tools
- Ability for authors/contributors to create/save content directly into the repository (I.e. without a separate authoring tool, and without having to author content then import it into the repository)
- Ability to support standard note file automation as followed in the current system of ULBs file management
- Ability to integrate with legacy system like File Tracking system
- Ability to define policies for documents such as active / retrieval / archival / destruction of documents and records.
- Ability to access/collect/retrieve/import static and variable content components from multiple types of sources, including automated systems as well as individual contributors.
- Ability to access/collect/retrieve/import content using import utilities or other code modules, either user-invoked or invoked via an automated process, from LAN/WAN locations
- Ability to access/collect/retrieve/import content with automated scheduled script as well as user selection
- Ability to identify source of content, original as well as updates
- Ability to handle variable components: text, data, graphics, images, charts and graphs
- Ability to create/handle graphs, bar/pie charts from variable and historic data
- Ability to define templates as assemblies of components, and use templates to create document instances; graphical user interface
- Ability to define templates as assemblies of components, and use templates to create document instances; graphical user interface
- Ability to define templates as assemblies of components, and use templates to create document instances; graphical user interface
- Ability to import/convert existing templates
 - Ability to have built-in functions: page numbering, header/footer sections, columns, etc
 - Ability to re-use components in templates/documents
 - Ability to cross-reference components to templates/documents, and list the templates/documents a component is used in
- Ability to search templates/components/documents



- Ability to search contents with respect to Acts/Circular/Rules
- Ability to print/produce documents from search results
- Ability to store templates/components/documents/versions in folders or other container hierarchy
- Ability to organize templates/components/documents: by type, author, date created, etc.
- Ability to check-out and check-in for template/component/document
- Ability to check-in only by user who checked out the template/component/document
- Ability to lock-out or notification of checked-out status for templates/components/documents being updated
- Ability to store and recall versions of templates/components/documents
- Ability for user to decide to save a revision/update as a new version or replace existing version
- Ability to distinguish between versions
- Ability to compare versions and report differences
- Ability to roll back to a prior version
- Ability to archive templates/components/documents
- Ability for user to define purge criteria and/or retention periods
- Ability to audit trail: who changed what when, template/component/document history tracking
- Ability to route automatically and notify for review/approval: status tracking, electronic approvals, history, annotation, comments , etc.
- Ability to attach documents to workflows
- Ability for reviewers/approvers to add comments/annotate documents/components, highlight text, attach related docs/files
- Ability to depict graphically workflows end-to-end
- Ability to define workflows by document/project
- Ability to route to an outside entity via email
- Ability to automatically notify via email or system notification, to component and document owners when a component is changed, so that the owners know what documents to change
- Ability to support for workgroup collaboration; definition/scheduling of tasks/plans/projects; notifications to users of pending/due/overdue tasks
- Ability to track status of task/plan/project
- Ability to email templates/components/documents from the desktop
- Ability to define distribution lists/ mailing lists; ability to email to an outside entity.
- Ability to do ad hoc reporting: graphical user interface, wizard, selections vs. expressions
- Ability to track Template/component/document usage
- Ability to generate user-definable reports & pre-defined reports
- Ability to export report results; to multiple formats (e.g., Excel, .txt, HTML)
- Ability to preview reports
- Ability to save report instances to a shared or local drive, printer, etc.
- Ability to administer system at user level; e.g., set-up new templates, change existing templates and content sources, change output formats.



9.17 Appendix 'Q' Affidavit for Manpower

To
The Director,
Municipal Administration,
URBAN DEVELOPMENT & HOUSING DEPARTMENT
Govt. of Jharkhand
Dhurwa, Ranchi
Tel/Fax:

Sub: Affidavit for Manpower

We hereby declare that the resources proposed for this project (mentioned in Appendix - H as per the resource deployment format) shall be available exclusively at project location and dedicated for this project only i.e. for implementing State Level Software Solution (SLSS) at Jharkhand.

Signature and Seal of Authorized Signatory of the Bidder:

Name:

Designation:

Organization and Address:

Date:

9.18 Appendix 'R' Hardware Proposed at State Data Center

Proposed Hardware for State Data Center

1	Network Infrastructure Components	
A	Router	1
B	Switch For Server Farm	2
C	Load Balancer	1
D	Rack (42U)	2
2	Server Hardware	
A	Application Server	4
B	Database Server	2
C	Web Server	4
D	GIS Server	2
E	Mail Messaging Server	2
F	Directory Server	2
G	Server For SLA Management and Helpdesk	2
H	SAN Storage	1
I	SAN Switch	2
J	Tape Library	1
K	Backup Media (Tape Cartridge)	
L	KVM Switch with Monitor	1
3	Security Infrastructure Components	
A	Firewall	2
B	Intrusion Prevention System	2

Note:

- I. The above proposed hardware is not in the present scope of supply.
- II. The above proposed Hardware are the minimum requirements & this is an indicative (Bill of Material) BoM for SDC. The actual components as well as their number will be dependent on the solution provided by the Bidder considering the architecture requirements, proposed solution and performance SLA proposed in the RFP.

Indicative Specifications for items Proposed above in Appendix "R"

A. Indicative Specification of Rack Mounted Server for Database and GIS

Chassis	4 U Rack Mountable
CPU	2 Nos X86 based Processor. Processor Core Per CPU should be minimum Six. The Server should scalable up to 4 processors. The Frequency should be minimum 2.0 GHz.
Motherboard	Equivalent Processor OEM motherboard/chipset.
Memory	256 GB DDR3RAM with ECC memory expandable up to 1 TB
Hard disk drive	4 X 500 GB SAS minimum 15K rpm with Raid 1
Clustering	Should have Cluster support for high availability
Back Up Device	Should be able to connect with SAN Storage over 16 Gbps Fiber channel.



Chassis	4 U Rack Mountable
Controller	PCIe 3.0 based SAS Raid Controller
Networking features	Server should have the following: 1Gb 4-port network adaptor in clustering.
Ports	USB 2.0 support With 5 total ports
Bus Slots	Minimum Four PCI-Express slots
Optical drive	DVD/CD-RW combo drive
Power Supply	Redundant Power Supplies
Fans	Redundant Fans
Industry Standard Compliance	ACPI 2.0 Compliant, PCIe 3.0 Compliant, USB 2.0 Support
Security	Power-on password Serial interface control. Administrator's password
OS Support	Microsoft Windows Server, Microsoft Windows Server Hyper-V, Red Hat Enterprise Linux (RHEL), Red Hat Enterprise Linux Virtualization, SUSE Linux Enterprise Server (SLES), SUSE Linux Enterprise Server with XEN Oracle Solaris/Linux for x86/x64 based Systems, VMware, Citrix XenServer
Warranty	3 year warranty On site OEM Warranty. Pre failure warranty on CPU, and Hard disks
Server Management	Should help provide proactive notification of failure alerts on critical components like CPU, Memory and HDD.

B. Indicative Specification for Blade Enclosure

Feature	Specifications
Form Factor	Up-to 10 U Form factor per chassis with all redundancy features (Hard Drives, Power, and Cable Management). The requisite number of Enclosures to be configured to populate the Servers and Storage/Expansion Units
Blade Bays	Blade Chassis to accommodate minimum of 8 hot pluggable blade servers with SAS HDDs.
Chassis Feature	<ul style="list-style-type: none"> ▪ Dual network connectivity for each blade server for redundancy should be provided. ▪ Backplane should be completely passive device. If it is active, dual backplane should be provided for redundancy ▪ Should have the capability for installing industry standard flavors of Windows, Linux, Unix, Solaris for x86 Operating Environments ▪ Single console for all blades in the enclosure or KVM Module ▪ DVD ROM can be internal or external, which can be shared by all the blades allowing remote installation of S/W and OS ▪ Minimum 2 external USB connections functionality
Ethernet Switch Modules	Two hot-plug, redundant 1Gbps Ethernet module which enable connectivity to Ethernet via switch. Switch should be Internal/external. The number of Ethernet ports should be sufficient to connect fully populated chassis being offered to network.



SAN Connectivity	Redundant SAN connectivity to the external SAN switch either via FC pass-through or SAN Switch.
Redundancy	Mechanical Devices such as Hard Disks, Fans and Power Units should be completely Hot Swappable and Redundant to ensure High Availability
Blade Management	<ul style="list-style-type: none"> Systems Management and deployment tools to aid in Blade Server configuration and OS deployment, Remote management capabilities through internet browser Blade enclosure should have provision to connect to display console / central console for local management like trouble shooting, configuration, system status / health display
Power	<ul style="list-style-type: none"> Hot Swap redundant power supplies to be provided Power supplies should have N+N. All Power Supplies modules should be populated in the chassis
KVM	To be enabled Virtually over IP for Remote Access or Provided Locally.

C. Indicative Specification of Blade Server for Application, WEB

Features	Specifications Required
CPU	2 Nos X86 based Processor with 64 bit Extensions (EM64T). Processor Core Per CPU should be Six. The Server should scalable up to 4 processors. The Frequency should be minimum 2.0 GHz. Processor should be latest series/generation for the server model being quoted
Chipset	Suitable Processor OEM motherboard/chipset
Form factor	Half/Full Height Blade with I/O connectivity to backplane
Memory	256 GB ECC DDR3-SDRAM DIMMs
Memory Expandability	Minimum 512 GB
Controllers	Integrated SAS Raid Controller with RAID 0, 1
Bays	Dual 2.5" SAS Hard Disk bays
Hard Disk Drives	Two 600 GB 2.5" SAS Hard Disk Drive hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks
Ethernet Adapter	Dual Port 1000BASE-T Gigabit Ethernet Adapter
SAN Connectivity	The Blade should have redundant 8 Gbps Fiber Channel HBA
I/O Expansions	I/O expansion slot for up gradation of Ethernet Adapter
Power Supply	From the Blade Chassis
System Management and Diagnostics	LED lights indicating failing component and on-board diagnostics (via on-board system management processor)
Software	Server Management software with the device drivers
OS Compatibility	Microsoft Windows Server latest version Standard Edition (32 bit and 64 bit) Red Hat Enterprise Linux latest version (32 bit and 64 bit) SUSE LINUX Enterprise Server latest version (32 bit and 64 bit) Oracle LINUX Enterprise Server latest version (32 bit and 64 bit)
Warranty	3 year comprehensive ON Site warranty

**D. Indicative Specification of Blade Server for email, Directory etc.**

Features	Specifications Required
CPU	2 Nos X86 based Processor with 64 bit Extensions (EM64T).Processor Core Per CPU should be Six. The Frequency should be minimum 2.0 GHz. Processor should be latest series/generation for the server model being quoted
Chipset	Suitable Processor OEM motherboard/chipset
Form factor	Half/Full Height Blade with I/O connectivity to backplane
Memory	64 GB ECC DDR3-SDRAM DIMMs
Memory Expandability	Minimum 512 GB
Controllers	Integrated SAS Raid Controller with RAID 0, 1
Bays	Dual 2.5" SAS Hard Disk bays
Hard Disk Drives	Two 600 GB 2.5" SAS Hard Disk Drive hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks
Ethernet Adapter	Dual Port 1000BASE-T Gigabit Ethernet Adapter
SAN Connectivity	The Blade should have redundant 8 Gbps Fiber Channel HBA
I/O Expansions	I/O expansion slot for up gradation of Ethernet Adapter
Power Supply	From the Blade Chassis
System Management and Diagnostics	LED lights indicating failing component and on-board diagnostics (via on-board system management processor)
Software	Server Management software with the device drivers
OS Compatibility	Microsoft Windows Server latest version Standard Edition (32 bit and 64 bit) Red Hat Enterprise Linux latest version (32 bit and 64 bit) SUSE LINUX Enterprise Server latest version (32 bit and 64 bit) Oracle LINUX Enterprise Server latest version (32 bit and 64 bit)
Warranty	3 year comprehensive On Site OEM warranty



9.19 Appendix 'S' (Format of Bank Guarantee for Performance Security)

(To be stamped in accordance with Stamp Act i.e. on Non-judicial Stamp Paper of value of Rs.100/-)

Ref: Date:

Bank Guarantee No

To,

The Director,

Municipal Administration, UD&HD

Project Building

Fourth Floor, Dhurwa, Ranchi

Against Contract vide Advance Acceptance of the Tender No..... Datedof the UD&HD, Government of Jharkhand, (hereinafter called the UD&HD) covering the design, development, implementation and maintenance of state level software solution including hardware and system software to be implemented in Dhanbad, Jharkhand (Hereinafter called " The Said Contract") entered into between the UD&HD and the _____ (Hereinafter called the "The Bidder"), this is to certify that at the request of the Bidder we Bank_____ are holding in trust in favour of the client, the amount _____(write the sum here in words) to indemnify and keep indemnified the Department against any loss or damage that may be caused to or suffered by the UD&HD by reason of the said Contract and / or in the performance thereof. We agree that the decision of the UD&HD, whether any breach of any of the terms and conditions of the said contract and / or in the performance thereof has been committed by the Bidder and the amount of loss or damage that has been caused or suffered by the UD&HD shall be final and binding on us and the amount of the said loss or damage shall be paid by us forthwith on demand and without demur to the UD&HD.

We _____ Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that could be taken for satisfactory performance and fulfillment in all respects of the said Contract by the Bidder i.e. till _____(viz. The date up to 36 months after the date of successful implementation and acceptance of each of the e- Governance Application Software by the URBAN DEVELOPMENT & HOUSING DEPARTMENT/DMC/UD&HD) hereinafter called the said date and that if any claim accrues or arises against us_____ Bank by virtue of this guarantee before the said date, the same shall be enforceable against us Bank

notwithstanding the fact that the same is enforced within six months after the said date ,provided that the notice of any such claim has been given to us _____ Bank by the purchaser before the said date. Payment under this letter of guarantee shall be made promptly upon our receipt of notice to that effect from UD&HD.

It is fully understood that this guarantee is effective from the date of the said Contract and that we _____ Bank undertake not to revoke this guarantee during its currency without the consent in writing of the UD&HD.

We undertake to pay the UD&HD any money so demanded not withstanding any dispute or disputes raised by the Bidder in any suit or proceedings pending before any Court or Tribunal relation thereto our liability under this present bond being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge or our liability for payment there under and the Bidder shall have no claim against us for making such payment.

We _____ Bank further agree that the UD&HD shall have the fullest liberty, without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the Bidder from time to time or to postpone for any time or from time to time any of the powers exercisable by the UD&HD against the said Bidder and to forbear or enforce any of the terms and conditions relating to the said Contract and we, _____ Bank shall not be released from our liability under these guarantee by reason of any such variations or extension being granted to the said forbearance and / or omission on the part of the UD&HD or any other matter or thing whatsoever, which under the law relating to sureties, would but for this provisions have the effect of so releasing us from our liability under this guarantee.

The guarantee is for an amount of Rs. _____ (In figures Rs. _____).

This guarantee shall not be discharged due to the change in the constitution of the Bank or the Bidder.

DATE: -

PLACE: SIGNATURE: -

WITNESS: - PRINTED NAME:

..... (BANK'S COMMON SEAL)

Government of Jharkhand
URBAN DEVELOPMENT & HOUSING DEPARTMENT
e-Procurement Notice (Re-Tender)

e-Tender (RFP) Reference No.: UDD/22.(Ni.Ko)/RE
NIT No.: JH/UDD/SW-URBAN/RE/2015-16/3138

Notice No:3138

Date: 26/8/2015

1.	Name of the Project	Implementing State level Software Solution at Jharkhand under e-Governance in Municipalities Project
2.	Estimated Cost	Open Tender
3.	Tender Fee & EMD (In INR)	Tender Fee: 25,000.00 EMD – 40,000,00.00
4.	Time of Completion	Implementation till Go-Live: 365 days (1 year) from date of signing of agreement Post Implementation operations and maintenance support: 3 Years (1095 days) from the date of Go-Live
5.	Date of Publication of Tender on website	27/08/2015, 09:00 hours
6.	Date of submission of pre-bid queries	01/09/2015 till 17:00 hours, bidders must submit their queries through post or email (uddeprocurement@gmail.com) in writing. Mail should contain NIT & e-Tender (RFP) Reference no. and RFP Name in email subject line.
7.	Mode of submission of bids	e-Tendering (https://jharkhandtenders.gov.in)
8.	Pre-Bid Conference	04/09/2015 at 15:00 hours
9.	Date of Start of Submission of Bids	27/08/2015, 15:00 hours
10.	Last Date/Time for submission of bids	18/09/2015 up to 17:00 hours
11.	Date of Technical Bid Opening (Online)	21/09/2015 at 10:00 hours
12.	Date of financial bid opening	To be announced later in https://jharkhandtenders.gov.in
13.	Bid submission address (Online)	Director, Urban Development Department, 3rd Floor Project Building, Dhurwa, Ranchi- 834004
14.	Helpline no. of e-Procurement Cell	Land Line -0651-2401955/9031003998

Note: Only e-Tenders will be accepted.

Further details can be seen on website <https://jharkhandtenders.gov.in>


Director, Municipal Administration