



**Request for Proposal to Build**

**Integrated GIS enabled Enterprise Municipal**

**e-Governance Suit**

**+**

**Post Implementation support for**

**e-Governance Solution for 2 years**

RFP Reference: 01-619-08

**RFP Price: Rs. 20,160/- (Rupees Twenty Thousand One Hundred Sixty Only)**

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**DOCUMENT CONTROL SHEET**

RFP Document No	<u>01-619-08</u>
Name of the Company	Nagpur Municipal Corporation
Date of Availability of RFP document	19 <sup>th</sup> January,2009 – 13 <sup>th</sup> February,2009
Date for Pre-Bid Conference	2 <sup>nd</sup> February, 2009 at 12:00 noon
Venue of Pre-Bid Conference	At Municipal Commissioners Chamber
Cost of RFP document payable	Rs20160/-
Last Date and Time for Submission of Bids	17 <sup>th</sup> February, 2009 upto 3:00 P.M.
Ernest Money Deposit in the form of D.D./Payorder	Rs.10,00,000/-
Date and Time of Opening of Technical Bids	17 <sup>th</sup> February,2009 at 4:00 P.M. IF POSSIBLE
Place of Opening of Bids	At Municipal Commissioners Chamber
Technical Presentation	26 <sup>th</sup> February,2009
Commercial Bid Opening	27 <sup>th</sup> february,2009 or the date decided by the NMC authorities
Address for Communication	City Engineer , Nagpur Municipal Corporation, Civil Lines, Mahapalika Marg, Nagpur-400001. Ph. -0712-2567022 Fax. -0712-2561584 Mobile:+919823059358 E-mail <a href="mailto:sgaikwad_nmc@yahoo.co.in">sgaikwad_nmc@yahoo.co.in</a>
Website	<a href="http://www.nmctenders.com">www.nmctenders.com</a> For details or in case of difficulties please contact Mr. Rajesh Lokhande, Project Incharge, e-tendering, NMC, Nagpur, Mobile telephone no:+919922948618

Note: This RFP document is not transferable.

**DISCLAIMER**

The information contained in this RFP Document or subsequently provided to Bidder(s) or Applicants whether verbally or in documentary form by or on behalf of Nagpur Municipal Corporation (hereinafter "NMC") or by any of their employees or advisors, shall be subject to the terms and conditions set out in this RFP Document and all other terms and conditions subject to which such information is provided.

This RFP Document is not an agreement and is not an offer or invitation by the NMC to any parties other than the Applicants who are qualified to submit the Bid. The purpose of this RFP Document is to provide information to the Bidder(s) which will assist them for formulation of their Proposals. This RFP Document does not purport to contain all the information each Bidder may require. This RFP Document may not be appropriate for all persons, and it is not possible for the NMC, their employees or advisors to consider the investment objectives, financial situation and particular needs of each Bidder who reads or uses this RFP Document. Each Bidder should conduct its own investigations and analysis and should check the accuracy, reliability and completeness of the information in this RFP Document and where necessary obtain independent advice from appropriate sources. The NMC, their employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the RFP Document. The NMC may in their absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP Document.

## INVITATION FOR BIDS (IFB)

Nagpur Municipal Corporation

## **NAGPUR MUNICIPAL CORPORATION (NMC)**

### **E-Tender notice to build Integrated GIS enabled Municipal e-Governance Suit**

Commissioner, NMC invites e-tenders to build Integrated GIS enabled Enterprise Municipal e-Governance Suit for Nagpur Municipal Corporation. These e-tenders can be purchased by the prospective bidders by obtaining temporary registration from NMC website.

'Detailed Tender Notice' along with tender document is available on the web site [www.nmctenders.com](http://www.nmctenders.com) , which can be viewed or downloaded free of cost. Prospective bidder has to download the tender from.

Further instructions can be accessed by clicking on "View tender list" and selecting City Engineer Department from the drop down list.

Detailed instructions are available in "Users Guide" to obtain password and to download the tender document.

Payment towards cost of tender document can be made online by Credit Card or by making direct payment and opening account with CTPC (Central Tender Processing Centre, of NMC).

The instructions of making payment are available in the web site.

Date of Availability of RFP document	19 <sup>th</sup> January, 2009 – 13 <sup>th</sup> February, 2009
Date for Pre-Bid Conference	2 <sup>nd</sup> February, 2009 at 12:00 noon
Venue of Pre-Bid Conference	At Municipal Commissioner's Chamber
Last Date and Time for Submission of Bids	17 <sup>th</sup> February, 2009 upto 3:00 P.M.

In case of difficulties please contact Mr. Rajesh Lokhande, Project In-charge, Central Tender Processing Center (CTPC), NMC, Nagpur, Mobile telephone no:+919922948618

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***City Engineer***

## **Part I**

### **1 Instructions to Bidders**

## **A. Introduction**

### **1.1 Objective**

The Nagpur Municipal Corporation constituted under the City of Nagpur Corporation Act,1948 (C.P.& Berar Act No. II of 1950), has decided to e-transform their operations within & services to Citizen. To achieve this objective NMC will require to build Integrated GIS enabled Enterprise Municipal e-Governance Suit after acceptance of the offer from most able & competitive Agency. The selected Agency is expected to build the achievable and practicable e-transformation system for integrated GIS enabled electronic Municipal Governance using State-of-the-art ICT infrastructure, software, hardware sizing, firmware and methodologies. Also, implement, operate, maintain and run the system for two years after the defect liability period to its satisfaction level of users and administrators.

The investment for this part of the Project shall be made by NMC to the extent of Rs.9.31Crores out of total outlay planned & estimated for Rs.23.35 Crores, from its sources along with the funding available from JNNURM for the expenses related to establishment of integrated GIS enabled electronic Municipal Governance using State-of-the-art ICT infrastructure for achievement of objectives to the extent possible for management, human resources, maintenance of services, collection of revenue and all other activities necessary for smooth functioning of the system. NMC shall explore the possibility of adopting PPP (public private partnership) mode for various citizen centric services.

NMC will utilize the ICT infrastructure to the fullest extent as it is required for their day to day operations and to deliver services to the citizens being committed to provide transparent, accountable and efficient local governance through the use of modern technologies especially in management and administration fields.

## 1.2 Eligibility Criterion for Bidders

The bidder can be a company/corporation/enterprise or a consortium of companies/corporation/enterprise. The consortium shall not consist of more than two companies/corporations/enterprises and shall be formed under a duly stamped consortium agreement. The original Stamped consortium agreement shall be attached along with the bid document. In a consortium one of the partners shall be designated as a 'Lead Partner'. However, every member of the consortium shall be equally responsible and jointly and severally liable for the successful completion of the entire project. The consortium, if any, will be designated as 'Bidder' or 'Vendor' for the remainder of this document. If original manufacturer/ Creator is bidding with System Integrators (SI) or Supplying Original Licences through SI, it has to be the part of consortium. Original ERP licence Provider (in the capacity of solely an Original Licence Provider) shall be allowed to be the part of more than one consortium. All other organizations (except Original Licence Provider) can be part of only one consortium.

The Bidder/Lead Bidder should possess the following conditions of eligibility:

1. Bidder when a single company/corporation/or enterprise must be the original manufacturer/creator of the enterprise platform software. When a consortium is bidding one of the partners must be original manufacturer/creator of the enterprise platform software. Bidder must have experience in planning, designing, implementation and management of complete ICT infrastructure including Hardware, Firmware & software required for such project and of this magnitude.
2. The Bidder should agree and give undertaking that they will create support and liaison office in Nagpur and keep it operational till the duration of contract.
3. The Bidder must provide O&M, augmentation, modernization, up-gradation support for the System offered for the full period of contract and incase of closer of manufacturing company shall provide alternate state-of-the-art solution/equipments to match the performance and the need of the system at that time of eventuality.



4. A consortium with legal agreements amongst its members consisting of not more than two different entities is allowed to bid through a lead Business Associate who is the original manufacturer/creator of the enterprise platform software or Authorized associated application product developer of the same technology/platform under the agreement that the Basic Platform developer shall remain jointly and severally responsible for this project in addition to the lead partner's commitment towards the project. The proof and other valid documents for all Business Associates of legally bound consortium should be produced as a part of submission of the RFP along with the bid including Registered Joint Venture Agreement (JVA) or Special Purpose Vehicle (SPV) with mention of Lead member whose credentials are to be evaluated for the qualifications to bid. The lead member shall have at least 51% share in the SPV or JVA.
5. Lead Bidder should have similar installations in India or abroad on same enterprise e-Governance platform in minimum 10 Municipal bodies out of which at least three municipal bodies should be in India. Proposed enterprise e-Governance platform should be in use for minimum 5 years and should have installations at 500 locations in India or abroad. Bidder will submit the certificate in this regard. This condition will be relaxed for the Bidder if they are approved or recommended by JNNURM for their product under e-Governance initiative.
7. The proposed enterprise e-Governance platform should comply with the open standards and should work with the commercially available Personal Computers and networks through thin client in a w3c compliant web browser
8. Lead bidder with CMMi level-5 certified organization shall be preferred.
9. Bidders should not be under a declaration of ineligibility for corrupt and fraudulent practices with any of its Client in accordance with the Clause 2.24.1 of GCC.
10. The Bidder itself when bidding individually or at least one partner when bidding as a consortium should have a proven capability of Change

management planning & implementation and capacity building in Government departments/ Institutions/PSUs in India.

11. Enterprise e-Governance software solution offered by the bidder should be GIS enabled.
12. Data Input method in the Enterprise e-Governance platform should be capable of bi-lingual Unicode based data entry i.e. enabled to input data in English as well as Deonagri script with a keyboard based toggle switch.
13. The Bidder itself when bidding individually or at least one partner when bidding as a consortium should have proper knowledge and expertise in handholding the system and operation of the project to client.
14. The Bidder itself when bidding individually or at least one partner when bidding as a consortium should have a proper and complete infrastructure and able manpower required to carry out the survey, study and analysis of the entire requirement of NMC.
15. The Bidder itself when bidding individually or at least one partner when bidding as a consortium must have experience of developing PPP models for operation and running of services to the citizens using the web portal and Citizen Facility Centers.

### **1.3 Eligible Solutions/Goods/products/Services**

1. All the solutions/goods/products/services to be provided or used under the Contract shall have their origin in eligible countries, and all expenditures made under the contract will be limited to such goods and services. Refer annexure 4 for List of Eligible Countries.
2. For purpose of this clause, "origin" means the place where the goods/products /solutions/Services are manufactured /created /processed /managed.

#### **1.4 Cost of Bidding**

Bidder shall bear all the costs associated with the preparation and submission of its bid. The NMC, or any other organization that has been engaged by the NMC to provide consulting services for the preparation of the design, specifications and other documents to be used for defining the Scope of work under this Invitation of Bids, will in no case be responsible or liable for these costs, regardless of the conduct or the outcome of the bidding process.

### **B. THE BIDDING DOCUMENTS**

#### **1.5 Contents of Bidding Documents**

1. In addition to the Invitation for Bids, the bidding documents include:

##### Part-1

- 1.0 Instructions to Bidders (ITB)
- 2.0 General Conditions of Contract (GCC)

##### Part-II

- 3.0 General Requirements
  - 4.0 Technical Specifications
  - 5.0 Additional services to be provided
  - 6.0 Annexure
  - 7.0 Bid Forms
2. 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 submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

#### **1.6 Clarification of Bidding Documents**

1. A prospective Bidder requiring any clarification of the bidding documents shall contact the NMC Authority in writing at the NMC's address indicated in the invitation to Bid or through e-mail on the email address given. The NMC Authority will respond in writing or email to any

request for the clarification of any bidding documents, which it receives three days prior to the pre-bid meeting.

2. For any further clarification, on the request of the vendor, the Corporation will make available a soft copy of the amendment/common set of deviations (CSD) to the tender document in 'pdf' format.

#### **1.7 Amendment of bidding document**

1. At any time prior to the deadline for submission of bids, the NMC Authority may, for any reason, whether on its own initiative or in response to the clarification request, if any, by a prospective bidder, modify the bidding documents.
2. All prospective bidders who have interest in offering their bid themselves will remain responsible to check the modifications to the bid document on the website of NMC before offering the bid. The last modification, if any, will be issued by NMC minimum 48 hours before the date and time of submission of tender.
3. In order to allow prospective bidders reasonable time to take the amendments into consideration, if any, while preparing their bids the NMC Authority, at its discretion, may extend the deadline for the submission of bids.

### **C. PREPARATION OF BIDS**

#### **1.8 Language of Bid**

The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid submitted by the Bidder to the NMC Authority shall be in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an appropriate translation of the relevant document in the English language and in such a case, for purpose of interpretation of the bid, the translation shall govern.

#### **1.9 Documents Comprising the Bid**

- 1.9.1 The Bid shall be submitted in two parts:

#### Part-1:Technical

The Technical Part shall be submitted by the bidders through e-tendering procedure already in practice at NMC.

#### Part-2: Financial

The Financial bid will be submitted through e-tendering procedure already in practice at NMC

1.9.2 Initially, only the Technical Bids will be opened on the date and at the address, and time specified in ITB Clause 1.20.1 and the same will be evaluated by the NMC. The Financial Bids will remain secured and shall be protected by the NMC Authority. No amendments or changes to the Technical Bids will be permitted after submission and opening of Bid.

1.9.3 The technical bid shall be opened subject to the confirmation to submission of documents required to be submitted along with bid. The confirmation form is enclosed as annexure 5 which is to be submitted as part of the covering letter. If any one of the essential documents is not submitted along with the bid, the bid will not be evaluated further and shall be treated as invalid bid.

1.9.4 Financial Bids of qualified bidders, whose technical bids are evaluated and declared successful as per the norms of qualifications, will be subsequently opened in the presence of representatives of technically qualified bidders on the date and at the address and time to be decided and advised by the NMC Authority. The Financial Bids will be evaluated in considerations of the Technical Bid and the contract will be awarded to the Bidder. The Technical Bid shall contain the following :

A) Technical Bid shall contain the following;

- a. The Overall approach to the Project
- b. The deployment methodology
  1. The proposed platform/technology and its appropriateness for NMC
  2. Maturity of the platform/technology
  3. Salient features of the proposed solution
  4. The Performance capabilities of the solution in terms of number of users and bandwidth requirement.

5. Change management methodology
6. Steps to complete the project
7. Capacity building methodology
8. Network architecture requirements
9. Licensing scheme for software during implementation and post implementation for next 10 Years.
10. The performance benchmark for the offered solution & services
11. The Warrantee and post warrantee services available from manufacturer, and their terms & conditions
12. The technology support strategy to the offered solution during its life time.
13. Detailed approach strategy with respect to the NMC project for Augmentation/modernization/modifications adoptability in the same solution during the course of its Life time due to change in technology along with the features.
14. The constraints, essentials and necessities if any for installation & commissioning of system
15. Hardware specifications and sizing along with the networking equipments required for this project
16. Special Infrastructure requirements
17. Any other requirement which will be essential for consideration to complete the project and will have effect on cost considerations.
18. Implementation, Operation & Management Plans with clearly marked hurdles and criticalities in implementation, management and O&M of project.
19. Taxation, duties, Levies, License Fees and Royalties required to be considered for implementation and running of this project activities while considering the investment or Liabilities what so ever.

B) Documents establishing evidence in accordance with ITB Clause 1.12 that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted;

C) Documents establishing evidence in accordance with ITB Clause 1.13, that the goods/products/solutions/services to be used/ rendered by the Bidder are eligible goods/products/solutions/services and conform to the bidding documents; and

D) Bid security furnished in accordance with ITB Clause 1.14.

1.9.5 The Financial Bid shall contain the following:

A Format is given to fill up the Amount to be funded by NMC to bidder in INR as annexure 6.

#### **1.10 Bid Format**

1.10.1 The Bidder shall complete the Bid Format.

#### **1.11 Bid Currency**

1.11.1 Quoted values should be mentioned in Indian Rupees (INR) in words as well as in figures.

#### **1.12 Documents Establishing Bidder's Eligibility and Qualification**

1.12.1 Pursuant to ITB Clause 1.2 & 1.9, the Bidder shall furnish, as part of its bid, documents establishing the Bidder's eligibility to bid and its capability to perform the Contract if its bid is accepted.

1.12.2 The documentary evidence of the Bidder's qualifications to perform the Contract if the bid is accepted, shall establish to the NMC's satisfaction:

1.12.2.1 That the Bidder has the financial, technical, production and management capability, if required, necessary to perform the Contract and the same meets the criteria outlined in the Qualification Requirements specified in ITB Clause 1.2. To this end, all bids submitted shall include the following information:

- a- The legal status, place of registration and principal place of business of the Bidder, whether a pvt. Ltd. or Ltd. company, firm or Consortium, etc;
- b- Details of experience and past performance of the Bidder and their performance of the solutions offered of similar nature within

the past five years and details of current contracts in hand and other commitments.

- c- Reports on the financial standing of the Bidder, such as profit and loss statement, balance sheets and auditor's reports of last three years.
- d- PAN/TAN/CST/Service Tax Numbers along with certified copies of Registration Certificates.

### **1.13 Documents Establishing Eligibility and Conformity to Bid Documents.**

1.13.1 Pursuant to ITB Clause 1.2 & 1.9, the Bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding documents.

### **1.14 Bid Security to be furnished**

1.14.1 Pursuant to ITB Clause 1.9, the Bidder shall furnish, as part of its bid, a Bid Security for an amount of Rs. 10,00,000/- (Ten Lakhs) in any of the following forms:

A DD or Pay order of a nationalized/scheduled bank, issued or drawn in the favor of "City Engineer, NMC, Nagpur" and payable at Nagpur. The Bid Security shall be valid for a period of one hundred and eighty (180) days beyond the end of the validity period of the bid. This shall also apply if the period of the bid validity is extended.

1.14.2 The Bid Security is required to protect the NMC against the risk of the Bidder's conduct, which warrants the security forfeiture, pursuant to ITB Clause 1.14.7.

1.14.3 The Bid Security shall be in Indian Rupees (INR) only.

1.14.4 Any bid that is not secured in accordance with ITB Clause 1.14.1 and 1.14.3 above will be rejected by the NMC as non-responsive, pursuant to ITB Clause 1.23.

1.14.5 Unsuccessful Bidder's Bid Security will be discharged / refunded as promptly as possible, but not later than 60 days after the expiry of the



period of the bid validity prescribed by the NMC, pursuant to ITB Clause 1.15.

1.14.6 The successful Bidder's Bid Security will be discharged only upon receipt of the contract duly signed by the Bidder along with furnishing of the performance security pursuant to GCC Clause 2.7. The NMC shall, within 10 days of such receipt, return to the successful Bidder, the Bid Security.

1.14.7 The Bid Security shall be forfeited If, a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form;

1.14.8 Or in case of a successful Bidder, if the Bidder fails:

- a) to sign the Contract; or
- b) to furnish the performance security in accordance with GCC Clause 2.7.
- c) failed to supply and install within the scheduled period

#### **1.15 Period of Validity of Bids**

1.15.1 Bids shall be valid for 120 days after the last date of submission for bid prescribed by the NMC, pursuant to ITB Clause 1.18. A bid valid for a shorter period shall be rejected by the NMC as non-responsive.

1.15.2 In exceptional circumstances, the NMC may solicit the 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 period provided under ITB Clause 1.14 shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request will not be permitted to modify its bid.

#### **1.16 Format and Signing of Bid**

1.16.1 The technical as well as the financial bid will have to be submitted by the bidder on line [www.nmctenders.com](http://www.nmctenders.com) for which the bidder will have to get registered following the temporary registration process as vendor. For details or in case of difficulties please contact Mr. Rajesh Lokhande, Project

Incharge, CTPC, NMC, Nagpur, Mobile telephone no:+919922948618 or Mr. Sanjay Gaikwad, City Engineer, NMC, Nagpur, Mobile telephone no.+919823059358.

- 1.16.2 The original and the photocopy of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. The letter of authorization shall be supported by a written power-of-attorney accompanying the bid. All pages of the bid, except for un-amended printed literature, shall be initialed by the person or persons signing the bid.
- 1.16.3 Any interlineations, erasures or overwriting shall be valid only if they are signed by the person or persons signing the bid.
- 1.16.4 The Technical Bid and the Financial Bid should be complete in all respects as per the conditions and requirements specified in the tender document. Partially filled bids are liable to get rejected.

## **D. SUBMISSION OF BIDS**

### **1.17 The Procedure to submit the bid:**

- 1.17.1 The technical Bid shall be submitted by the bidder by attaching scanned copy of Earnest Money Deposit (EMD) which shall necessarily be Demand Draft/Pay order of Nationalized/Scheduled Bank drawn in favour of CITY ENGINEER, Nagpur Municipal Corporation amounting to EMD amount shown against the work in tender notice. Original EMD should be submitted in the office of City Engineer, NMC before opening of the technical bid. Scanned copy of technical bid shall be uploaded on the website and the original copy along with one more copy shall be submitted to the NMC by hand at the time of opening of technical bid.
- 1.17.2 More over the bidder should submit soft copy on compact disk (CD) of the technical bid along with the two hard copies
- 1.17.3 The Scanned copy of financial bid should be submitted electronically to website on or before the due date & Time, the same will be kept in the custody of NMC unopened.

### **1.18 Deadline for Submission of Bids**

1.18.1 Bids must be received by The NMC at the website [www.nmctenders.com](http://www.nmctenders.com) no later than the time and date specified in the Invitation for Bids.

1.18.2 The NMC may, at its direction, extend this deadline for submission of bids by amending the bid documents in accordance with ITB Clause 1.7, in which case all rights and obligations of the NMC and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

#### **1.19 Late Bids**

Bids are not accepted on website after the due date and time of submission therefore the bidders are requested to upload their bid well in advance before the due date and time to avoid the inconvenience.

#### **1.20 Modification and Withdrawal of Bids**

- i. The Bidder may note that modifications or withdrawal of submitted bid is not allowed after its submission.

### **E. OPENING AND SCRUTINY OF TECHNICAL BIDS**

#### **1.21 Opening of Bids by the NMC**

1.21.1 The NMC will open all ORIGINAL Technical Bids in the presence of the Bidders or their representatives (having the authority letter) who choose to attend, at 16:00 Hrs. on 16<sup>th</sup> February, 2007 and at the following address:

**The Municipal commissioner,  
Nagpur Municipal Corporation,  
Head Quarter Building  
Civil Lines  
Nagpur-440001**

1.21.2 The Technical Bid submitted by a bidder who or whose representative is present or absent shall be opened and shall be evaluated. The bidder who

or whose representative may be absent, will not be entertained by NMC for the information related to the Technical Bids of competitors, which may be read in front of all the bidders present.

- 1.21.3 A short list of the bidders will be made based on the evaluation (by a committee formed for the purpose) of Technical Bids. The further process will be confined to the short listed bids. Those not short listed will be so informed. The decision of NMC in this matter will be final.
- 1.21.4 The Financial Bid will remain unopened until the time of opening of the Financial Bids. The date, time and address for opening of Financial Bids will be informed in writing by the NMC.
- 1.21.5 A Bidder's representative who is present shall sign an attendance register evidencing his attendance. In the event of the specified date of bid opening being declared holiday for the NMC, the bid shall be opened at the appointed time and address on the next working day.
- 1.21.6 The Bidder's names, bid prices, requisite bid security and such other details as the NMC at its discretion may consider appropriate, will become available on website, after the bid opening.
- 1.21.7 The NMC shall prepare a record of the opening of Technical Bids that shall include Name of the Bidder, availability of Bid Security and other documents as per ITB Clause 1.12.
- 1.21.8 At the end of the scrutiny of the Technical Bids, the NMC will invite Bidders who have been short listed after evaluation of Technical Bids and who are determined as being qualified to attend the opening of Financial Bids. The date, time and address for the opening of Financial Bids will be given in writing by the NMC. The NMC will notify Bidders in writing that have been rejected on the basis of evaluation criterion mentioned at ITB Clause 1.23 of being substantially non-responsive to the requirements.
- 1.21.9 The NMC shall conduct the opening of Financial Bids of all Bidders who have been short listed after evaluation of Technical Bids, in the presence of Bidders' representatives who choose to attend on the date and at the time and address specified by the Purchaser NMC. The Bidder's representatives who are present shall be requested to sign a register evidencing their attendance.
- 1.21.10 Bids that are not opened and read out at bid opening shall not be considered for further evaluation, irrespective of the circumstances.

## **1.22 Clarification of Bids**

During scrutiny of bids, the NMC may, at its discretion, ask the Bidder for a clarification of its bid. The request for a clarification and the response shall be in writing and no change in revenue sharing amount or substance of the bid shall be sought, offered or permitted.

## **1.23 Preliminary Examination**

1.23.1 The NMC will examine the Technical Bids to determine whether they are complete, whether any computational errors have been made, whether sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Bids from Authorized associated application product developer without proper authorization from the original manufacturer/creator of the enterprise platform software, shall be treated as non-responsive. If any document or information as per ITB Clause 1.12 is missing, the bid shall be rejected.

1.23.2 In case of Financial Bids, if there is a discrepancy between words and figures, the amount in words will prevail. If the Bidder does not accept the correction of errors, its bid will be rejected.

1.23.3 The NMC may waive any minor formality or non-conformity in a bid which does not constitute a deviation to the objective proposed by the NMC.

1.23.4 Prior to the detailed evaluation, pursuant to ITB Clause 1.24, the NMC will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one that conforms to all the terms and conditions of the bidding documents without deviation to the object of the Project. Deviations from or objections/reservations to critical provisions such as those concerning Performance Security (GCC Clause 2.7), Applicable law (GCC Clause 2.30) and Taxes and duties (GCC Clause 2.32) will also deemed to be deviations to the Object of the Project. The NMC's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

1.23.5 Bidder is considered to be responsive on satisfying the points mentioned in Annexure 5 and once the bids stands responsive shall be further evaluated for technical details.

## 1.24 Evaluation and comparison of Bids

1.24.1 The bidder shall be evaluated and weighted on the merits considering aspects mentioned in table-A as below:

**TABLE-A**

SN	Description	Points
1.a	Bidder itself when bidding individually or Lead partner when bidding as a consortium is the original manufacturer/creator of the enterprise platform software. Bidder must have experience in planning, designing, implementation and management of complete ICT infrastructure including Hardware, Firmware & software required for such project and of this magnitude.	5
1.b	Bidder itself when bidding as Lead partner of a consortium is an Authorized associated application product developer of the technology/platform manufactured /created by the other partner of Consortium. Bidder must have experience in planning, designing, implementation and management of complete ICT infrastructure including Hardware, Firmware & software required for such project and of this magnitude.	2
2.	Bidder itself when bidding individually or at least one partner when bidding as a consortium having experience in planning, designing, implementation and management of complete ICT infrastructure including Hardware, Firmware & software required for Urban Local Body project and of this magnitude.	
2.a	In ten ULBs out of which three ULB's in India	5
2.b	In ten to twenty ULBs out of which three ULBs in India	7
2.c	More than twenty ULBs out of which three ULBs in India	10
3	The proposed methodology of O&M, augmentation, modernization, up-gradation support for the System offered for the full period of contract and incase of closer of manufacturing company shall provide alternate state-of-the-art solution/equipments to match the performance and the need of the system at that time of eventuality.	5

4	The proposed enterprise e-Governance platform should comply with the open standards and should work with the commercially available Personal Computers and networks through thin client in a w3c compliant web browser	5
5	Enterprise e-Governance software solution offered by the bidder is GIS enabled.	5
	Total Maximum Points	30

1.24.2 The Technical Bid shall be evaluated from the documents submitted by the bidder in support of the technical bid and shall be weighted as mentioned in the Table-B below:

TABLE-B

SN	Description	Points
A	The Overall approach to the Project	3
B	The deployment methodology	
1	The proposed platform/technology and its appropriateness for NMC	3
2	Maturity of the platform/technology	2
3	Relevance of the features of the proposed solution	2
5	Change management methodology	3
6	Proposed work plan	2
7	Capacity building methodology	3
8	Proposed solution and Network architecture	3
9	Licensing scheme for software during implementation and post implementation for next 10 Years.	3
10	The technology support strategy to the offered solution during its life time including the proposed software application which shall publish standard API to expose underlying database and functional meta data for use by third party application or developers to integrate third party applications that may be	2

	implemented in NMC from time to time	
11	Hardware specifications and sizing along with the networking equipments required for this project	2
12	Implementation, Operation & Management Plans with clearly marked hurdles and criticalities in implementation, management and O&M of project.	2
13	Proposal having consideration of PPP model for this project considering planning for five years from the date of project Implementation	10
	Total Maximum Points	40

1.24.3 The individual bidder/consortium members will present the bid addressing the following aspects on the day decided for the presentation. The content of presentation, explanations & deliberations shall be weighted as mentioned in Table-C below :

TABLE-C

SN	Descriptions	Points
1	Understanding of ULB and citizen centric service delivery	5
2	Proposed solution to ULB	5
3	Soundness and ease of Operation for users	5
4	Innovative approach	5
5	PPP approach for this project	10
	Total maximum Points	30

1.24.4 The Total maximum summated Points for technical bid are 100 i.e.30 (Table-A)+40(Table-B)+30(Table-C). The bidder has to score minimum 70 points out of 100 Points to be a successful bidder.

1.24.5 ORIGINAL Financial Bids of technical complaint bidder will be opened in the presence of the bidder or the representative of the bidder, Additional Dy. Commissioner, City Engineer and Chief Accounts & Finance Officer on the date and at the address and time specified by the NMC.



1.24.6 The Financial Bid submitted by a bidder who or whose representative is present or absent shall be opened and shall be evaluated.

1.24.7 The Bidder shall fill-up the offered value to be paid by NMC to bidder considering the size of solution suitable for three thousand operational users initially and expandable to Five Thousand operational Users in future, following format which will be evaluated and compared for the best lowest offered total value of solution for 3000 operational users.

1.24.8 The cost of application software shall include cost of licencing of network operating system, databases or any other system software that may be required to run the proposed application software.

<b>Item No.</b>	<b>Description of deliverable item</b>	<b>Quote Amount for 3000 Operational Users (INR in Lakhs) In Figure</b>	<b>Quote Amount for 5000 Operational Users (INR in Lakhs) In Words</b>
<b>1</b>	<b>Packaged and Application Software</b>		
	Operating system		
	RDBMS with hot standby		
	Office Productivity Tools		
	e-Mail and Intranet servers and clients		
	Anti-virus and other security systems		
	Geographical Information System web server application		
	Integrated enterprise e-Governance solution including portal		
	Document Management System		
	ESS		
<b>2</b>	<b>Consultancy and other Services</b>		
	ERP implementation, BPR along with usage Training		
	Design and development of NMC		

<b>Item No.</b>	<b>Description of deliverable item</b>	<b>Quote Amount for 3000 Operational Users (INR in Lakhs) In Figure</b>	<b>Quote Amount for 5000 Operational Users (INR in Lakhs) In Words</b>
	Portal		
	DR and Business continuity Plan (BCP) Implementation		
	Capacity building and change management		
	Post implementation support for ERP(2 yrs)		
	Annual maintenance for RDBMS for 2 years		
	Annual maintenance for ERP for 2 years		
	Annual maintenance for GIS web server for 2 years		
<b>3</b>	<b>Other Activities</b>		
	Setting up of CFCs including Hardware, Software, complete Solution and the network Connectivity with Furniture and fixtures at 7 zone offices in a space provided by NMC		
	<b>TOTAL</b>		

The Price breakup for number of modules constituting each deliverable item should be quoted separately (module wise wherever required) to facilitate the payment to the bidder.

1.24.9 The Bidder will note that the total financial layout for the total work of building integrated GIS enabled enterprise municipal e-Governance Suit for NMC and its Post Implementation support for e-Governance Solution for 2 years is as follows and bidder shall remain responsible for deciding the specifications and sizing of the items which are not included in the scope of this tender but essential to

complete and run the project in all respects within the limits of financial layout of Rs.23.35 Crores.

<b>Sr. No.</b>	<b>Description</b>	<b>Estimated Amount (INR in lakhs)</b>
<b>1</b>	<b>ICT Infrastructure</b>	
	IT Hardware – Servers	80
	IT Hardware – PC’s & Peripherals	500
	IT Hardware – Firewall and other Security Components	30
	Creation of Main Data centre	210
	Creation of Disaster Recovery(DR) Data Center	90
	Provisioning of Uninterrupted Power Supply for main Data Center	20
	Provisioning of Uninterrupted Power Supply for DR Data Center	20
	Local Area Networking(LAN) and wireless connectivity at all identified (over 134) offices of NMC.	134
	High Bandwidth Leased line connectivity between NMC and ISP(for 2 yrs)	15
		<b>1099</b>
<b>2</b>	<b>Packaged and Application Software</b>	
	<b>(3000 operational users)</b>	
	Operating system	40
	RDBMS with hot standby	75
	Office Productivity Tools	10
	e-Mail and Intranet servers and clients	20
	Anti-virus and other security systems	20
	Geographical Information System	50
	Integrated ERP Application including portal	300

Sr. No.	Description	Estimated Amount (INR in lakhs)
	Document Management System	10
	ESS	25
		<b>550</b>
<b>3</b>	<b>Consultancy and other Services</b>	
	GIS Implementation	100
	GIS related property Survey	75
	ERP implementation, BPR along with usage Training	100
	Design and development of NMC Portal	40
	DR and Business continuity Plan (BCP) Implementation	10
	Data digitization	100
	Capacity building and change management	25
	Post implementation support for GIS( 2yrs)	15
	Post implementation support for ERP(2 yrs)	50
	Annual maintenance for RDBMS for 2 years	15
	Annual maintenance for GIS for 2 years	15
	Annual maintenance for ERP for 2 years	100
		<b>645</b>
<b>4</b>	<b>Other Activities</b>	
	Setting up of CFCs (at main office and each zone office)	41
		<b>41</b>
	<b>TOTAL</b>	<b>2,335.00</b>

#### 1.25 Bid Evaluation Criteria -

NMC will evaluate and compare the bids that have been determined to be substantially responsive by using the following formula:

$$E_s = (0.7 \times TS_B + 0.3 \times FS_b) \times 100$$

$FS_b$  = Bid amount of Lowest Bidder/Bid amount of the Concerned Bidder

$E_s$  - Evaluated Score

$FS_b$  - Financial Score of the concerned Bidder

$TS_B$  - Technical Score of the evaluated Bidder

The evaluation will be performed assuming that the Contract will be awarded to the Bidder whose Evaluated score ( $E_s$ ) stands highest and is eligible for Contract award after negotiations, provided the Bidder was prequalified and/or it was found to be qualified to perform the Contract.

## **Part II**

### **2 General Conditions of Contract**

#### **2.1 Definitions**

2.1.1 In this Contract, the following terms shall be interpreted as indicated

- a) "The Contract" means the agreement entered into between the NMC and the successful Bidder, as agreed and signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein;
- b) "The Amount" means the amount offered by the bidder for individual item which will be considered for the calculation of bidders total quote value and the same shall be the basis on which NMC will consider amount to be paid to the bidder at the time of

eventuality such as completion of the contract along with the penalties and other dues as per the terms & conditions of the contract for the full and proper performance of its contractual obligations;

- c) "The Goods/products" means all the equipment, machinery, infrastructure, software, firmware, hardware, and /or other materials which the Bidder is required to provide, operate & maintain under the Contract;
- d) "Services/solutions" means services/solutions, such as planning, designing, creation, packaging, testing, deployment, installation, commissioning, provision of technical assistance, training, augmentation, modifications, modernization, bandwidth, data center and Disaster recovery site facilities, etc., and other obligations of the Bidder covered under the Contract;
- e) "GCC means the General Conditions of Contract contained in this section.
- f) *"The NMC(s) or Client(s)" means the organization intending this requirement of provisions & services.*
- g) "The Client's Country" is India
- h) "The Bidder" means the successful Bidder, represented by a firm or a consortium.
- i) "The Project Site", where applicable, means the offices of Nagpur Municipal Corporation, Nagpur, Maharashtra, India
- j) "Day" means 24 Hours of a day.
- k) "Man day" means 8 Hours of a working day
- l) "The bidder" means the firm or consortium offering their quote against this tender with willingness to execute the project successfully.

## **2.2 Application**

These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

## **2.3 Country of Origin**

For purposes of this Clause, "origin" means the place where the Goods are produced, or from which the Services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.

## **2.4 Standards**

The Infrastructure material, equipments, firmware, software and technology to be offered should adhere to the state-of-the-art international standards and Indian standards following the rules & regulations set by the various regulatory authorities of India and when no applicable standard is mentioned to the authoritative standards relating to the goods in the country of origin and such standards shall be the latest issued by the concerned standards certifying institutions in the respective countries of origin.

## **2.5 Use of Contract Documents and Information**

- 2.5.1 The Bidder shall not, without the NMC's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the NMC in connection therewith, to any person other than a person employed by the Bidder in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.



- 2.5.2 The Bidder shall not, without the NMC's prior written consent, make use of any document or information enumerated in GCC Clause 2.5.1 except for the purposes of performing the Contract.
- 2.5.3 Any document, other than the Contract itself, enumerated in GCC Clause 2.5.1 shall remain the property of the NMC and shall be returned (in all copies) to the NMC on completion of the Bidder's performance under the Contract, if so required by the NMC.
- 2.5.4 The Bidder shall permit the NMC to inspect its accounts and records for the last three years, relating to its performance and to have them audited by auditors appointed by the NMC, if so required by the NMC.

## **2.6 Patent Rights**

The Bidder shall indemnify the NMC against all third-party claims of infringement of Intellectual property Rights in any form including patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

## **2.7 Performance Security**

- 2.7.1 At the time of signing the agreement, the Bidder shall furnish performance security of the amount 10% of the total order value in the form of FDR or bank Guarantee from any nationalized bank. The Bank Guarantee Format shall be provided by the NMC.
- 2.7.2 The proceeds of the performance security shall be payable to the NMC as compensation for any loss resulting from the Bidder's failure to complete its obligations under the Contract.
- 2.7.3 The Performance Security shall be denominated in Indian Rupees (INR) and shall be in one of the following forms:
- 2.7.1.1 An FDR issued by a nationalized/scheduled bank located in India or a bank located abroad acceptable to the NMC, in the format provided in the bidding documents or another format acceptable to the NMC.

- 2.7.2 The Performance Security will be discharged by the NMC and returned to the Bidder after every year end for renewal, for the value specified in GCC.
- 2.7.3 In the event of any contract amendment, the Bidder shall, within 7 days of receipt of such amendment, furnish the revised performance security as per the GCC Clause 2.7.4, rendering the same valid for the duration of the Contract, as amended.

## **2.8 Inspections and Tests**

- 2.8.1 The NMC or its representative shall have the right to inspect and/or to test the Goods/solutions to confirm their conformity to the Contract specifications, at no extra cost to the NMC. Technical Specifications shall specify what inspections and tests the NMC requires to be carried out and where they have to be conducted. The NMC shall notify the Bidder in writing in a timely manner of the identity of its representatives / inspectors retained for these purposes and the place of inspection, which shall be the Bidder's premises or manufacturer's premises or the final destination of Goods/solutions as decided by the NMC.
- 2.8.2 The inspections and tests may be conducted on the premises of the Bidder or its consortium Business Associate or its subcontractor(s), at point of delivery and/or at the project site. If conducted on the premises of the Bidder or its consortium Business Associate or its subcontractor(s), all reasonable facilities and assistance, including access to process drawings and product data, shall be furnished to the inspectors at no charge to the Project and NMC.
- 2.8.3 Should any inspected or tested Goods/solution fail to conform to the specifications, the NMC may reject the goods and the Bidder shall either replace the rejected Goods.
- 2.8.4 The NMC's right to inspect, test and, where necessary, reject the Goods after the arrival of Goods at the Project Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the NMC or its representative / inspector prior to the shipment of Goods.

2.8.5 A thorough inspection of the supplied hardware and the software will be carried out by the technical advisor of the NMC. The implementation at site shall be permitted only after the positive approval report of the technical advisor appointed by NMC.

2.8.6 Nothing in GCC Clause 2.8 shall in any way release the Bidder from any warranty or other obligations under this Contract.

## **2.9 Delivery and Documents**

Delivery/provision of the Goods/services shall be made by the Bidder in accordance with the terms specified by the NMC in the Notification of Award

## **2.10 Insurance**

The Goods & Services supplied/provided under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage, working environment, Installation & Commissioning, fire, safety, theft, calamities, performance and delivery in the manner specified.

## **2.11 Bidder office at NMC site**

The successful bidder will be provided with a 700 square feet space to carry out the design and development of the e-Governance software. The bidder will have to bring their own development equipments and tools including the table and chairs. NMC will provide the electrical connection at one point. The bidder will have to make other arrangement to create the development environment.

## **2.12 Transportation**

Where the Bidder is required under the Contract to transport the Goods/Services to a specified place of destination within the NMC limits,

defined as Project site, transport cost to such a place and the insurance, as shall be specified in the Contract, shall be arranged by the Bidder.

## **2.13 Incidental & Back-up Services**

2.13.1 The Bidder may be required to provide any or all of the following services, including additional services, if any.

2.13.1.1 performance or supervision of the on-site assembly/work/training and/or start-up of the supplied/provided Goods/products/services/solutions;

2.13.1.2 furnishing of tools/software/firmware required for running and/or maintenance of the supplied/provided Goods/products/services/solutions;

2.13.1.3 furnishing of detailed installation, implementation, commissioning, operations and maintenance manual for each appropriate unit of supplied/provided Goods/products/services/solutions;

2.13.1.4 performance or supervision or maintenance of the supplied/provide Goods/products/services/solution, for a period of time agreed by the Bidder under this Contract: and

2.13.1.5 training of the NMC's personnel will have to be provided on NMC site, in start-up, operation, maintenance, installation, implementation, commissioning of installed Goods/products/services/solutions to the extent of the involvement of NMC in the execution of the project but the Bidder will ensure the trained persons in the sufficient numbers as specified in the part 2 of this document and as desired for the maintenance of the 99.98% services availability with 99.99% quality of delivery of services.

## **2.14 Spare products**

2.16.2 The Bidder will have to specify the details of the spare products which are to be stocked during the warrantee, Post warrantee and Life period of the solution as recommended by the solution provider/manufacturer along with the process drawings and installation, implementation & commissioning manuals require for running and maintaining the system.

2.16.3 In the event of termination of production of the spare products/software/firmware, up gradation of technology, modernization, augmentation :

The Bidder will ensure that the new version or proper replacement should be implemented with advance intimation to the NMC which is considered & covered to be under life time warrantee or with a mention of cost of replacement.

## **2.15 Warranty**

2.16.4 The Bidder as well as the solution provider/manufacturer warrants that the Goods/Services/products/solutions supplied/provided under this Contract are new, unused, of the most recent or current versions, based on the current standards/specifications available in the market and upgradeable to the standards/specifications up-coming in the market, in accordance with Indian Rules & Regulations applicable on the day and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Bidder further warrants that all Goods/products/Services/solutions supplied/provided under this Contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Bidder that may develop under normal use of the supplied Goods/products in the conditions prevailing in the country of final destination.

2.16.5 This warranty shall remain valid for six months period as defect liability of the product after the Goods/products/Services/solutions or any portion thereof, as the case may be, have been delivered, commissioned and accepted at the final destination indicated in the Contract.

2.16.6 The 2 years post implementation support services being the responsibility of the Bidder the due care of cost implications should be

taken in to account on the revenue loss due to non availability of the services and also the cost implication on support services. It is essential to be noted that the minimum down time will be the essence of the Warranty.

2.16.7 If any system(s) with this software gives continuous trouble, say six times in one month during the warranty period, the Bidder shall replace the software to newer version or upgrades without any additional cost to the project. The Bidder will be required to arrange for an immediate replacement of the faulty items software solution. Failure to arrange for the immediate replacement will make the Bidder liable for a penalty of Rs. **1000/-** per day per service to the maximum of Rs.5000000/-. The amount of penalty will be recovered from the amount to be paid by the NMC against services.

2.16.8 The Bidder will also ensure the round the clock (24x7x365) services of sufficient on-site trained Service Engineers by the Bidder as mentioned in the part 2 of this document.

2.16.9 The suitability of the Service Engineer shall be examined and ascertained by the NMC Authority in-charge of this project or their technical advisor.

## **2.16 Payments**

2.16.1 The methods and conditions of amount to be paid to the Bidder or to be received from the Bidder under this Contract shall be specified.

2.16.2 Goods/products/Services/solution cost :

2.16.2.1 The Bidder's request(s) for payment shall be made to the NMC in writing, accompanied by an invoice describing, as appropriate, the Goods/products/Services/solutions delivered and the Services performed, and by documents, submitted pursuant to GCC Clause 2.10, and upon fulfillment of other obligations stipulated in the contract.

2.16.2.2 Payment will be made only after the positive satisfactory testing report by the technical advisor at every stage that is:

A - Pre-Dispatch testing of goods/products/Services/solutions at the BIDDER premises or at NMC premises.

B - Acceptance Testing after successful deployment & Commissioning

2.16.2.3 C- Satisfactory Performance Testing by NMC.

2.16.2.4 Following will be the installments of payment for equipment

Sr. No.	Description	Payment on Installation and commissioning at NMC site	Payment on Deployment/execution on NMC computers/ Servers	Payment after 180 days of successful functioning
	<b>Packaged and Application Software</b>			
1	Operating system	40%	30%	30%
2	RDBMS with hot standby	40%	30%	30%
3	Office Productivity Tools	40%	30%	30%
4	e-Mail and Intranet servers and clients	0%	70%	30%
5	Anti-virus and other security systems	0%	70%	30%
6	Geographical Information System web server application	40%	30%	30%
7	Integrated enterprise e-Governance solution all Modules including portal	40%	30%	30%

8	Document Management System	40%	30%	30%
9	ESS	40%	30%	30%
	<b>Consultancy and other Services</b>			
10	ERP implementation, BPR along with usage Training	Bidder will quote the total cost of application software and the payment will be made as per the details given in section 2.17		
11	Design and development of NMC Portal	0%	60%	40%
12	Disaster Recovery and Business continuity Plan (BCP) Implementation	0%	60%	40%
13	Capacity building and change management	0%	0%	100%
14	Post implementation support for ERP(2 yrs)	This will be paid at the beginning of each year during the maintenance period against the bank guarantee of equivalent amount		
15	Annual maintenance for RDBMS for 2 years	This will be paid at the beginning of each year during the maintenance period against the bank guarantee of equivalent amount		
16	Annual maintenance for ERP for 2 years	This will be paid at the beginning of each year during the maintenance period against the bank guarantee of equivalent amount		
17	Annual	This will be paid at the beginning of each year during the		



	maintenance for GIS for 2 years	maintenance period against the bank guarantee of equivalent amount		
	<b>Other Activities</b>			
18	Setting up of CFCs including Hardware, Software, complete Solution and the network Connectivity with Furniture and fixtures at 7 zone offices in a space provided by NMC	0%	60%	40%
<b>19</b>	<b>TOTAL</b>			

## 2.17 Module wise payment schedule

Software Module Code	Name of the Software Module	Payment %
M1	PWD	3
M2	Building Permission	4
M3	Birth	2
M4	Sanitation	1
M5	Death	2
M6	Water	2
M7	Property Tax	5
M8	Octroi	1
M9	Education	1
M10	Grievance	1
M11	License	1
M12	SWM	2
M13	FA	4
M14	FR	3
M15	Audit	2
M16	Establishment	2
M17	GAD	2
M18	PRO	1
M19	Fire	1
M20	Estate	1
M21	Market	1

<b>M22</b>	Social Welfare	1
<b>M23</b>	Statistic	1
<b>M24</b>	Election	1
<b>M25</b>	Library	1
<b>M26</b>	Legal	1
<b>M27</b>	Electrical	1
<b>M28</b>	Garden	1
<b>M29</b>	Records	1
<b>M30</b>	Slum	2
<b>M31</b>	Workshop	1
<b>M32</b>	Roads	2
<b>M33</b>	QC	1
<b>M34</b>	HMP	1
<b>M35</b>	Zone	3
<b>M36</b>	CFC	1
<b>M37</b>	Cattle Pond	1
<b>M38</b>	RTI	1
<b>M39</b>	Marriage	1
<b>M40</b>	Committee	1
<b>M41</b>	Plumber	1
<b>M42</b>	Drainage	1
<b>M43</b>	Sports and Cultural	1
<b>M44</b>	JNNURM cell	2
<b>M45</b>	Special desk office	1
<b>M46</b>	Pench	1
<b>M47</b>	Estimate	2
<b>M48</b>	Food	1

<b>M49</b>	Contractor Registration	1
<b>M50</b>	File Tracking	3
<b>M51</b>	Purchase	3
<b>M52</b>	Inventory	2
<b>M53</b>	Portal	3
<b>M54</b>	DashBoard	1
<b>M55</b>	Integration	2
<b>M56</b>	Porting of old data	1
<b>M57</b>	Security	1
<b>M58</b>	HRM	3
<b>M59</b>	DMS	3
<b>M60</b>	Enforcement	1
<b>M61</b>	Development Plan	1

2.17.1 Payments shall be made promptly by the NMC but in no case later than thirty (30) days after submission of the invoice or claim by the Bidder, only after quality inspection and verification by the NMC's representative of the conformity of the goods supplied as per the agreed specifications.

2.17.2 Any incidental Charges agreed under the contract and acceptable mutually shall be paid within 45 Days from the date when it becomes due for payment and proper bills are submitted with desired documentation.

2.17.3 Payment shall be made in Indian Rupees by Cheque drawn on nationalized Bank in the name of bidder.

## **2.18 The Amount payable**

The amount against delivery of goods/products/services/solutions which will be payable to the Bidder as stated in the Agreement.

## **2.19 Change Orders**

2.19.1 The NMC & the Bidder shall decide jointly the changes required to meet the requirement of the time and processes, and will minute the modifications and cost implications where the payment is to be made by the NMC at the agreed prices and accordingly necessary amendment order will be issued by NMC. The Bidder pursuant to GCC Clause 2.31, make changes within the general scope of the Contract with due permission & knowledge of NMC in any one or more of the following :

- a) Process drawings, designs, or specifications, where Goods/products/Services/Solutions to be furnished under the Contract are to be specifically created/manufactured/designed for the NMC;
- b) the method of shipping or packing;
- c) the place of delivery; and/or
- d) the Services to be provided by the Bidder.

2.19.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Bidder's performance of any provisions under the Contract, an equitable adjustments shall be made in the Price to be paid by NMC or delivery schedule, or both, and the Contract shall accordingly be amended on time to time basis . Any claims by the Bidder for adjustment under this clause must be assessed within Sixty(60) days from the date of the receipt of the NMC's change consent by the Bidder.

## **2.20 Contract Amendments**

Subject to GCC Clause 2.18, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

## **2.21 Assignment**

The Bidder shall not assign, in whole or in part, its obligations to perform under the Contract, except with the NMC's prior written consent.

## **2.22 Subcontracts**

The Bidder shall notify the NMC in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Bidder of any liability or obligation under the contract.

## **2.23 Delays in the Bidder's Performance**

2.23.1 Delivery/Provision of the Goods/Products/Services/Solutions and performance of the Services/Solutions shall be made by the Bidder in accordance with the time schedule agreed mutually and specified in the Agreement to be arrived at.

2.23.2 If any time during performance of the Contract, the Bidder or its sub-contractor(s) should encounter conditions impeding timely delivery/provision of the Goods and performance of Services, the Bidder shall promptly notify the NMC in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after the receipt of such notice, the NMC shall evaluate the situation and may, at its discretion, extend the Bidder's time for performance with or without a penalty, in which case the extension shall be ratified by the parties by amendment of the Contract.

2.23.3 Except as provided under GCC Clause 2.25, a delay by the Bidder in the performance of its delivery obligations shall render the Bidder liable to the imposition of a penalty as well as seeking enforcement of Performance Security, pursuant to GCC Clause 2.22.2, unless an extension of time is agreed upon pursuant to GCC Clause 2.22.2 without the application of penalty.

## **2.24 Penalty Clause**

Subject to GCC Clause 2.25, if the Bidder fails to deliver/provide any or all of the Goods/products or to perform the Services/solutions within the period(s) specified in the Agreement, the NMC shall, without prejudice to its other remedies under the Contract, deduct from the amount to be paid to Bidder, as penalty, a sum of **Rs 5000/- per day** per item/service/module

of solution until actual delivery/provision/delivery of Service or performance, up to a maximum deduction of Rs 5000000/-. Once the maximum is reached, the NMC may consider termination of the Contract pursuant to GCC Clause 2.24.

## **2.25 Termination for Default**

2.25.1 The NMC may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Bidder, terminate the Contract in whole or part:

- a) if the Bidder fails to deliver/provide any or all of the Goods/Products/Services/Solutions within the period(s) specified in the Contract, or within any extension thereof granted by the NMC pursuant to GCC Clause 2.22; or
- b) if the Bidder fails to perform any other obligation(s) under the Contract.
- c) If the Bidder, in the judgment of the NMC, has engaged in corrupt and / or fraudulent practices in competing for or in executing the Contract.

For the purpose of this Clause:

**Corrupt practice** means the offering, giving, receiving or soliciting of any thing of value to influence the action of the NMC, its agents, employees or Office Bearers in the procurement process or in contract execution.

**Fraudulent Practice:** a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the NMC, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive, levels and to deprive the NMC of the benefits of free and open competition;

2.25.2 In the event the NMC terminates the Contract in whole or in part, pursuant to GCC Clause 2.24.1, the NMC may procure, upon such terms and in such manner as it deems appropriate, Goods/Products/ Services/solutions similar to those undelivered, and the Bidder shall be liable to the NMC for any excess costs for such similar Goods or Services.

## **2.26 Force Majeure**

- 2.26.1 Both parties shall not be responsible for any failure to perform due to unforeseen circumstances or to causes beyond their reasonable control, including but not limited to acts of God, war, riot, embargoes, acts of civil or military authorities, fire, floods, accidents, terrorist activity, strikes or shortages of transportation facilities, fuel, energy, labor or materials, In the event of any such delay, either or both may, after giving a due notice, defer the delivery date for a period equal to the time of such delay.
- 2.26.2 Having regard to the commitments of either party to other third parties, either party shall intimate to the other in writing the likely period of suspension of fulfillment of its commitments and the likely date of resumption of the operations.

## **2.27 Termination for Insolvency**

The NMC may at any time terminate the Contract by giving written notice to the Bidder, if the Bidder becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Bidder, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the NMC.

## **2.28 Termination for Convenience**

- 2.28.1 The NMC by written notice sent to the Bidder, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the NMC's convenience, the extent to which performance of the Bidder under the Contract is terminated, and the date upon which such termination shall become effective.
- 2.28.2 The NMC will Pay amount to the Bidder for the Goods & Services already executed by the BIDDER up to the effective date of termination according to the agreed exit formula.



## **2.29 Resolution of Disputes**

2.28.3 In case of any dispute between the NMC and the Bidder, due notice will be given in writing by the aggrieved party and a due process of resolution will be attempted by both sides. If no resolution is reached within a period of not more than 2 weeks, due process of arbitration will be followed and Arbitrator will be appointed under the governing arbitration act of India. The decision of the Arbitrator shall be final and binding on the NMC and Bidder .

## **2.30 Governing Language**

2.28.4 The contract shall be written either in English or in Marathi language. Subject to GCC Clause 2.30, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

## **2.31 Applicable Law**

The Contract shall be governed by and interpreted in accordance with the laws of the Union of India.

## **2.32 Notices**

Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing by e-mail/facsimile and confirmed by original copy by registered post / courier service to the other Party's address specified in the contract document

2.28.5 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

### **2.33 Taxes and Duties**

Bidder shall be entirely responsible for all taxes, duties, license fees, Octroi, road permits, Insurance etc., incurred until delivery of the contracted Goods/Products/Services/Solutions to the NMC. However, any tax in respect of the transaction between the NMC and the Bidder shall be paid extra by NMC, if so stipulated in the Notification of Award.

### **2.34 Binding Clause**

2.28.6 All decisions taken by the NMC regarding the processing of this tender and award of contract shall be final and binding on all parties concerned and shall not be challenged in any Court of Law or other judicial forum.

### **2.35 Labour Liabilities**

The bidder shall appoint his own skilled and unskilled staff for running the project entirely at his own cost and consequences. The bidder shall abide by all provisions of Labor Laws, Minimum Wages Act, Labour Contract Act, etc, and other applicable acts. The bidder will have to undertake all liabilities and responsibilities as the employer of his employees and shall indemnify the corporation from all the liabilities as a principle employer during the tenure of this project.

### **2.36 Cyber Laws**

The bidder shall indemnify the corporation from all penal and criminal liabilities arising out of breach of the provisions of cyber law and other applicable laws during the process of delivering services over the infrastructure built for providing these services by them or by the persons they will be employing, for running the project, to various citizens, clients in NMC area including NMC's in house users. The bidder shall assure the corporation to keep aside from all legal liabilities and penal actions that

would be caused due to the actions of their employees and the user(s) responsible for committing the crime covered under the cyber laws or any other law.

### **2.37 Jurisdiction:**

2.28.7 For all the legal purpose the Jurisdiction shall remain confined to the Courts of Nagpur.

### **2.38 Exit Policy**

2.38.1 At the time of exit under the agreed or forced circumstances, the proper evaluation of assets & liabilities, penalties, market & brand image loss, Business proposition of that instant, amounts payable and receivable among the NMC & Bidder, market dues recoverable and the non recoverable debts, status of warrantee, the technology update, etc. shall be worked with the help of NMC's Technical Consultants, Chartered Accountants, Tax Consultants and financial analysts as per the guidelines set by the NMC and shall remain acceptable to the exiting Bidder.

2.38.2 The transfer loss due to the price & terms & conditions offered by the new incomer Bidder shall be charged to the account of the exiting Bidder.

2.38.3 The payment to the Bidder shall become due, if any, after settlement on all accounts and shall be made within 60 days from the date of settlement of last disputed issue by NMC.

2.38.4 The Bidder shall submit the documentation as follows:

2.38.4.1 The valid insurance policy documents.

2.38.4.2 Copies of the Bidder's invoice mentioning the clause of agreement to pay or accounting purpose only, showing Goods/Products/Services/solutions description, amount, total amount, life lived, total life year of the goods/products/Services/solutions, now claimable value.

2.38.4.3 Bidder's warranty certificate;

2.38.4.4 Inspection Certificate issued by the nominated inspection agency, and the Bidders test report; and

2.38.4.5 Certificate of Origin

### **2.39 Bidder's Obligations**

The Bidder is obliged to work closely with the NMC's staff, act within its own authority and abide by directives issued by the NMC.

A joint management committee (JMC) shall be formed constituting three NMC officials including the technical advisor/consultant appointed by the Commissioner of NMC and the three representatives of the Bidder. In addition to these six members, the Commissioner of NMC shall remain permanent chairman of this committee and his decisions will be final.

This committee will be responsible for deciding and formulation of policies related to the services to be offered under the NMC services and shall also monitor the quality and performance of the services to be rendered by the solution/service provider to the citizens in the City and within NMC staff.

This Joint Management Committee shall also be responsible for addressing the complaints from the users and giving proper solutions to the problems to make the entire system user friendly and performance oriented to help NMC in meeting the objective and achieving the vision concept.

The Bidder will abide by the job safety measures prevalent in India and will free the NMC from all demands or responsibilities arising from accidents or loss of data/ life the cause of which is the bidder's negligence. The Bidder will pay all indemnities arising from such incidents and will not hold the NMC responsible or obligated.

The Bidder is responsible for managing the activities of its personnel or sub-contracted personnel and will hold itself responsible for any misdemeanors.

The Bidder will treat as confidential and in strict confidence all data and information about the NMC, obtained in the execution of his responsibilities and will not reveal such information to any other party without the prior written approval of the NMC.

### **2.40 Software Installation**

The Bidder is responsible for installation of firmware/software on the various hardware units and implementation of process within NMC offices. Bidder

will test all software operation and accomplish all adjustments necessary for successful and continuous operation of the software solution/firmware at all installation sites and processes.

# **Request for Proposal**

**To build integrated GIS enabled  
enterprise municipal e-Governance  
Suit**

**+**

**and Post Implementation support for  
e-Governance Solution for 2 years**

**Part II**

**General Specifications and  
Technical specifications**

**Nagpur Municipal Corporation**

## **1 Preamble**

This Part of RFP deals with General and Technical specification of the Integrated e-Governance suit to be delivered to NMC.

Nagpur Municipal Corporation is an Urban Local Governance Body. It is committed to provide transparent, accountable and efficient local governance through the use of modern technologies especially in management and administration fields. It has decided to embrace Information Technology in the form of E-governance as a tool towards this goal.

NMC covers an area of over about 217.56 Square Kilometers, catering to the civic needs of over 2.5 million citizens. The Corporation operates an annual budgetary outlay in excess of Rs. 800 Crores. Most of the functions carried out by this Corporation are service oriented. The services offered include Sanitation, Health, Community Services, Water supply, Secondary & Primary Education, Town Planning and Fire fighting, etc.

There are 136 wards across Nagpur through these services are rendered to the citizens. There are 56 departments & sub-departments including 11 Zone offices in all functioning in tandem to ensure the services to the citizens. Better IT systems are required to integrate all the workflows seamlessly for a faster and efficient service to the citizens, employees, administrators, Office bearers and ward councilors.

Section 1 list downs General Features required in the proposed solution, while Section 2 gives the Detail Software Functionality Scope and section 3 gives the list of additional services to be delivered and section 4 deals with relevant Annexure.

### **Goal**

The objective of the current project is to provide efficient services to citizens, administrators and corporators by implementing integrated solutions like Integrated Project Development and monitoring for Municipal e-Governances to enable NMC's processes and workflows. The key objectives of these solutions are as follows:

- Facilitate the decision making process of top management by furnishing the relevant information. Identify the source of problems in the system so that prompt remedial measures can be taken.
- Highlight the critical factors to be monitoring for the successful functioning of NMC.
- Provide requisite information at each level of management to carry out their respective function.



- Provide a system of people, computers, procedures and documents for collecting, storing, retrieving and transmitting information to the users.
- Streamline the reporting procedures and eliminate the current duplication of reports being generated.
- Enable NMC to submit detailed information required by various departments of Government of India, Government of Maharashtra and the Urban Development Department in the prescribed formats.

### **Brief Overview of the Nagpur City**

Nagpur is the second capital of Maharashtra and is located in the geographical centre of India. It is also the administrative, educational, Financial and cultural centre of Vidarbha region and is also well connected by road, rail and air transport and is accessible from all parts of the country. Nagpur is rich in minerals, has a thick forest cover and fertile agricultural lands. It being strategically located offers tremendous potential to be developed as a strong industrial nucleus of central India, transport hub and a strong aviation base in the country. That Nagpur has realized this potential avenue for development is evident from the MIHAN project and the Sahara City project and of course the bubbling effervescent five star industrial estate of Buti Bori.

Considering the non planned development in the central areas of Nagpur and along the main corridors of the city, the ever growing population has put a great strain on the available infrastructure. The growth in the automobile population has further burdened the already strained road infrastructure. There is a growing resentment in the people on the effects of congestion and pollution in the city.

### **Status of NMC Physical Infrastructure**

The Nagpur Municipal Corporation main administrative building is situated in Civil lines. This building has no of Departments namely GAD, Health, PWD, Projects, Development, Construction, Slum and Slum rehabilitation authority, Education, Fire, Legal, Garden, CFC, CAFO and Committee section. All other departments are situated in town at various places which includes water works, Town Planning, Octroi, Property Tax, Schools, Hospitals , Dispensaries, Workshops, Hot mix plant, sewerage Treatment Plant, Water treatment Plants, Zonal offices etc.

Other than this there are several markets, Shopping complexes, Malls, Cremation Grounds, etc are also covered under NMC estates and properties. Most of these Locations are used for generation of revenue for NMC other than property tax and Octroi.

The total construction and management of assets and generation of revenue along with expenditure on operation and maintenance is looked after by all these departments.

In addition to these departments the roads, culverts ,gardens, Libraries, Samaj Bhavans, reading rooms, drainage lines, water pipelines, storm water system , street lights, Hospitals, schools are also the properties looked after by NMC. The total NMC properties listed with the Estate department are more than 2500.

### **Baseline information on the department wise list of transactions**

We have conducted a detailed analysis of the functioning of all departments and prepared the department wise list of base line figures. These figures indicate the current operating efficiency for the weekly monthly and yearly transactions. The detailed table is attached in Annexure 1

### **Current Status of Computerization**

Octroi Department: Out of the 35 Octroi posts only 6 Octroi Posts are having client server systems operating on decentralised databases. The data is generated in local systems at each Octroi post and later on at a particular time asynchronously it is sent to central database for consolidations. All the data from the different Octroi post is collected using different methods like, through a wireless link, Broad band, Lease lines and through a CD ROM media. The details of connectivity between Octroi central office and other locations is as given in Annexure 2.

Finance & Accounting department uses tally software in independent stand alone mode to update financial transactions using double entry method.

Fire & Disaster management department uses a bulk SMS system to alert citizens in case of any emergencies or disaster.

The procurement function has an e- Tendering facility where by bidders, contractors & vendors upload download tender online on [www.nmctenders.com](http://www.nmctenders.com)

A data Acquisition System (SCADA) is used by Water Works Department to acquire data related to flow of water.

Health Department is using very basic web based citizen Information system such as:

- Call centre facility for health related information and guidance to citizen
- SMS services for epidemic
- SMS services for group specific blood donors list
- Web based display of registered clinics and hospitals

- Web based list of non hygienic hotels with photograph

Birth & Death: Certificates are issued through tailor made software & database management is done. Certificates are still issued physically across the counter.

Tax Department: Bills of property tax are generated, with tailor made software of each property. This software works in isolation of the linkage to Finance and accounts. To assess properties in the town and to keep the track of new developments the Geographical Information System based mapping is in Process. All the properties are surveyed and documentation is getting ready.

The data for Water supply, Sewerage and storm water (Under ground utilities) is partially ready and need to be integrated in current GIS system. The data is prepared using Electronic Total station along with essential attribute information.

### **Current Status of ICT Infrastructure**

The Science and Technology Park team conducted a series of one to one meetings with the NMC staff members across all the departments. The team collected relevant data from Fifty Six departments & sub-departments including Zone offices of the NMC. Based on the above interaction and collection of data, it can be concluded that there is suboptimal and ad-hoc usage of ICT tools in the functioning of various departments. The department wise usage of the ICT can be understood from following table.

Our study further reveals that internet connectivity is only available in the Municipal Commissioner's office.

There are Four Citizen facilitation Centers (CFC) out which One is at the Head Quarter and rest three are at Zone offices namely: Aashi Nagar, Lakadganj, Gandhibagh and all the three are connected with Head Quarter at 512KBPs lease Line.

The Octroi department however is using internet connectivity and wireless connectivity with major octroi post for data consolidation and control on material on transit.

NMC is having wired telecom connectivity through a Centrax Exchange that links all the zone offices with a three digit extension number.

The NMC civil line building is having a Local Area Network (LAN) and all the departmental heads are using intranet for their official communication.

The new building currently being built next to the existing building is having all the provisions for Building Management System, EPABX & Local Area Network and server room. The NMC now require a fully secured consolidated Internet and Intranet

communication network having presence all over the city at the NMC establishment and public places to ease out citizens to interact with NMC.

No	Name of department	No of Computers	No of software
1	Education	06	06
2	Slum Rehabilitation	01	00
3	Estate	02	00
4	Town Planning	03	00
5	Committee Section	04	00
6	JnNURM	08	00
7	Accounts and Finance	08	02
8	Fire Brigade	02	04
9	General Administration	16	00
10	Garden	02	00
11	Health	06	06
12	Library	02	02
13	Octroi	15	01
14	Market	01	00
15	Legal	01	00
16	Lighting	05	00
17	Social Welfare	01	00
18	Public Works	08	08
19	Water Works	01	03
20	Traffic	02	00
21	Tax & Assessment	09	01

The exact number of PCs, Laptops and servers in operation at present in NMC are tabulated below

IT Infrastructure	Quantity
PC's	103
Laptops	30
Printers	54
Servers	08
Hubs/switches	20
Internet connections	20
Mail IDs on NMC domain	Nil

The case is made out for the establishment of a centralized fully secured consolidated Internet and Intranet communication backbone.

### **Current ICT Gap**

After analyzing the current state of operations in delivering the work and keeping the record in place is time consuming, clumsy and far behind the current trends available in practice at the leading citizen centric city management system which is achieved through computerized data acceptance, management, documentation and delivery systems including easy to access data storage system.

The biggest disadvantage is the information remains in files and unless somebody desires it can not be retrieved or statistically studied or brought to the notice of executers that one must look into the urgency of matter stored in the files.

Most of the records can not be co-related hence are getting duplicated and in some cases multiplied. This also multiplies to various similar activities and expenditure too.

NMC wish to deliver prompt service to Citizens & business sectors, but remains handcuffed to the legacy Snell system which referrers to files and procedures which move with the movement of files.

So undoubted system required is the electronic data storage & retrieval system a data center where entire record can be stored and shall be available to every authenticated user.

Today the time required to retrieve the file from record section is minimum 5 days means 35 working hours and to keep file in place is another one day or 7 Hours.

This can be avoided and the system can be made efficient by adopting integrated e-Governance system on one platform and with unified database and seamless connectivity between the NMC establishments. It is needless to mention that the revenue collection and expenditure system need close linkages to the Audit and accounts system for better fund planning and resource management.

To build the citizen centric eco system in the over all administration, NMC is planning to build working system around Geographical identity. To achieve the desired working system the most modern technique of Geographical Information system will be implemented first so that all the development and processes will be connected to each other through the GIS platform. The GIS will incorporate and integrate all the Business user groups under one umbrella with Spatial and non spatial data. All the Business user groups will follow one Map for all references for its day to day functions, analysis and for decision support system. The GIS will be implemented for all important departments. GIS based decision support system will bring the tremendous benefits to following departments

- Property Tax, PWD, Projects, Traffic & Roads, Water Supply, Lighting
- Slums & Rehabilitation, Civil, Disaster management, fire, Estate and Market
- Town Planning, Garden, Transport ,
- Storm Water, Election, City Developments and Sewerage management

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

### **Project Definition**

The primary focus of the proposed project is to provide the Integrated e-governance solution and maintain the project for two years post warranty period. The major objectives being the delivery of various services to citizens online and thereby reduce the citizen footfalls at the NMC offices. The delivery of these services given below and the list given in section 4.0 forms the core of the e-governance implementation plan at NMC.

- On line Registration and Issue of Births/ Deaths Certificate

- Utility Bills and Management of Utilities that come under the NMC.
  - i. Payment of Property Tax,
  - ii. Water Supply and Other Utilities
  - iii. The NMC infrastructure Lease
- Building Approvals, Inspection during the completion of plinth level and final compliances.
- Planning, Designing, Tendering, Execution and Monitoring of Projects & Works
- Problem Analysis, estimation, execution monitoring and Certification of Ward wise Project and works
- Health and Sanitation Programs
- Licenses
- Solid Waste Management
- Accounting System
- Personnel Information System
- Education

The detailed functional and system scope of each module to be developed will be finalized by the Implementation Partner with due interactions with project assigned NMC officials. The Nagpur Municipal Corporation proposes to deliver citizen centric services through an Integrated Service Delivery Portal. Access to this portal shall be either through the internet or Intranet or for those citizens not having online access to the portal may visit the nearest Citizen Facilitation Centre or Kiosk that will be set up across the city.

The NMC administration shall benefit from being able to perform value added work since most of the manual repetitive work involved in service delivery to the citizens would be automated.

### **Concept**

The Integrated e-Governance Infrastructure aligns completely with the clearly set well laid out priorities of e-governance in the JNNURM reform guidelines

- Promote people-centric administration - Common citizens to get the benefits of the system of accurate billing and avoidance of corruption
- Move from process accountability to productivity accountability and from transactional to transformative governance - The process is computerized to increase productivity. Each department of the corporation has reports giving exact statistics of how accountability is achieved through the system.

- Reduce delays and ensure promptness in delivery of services through computerization - This will ensure timely delivery of accurate service.
- e-Administration - Improve administrative processes by cutting cost, managing performance, making strategic connections within the local bodies and creating empowerment.
- e-Services - Connecting citizens to the local government by talking and listening to citizens, supporting accountability and democracy, and improving public services.

## Scope

The Integrated e-Governance Applications Suite is an amalgamation of various integrated information systems that will deliver citizen centric services. It is a layered interconnected application architecture that is shown in the schematic below:

### Functional Components

#### **1. Services Delivery Portal**

This is the web based interface that the citizen will use to apply for and get delivered the various municipal services. Viewing and paying property / water tax bills online, applying for and receiving birth / death certificates, etc.

#### **2. Executive Information System ( Digital dash Board)**

The digital dashboards layer shall enable the decision makers in NMC to view information regarding various departments, projects or status of various service requests and non conformance of defined timelines in the form of drill down dash boards. These will be available as information cubes with the information being presented in easy to understand charts and tables with drill down capabilities.

#### **3. Document Management**

NMC holds a vast quantity of physical documents that are currently in the process of being scanned and archived to enable them to be digitally retrieved whenever required and also to protect and preserve the physical documents from being worn out due to heavy usage.

#### **4. Integrated e-Governance solution/ Suit**

The ERP Suit comprises of applications that automate the transaction processing of the core NMC departments as given below. It is an integrated



GIS based Enterprise wide Resource Planning suit of applications which is the heart of the proposed e-Governance Infrastructure Architecture

- GIS based Building Permission Management System.
- GIS based Assets & Works Management System
- GIS based Property & Water Revenue Management System.
- NMC Services Portal.
- Citizens Grievance Monitoring System.
- Solid Waste Management System.
- Stores & Inventory Management system
- Vehicle Workshop Management system.
- File Tracking System.
- Food Licenses Management System.
- Security Management System.
- Public Auditorium Management System.
- Assets Management System.
- Stores & Inventory Control.
- Double entry Accounting System
- Personnel Management
- ESS

### **Performance metrics in regard to e- Governance in NMC**

The performance of the proposed system can be monitored based on the following parameters. NMC expects Bidder to provide various reports based on following performance measurements parameters

- The effective man-hours saved-
- The effective paper use is reduced-
- The effective revenue collection increased -
- The effective expenditure is controlled -
- The bills on Citizen services delivered
- The bill on medicine is reduced by effective control on epidemics
- The bill on transport fuel is reduced by effective use of Vehicles and less transportation between various offices for meetings
- The bill on utility services are controlled
- The bills on energy consumption is reduced and controlled
- The effective use of environmental expenditure and growth in CDM

## **Part II**

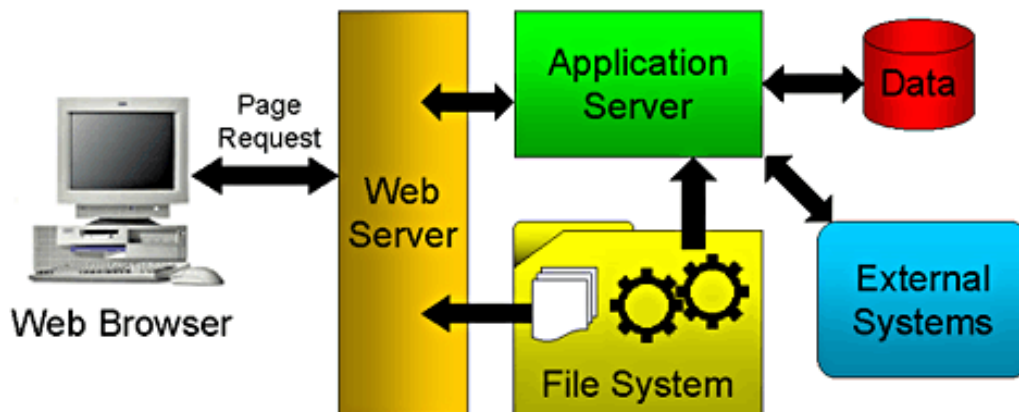
### **3 General Specifications**

## General Features for the proposed e-Governance solution

We recommend following technology standards to be used while building the integrated software system. At the same time if bidder wants any variation then it has to be substantiated with the adequate justification in writing. The decision of the technical consultants appointed for this project will be final and binding on the bidder.

### 3.1 Architecture

- Proposed Software system should have n-tier internet architecture with web enabled user interface through W3C compliant Web Browsers.



The presentation logic should be decoupled from the business components logic

### 3.2 Relational Database Management System

The final selection of RDBMS should be based on the following considerations:

- Robust and Industrial Strength
- Conforms to all the thirteen 'Codd's Rules'
- Often used in OLTP and online environments
- Supports GIS data type extensions
- Low Licensing Costs
- Paid support available, if required at very small cost
- Very mature, Industry proven
- 100% Unicode compliant for regional language support.
- Highly intuitive and user friendly administration tools

- Highly scalable – Clustering and Mirroring are inbuilt supports.

### **3.3 HTTP Server**

- The Apache Foundation's Apache web server is the web server of choice

### **3.4 Application Server**

A robust industrial strength application server like the Apache Geronimo is chosen as the J2EE / Application Server and java container.

- Fully certified J2EE/ server
- Completely modularised
- Based on Inversion of Control
- SOAP compliant
- Clustering, Load balancing & Failover
- Available under the Apache License

### **3.5 Map Server**

The University of Minnesota's Map Server is chosen to deliver the GIS maps along with the non spatial data to the web.

- GIS enabled web applications platform
- Widely adopted (<http://mapserver.gis.umn.edu/gallery> )
- Advanced cartographic output
- Supported and used by NASA
- Works with standard GIS file formats
- Highly secure
- Easy to administer and maintain

### **3.6 Object Relational Mapping**

This enable application to run on database agnostic platforms and remove dependence on database licensing, an object relation mapping layer (ORM) is proposed to be used. Hibernate is the worlds leading open source ORM tool.

- Makes applications database agnostic
- Easy to use framework for mapping an object-oriented domain model to a traditional relational database
- Available as a free download including source
- Database portability
- Paid support from Red Hat available

- Eclipse IDE plug-in for Hibernate available for easy programming

### **3.7 Programming Languages**

The Java 2 Enterprise Environment has been chosen as the programming language for the development of the Integrated e-Governance Application because of following reasons.

- Most widely used programming platform for the Web
- Fully supported by Sun, IBM, etc.
- Java released as GPL by Sun
- Industrial Strength and Robust application development
- Highly intuitive Eclipse IDE (Integrated Development Environment) for developers

### **3.8 Network Operating System**

Linux adhering to POSIX, SUS, ISO and ANSI standard is the Network Operating system (NOS) proposed to be used on the server side.

### **3.9 User Interface**

The user interface should support standard operating systems for display and storage and should be available on any commercially available Web Browsers such as Internet Explorer /Netscape/Mozilla/ firefox, etc.

- All Inputs & Outputs should be in English and Marathi (Unicode)
- Single Sign-on for accessing all the modules using the LDAP Services
- Any item of data needs to be entered once and is then made available as often as necessary to all the systems that need to use it
- All modules should be homogeneous with respect to Keyboard use, screen layout and menu operations with Graphic User Interface (GUI) support
- GUI Form Administration should support
  - Changing fields or tab labels
  - Hiding fields or tabs.
  - Changing the position or size of field or labels
  - Adding restrictions like mandatory or not
  - Setting default value in a field
  - Changing list of value (LOV) contents

- Capability to setup logic to trap conditions to pop messages in response to conditions like logical data entry errors, certain conditions etc. For example State is Maharashtra and Country is India
- Ability to provide these configurations down to the user level so that the screen can be made to have different functionality for a given user
- Discrete information can be consolidated from a number of systems as required to produce reports and carry out ad hoc analysis and reporting. RDBMS Capabilities such as enterprise reporting, analysis & business Intelligence should be used wherever possible

### **3.10 Data Volumes**

The system is expected to handle all the transactions currently handled by NMC in the proposed areas. The Intranet system usage will be spread over 10 zone offices + 04 offices buildings ( Property tax, Octroi, Water works and STP) remaining 120 office locations will be using the software through internet.

### **3.11 Internal Users**

Number of e-Governance solution users will be 3000, which may increase over a period of time to 5000.

### **3.12 Access & Data Security**

- Role based authentication through LDAP to various functionalities mentioned in different modules with encrypted passwords. Rights can be given to Individual Users or Groups. Employees should be provided with Single Sign On & Integration with existing workstation is must.
- User rights to various forms should be either Create New Record or View existing Record or Edit existing record.
- System should be easy to support and tamper proof
- Should capture exceptions to detect frauds / mistakes
- An audit trail of changes to data in the system shall be maintained to identify the users responsible for the modification. There should be a facility to create reports on audit logs.
- Information Security i.e. Integrity, Confidentiality & Availability of data to be maintained.

### **3.13 Scalability**

The Project will mark beginning towards building Information Base for tomorrow's hi-tech Nagpur. It is thus imperative that the Application Software has the capability to scale up to tomorrow's requirements like given below :

- The proposed software application shall publish standard API to expose underlying database and functional meta data for use by third party application or developers to integrate third party applications that may be implemented in NMC from time to time
- System should be built using Service oriented, Open Architecture
- It should be possible to add more fields to the data input screens for capturing additional business specific information without having to write any code
- Capability to modify existing forms to suit the requirements without requiring additional development tools
- Managing the entire Property Life Cycle (Data Collaboration between various govt. departmental systems right from Land Records Department, Registration Department, Building Permission Department, Property Tax Department, Water Department, Licenses Department, Electricity Department, etc.).
- Maintaining Information on Citizen Life Cycle (Right from Birth, Health, Education, Interactions with NMC, Death)

### **3.14 General**

- The system requires continuous availability (24 \* 7) and with 99.98% availability
- System should store and display defaulted values
- The system shall be designed in such a way so as to ensure that the loss of data is minimized due to network 'drop outs'.
- Automatic refreshing of data at specified time intervals. The information shall be refreshed from the database and shall not require user intervention
- System should provide a user driven data archiving capability, with support for flexible archiving periods and selected tables
- System should have an online help capability, which should be customizable. Should have a facility for online learning and collaboration
- All reports should be query based and should have options line departments, wards, employee's Designation, etc.
- NMC Users will access the system using following type of connectivity :

- 10/100 MBPS Ethernet LAN
- 64/128 KBPS broadband from 120 offices
- 2 MBPS connection from 14 offices
- 10/100 MBPS Intranet

### **3.15 Performance Testing Benchmark Environment**

For the performance testing benchmark environment, NMC shall determine the quantitative response time requirements and the method of conducting the performance testing during the design phase. NMC shall consult with the Bidder in the development of the System Performance Testing Benchmark Environment and the Performance Requirements.

The system performance across all modules/sub systems must not degrade by increasing the number of nodes on the Network or the number of users accessing the system (whether simultaneously or not).

### **3.16 System Persistency**

There are many remote users entering information into system. These remote users will be prone to 'dropping out' due to network communication failures. This may result in the loss of data already entered. The system shall be designed in such a way so as to ensure that the loss of data is minimized due to the network 'drop outs'.

### **3.17 Automatic Refreshing of Data**

There are several windows specified in the system that require the data to be automatically refreshed at specified time intervals. The information shall be refreshed from the database and shall not require user intervention.

### **3.18 User Access Control**

The system must provide the means to control and restrict the system access to critical and confidential data. Security / User Access Controls are required at the following levels:

- Sub-system
- Function
- Buttons / Hyperlinks on a Window
- Fields on a Window



- Data Records
- Role in Corporations

The user access control capability shall support the limiting of access to certain objects, and the filtering records of certain objects based on the user role, and the user's attributes, including position of person in the organizational hierarchy.

The system administrator will have the ability to:

- Create new roles
- Give a role access to an object, and where applicable define the level of access

Define the Access Filter that will be used by a particular user role when accessing the object. The Access Filter will limit the user to a subset of records of that object, based on the user's attributes.

### **3.19 Audit Trails**

An audit trail of changes to data in the system shall be maintained. Any change made in any record shall be stamped with and logged. Transactions modifying critical data must record an audit trail to identify the user responsible for the modification. The audit trail must operate on nominated Tables and Data Items. There should be a facility to report on audit logs.

### **3.20 Data Archiving**

The system should provide a user driven data archiving capability, with support for flexible archiving periods and selected Tables.

### **3.21 Solution Support**

The system should have an online help capability, which should be customizable. The proposed system should have facility for online learning and collaboration.

### **3.22 Project schedule:**

The Solution provider ( System Integrator) will be implementing the entire project in 12 colander months. The capacity building and the project

monitoring phases will run through the project execution cycle Following chart gives the details of implementation phases.

Activity	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Project initiation phase	■	■										
Software development and AGILE delivery			■	■	■	■	■	■	■	■		
Software Integration						■	■	■	■	■		
Go live phase									■	■	■	■
Tracking and monitoring	■	■	■	■	■	■	■	■	■	■	■	■
Project closure												■

**Note: Various Software modules should get implemented between 3<sup>rd</sup> to 10<sup>th</sup> month**

### 3.23 Interface to existing systems

Proposed system should be able to push and pull the data from existing SCADA ,GIS system and Octroi systems at the same time should be able to convert and accept the old legacy data available in Oracle RDBMS.

### 3.24 GIS Data attachment to the system

Geographical Information System provides the technology glue between spatial and non-spatial data. Planning of infrastructure projects should be done by using GIS enabled spatial data and non spatial data. Some services like property and water tax, infrastructure project planning, citizen grievances, etc are better provided using GIS data. GIS involves the digitization of satellite images and the attachment of non spatial data to the digitized images.

**Note:** The Ground survey, Procurement of satellite image and the ground truthing in not in the scope of this project

**3.25 The Integrated e-Governance Solution provider is expected to**

Use the GIS data for addressing all the works to be executed or the works already executed in past. All the properties of NMC shall be linked to the GIS system for every change in the status. The intensions are to check the financial outlays under works, maintenance, construction, renovation, modernization, dismantling, reconstruction etc for this purpose the bidder will have to study the available information with various departments such as city engineer office, water works office and property tax office.

## **Part II**

### **4 Technical Specifications**

## Detailed Technical Requirements Specifications

Module wise detailed functionality requirements based on the current practices is as given below. However supplier is required to go through the To-Be process documentation for further details. The proposed system should facilitate the process and functions and workflows as per the To-Be document. Supplier is also required to study the current forms and formats of data storage and retrieval and develop new reports as per the international best practices. The proposed Integrated e-Governance system should provide following including but not limited to functionalities. In the section starting from 4.1 onwards we have included functional requirement of some of the modules. This is indicative list and not a complete list of functionalities required.

### Deliverables

In addition to the Names of the modules mentioned above sections NMC has considered all the departments of NMC for design and development of integrated e-Governance solution. E-governance application is expected to incorporate all processes and complete functioning of all the departments and sections of Nagpur Municipal Corporation. This list is indicative and not exhaustive

#### List Of e-Governance Software Modules to be delivered

Software Module Code	Ref specification Name	Name of Department	High Level functional requirement
M1	PWD	Superintending Engineer	This department deals with all types of civil execution & maintenance works like Road, Building, Bridge, Dam, Shopping complex etc. This department also look after <ul style="list-style-type: none"> <li>▪ HMP (Hot Mix Plant)</li> <li>▪ Quality Control (Q.C)</li> <li>▪ Traffic Engineering</li> </ul>
M2	Building Permission	Planning	GIS based Building Permission System
M3	Birth	GAD	Record keeping and issuance of

			certificate towards Births in the NMC region and issuance of to Citizen
<b>M4</b>	Sanitation	Health	Responsible for the Birth and Death registration and Inspection of the Hospitals
<b>M5</b>	Death	GAD	Record keeping and issuance of death certificate
<b>M6</b>	Water	Water Works	This department deals with the functions and processes related to : <ul style="list-style-type: none"> <li>▪ Water Treatment, Filtration and distribution</li> <li>▪ Give new connection to consumer.</li> <li>▪ Forecast and Planning for new pipelines.</li> <li>▪ Water tax Bill distribution &amp; collection.</li> <li>▪ Take actions against illegal connection.</li> <li>▪ Release the salaries to employees.</li> <li>▪ Maintenance of pipelines.</li> </ul>
<b>M7</b>	Property Tax	Property Tax	This department is responsible for the registration of the ownership details and the calculation of the Tax on properties based on the property valuation
<b>M8</b>	Octroi	GAD	This department is responsible record keeping related to the Octroi collection on the goods coming inside the Nagpur city. The main functions are To provide service in assessment of octroi duty, recovery of octroi taxes, issuing Transit passes, Return passes and to take care of evasion of octroi duties
<b>M9</b>	Education	Education	Responsible for the record keeping and management of the schools run by NMC

<b>M10</b>	Grievance	GAD	Keeps records of citizen complaints, suggestions and the management of grievances
<b>M11</b>	License	Health	Record management of the Licenses to the food industry in NMC region
<b>M12</b>	SWM	Health	Deals with the record keeping and various process details for collection and disposal of the solid waste produce in the city
<b>M13</b>	FA	Finance	This department deals with Financial Accounting - General Ledger, Cash & Payments Module
<b>M14</b>	FR	Finance	Financial Accounting - Receipts Module
<b>M15</b>	Audit	Finance	This section deals with the auditing of the different accounts maintained by the NMC departments
<b>M16</b>	Establishment	GAD	<ul style="list-style-type: none"> <li>▪ Publish the seniority list class I to class IV employees</li> <li>▪ Promotions of NMC staff</li> <li>▪ Appointment / recruitment</li> <li>▪ Suspension / reinstate order</li> <li>▪ Transfer</li> </ul>
<b>M17</b>	GAD	GAD	<p>Government correspondence.</p> <p>Purchasing &amp; distribution</p> <p>Procurement and distribution of the office Stationery &amp; computers and Consumables</p> <p>Arrangement of security guards</p> <p>Hiring of vehicles for official use for officers.</p> <p>Mobile &amp; telephone connections to the offices</p> <p>Auditing with central &amp; state government authorities.</p> <p>Issuing of circulars and orders for</p>

			<p>Delegation of power to other departments.</p> <p>Departments coming under GAD:</p> <ul style="list-style-type: none"> <li>▪ Establishment section (o &amp; m) operation &amp; methods.</li> <li>▪ Committee section.</li> <li>▪ PRO (Public relation office)</li> <li>▪ CCA/ Prosecution</li> <li>▪ Record section.</li> <li>▪ Labour department.</li> <li>▪ Special desk office (bookwork class cell)</li> <li>▪ Revenue &amp; spot auditor department</li> <li>▪ CFC</li> </ul>
<b>M18</b>	PRO	GAD	<ul style="list-style-type: none"> <li>▪ Publishing various Advertisement in News paper.</li> <li>▪ Tender publishing.</li> <li>▪ News publishing</li> </ul>
<b>M19</b>	Fire	GAD	This section is responsible for record keeping related to the maintenance and management of the Fire fighting equipments and fire brigades
<b>M20</b>	Estate	GAD	
<b>M21</b>	Market	GAD	
<b>M22</b>	Social Welfare		
<b>M23</b>	Statistic		Birth and Death records for statistical information
<b>M24</b>	Election		Department responsible for planning and conduct of the Municipal elections
<b>M25</b>	Library		Municipal corporation runs over 200 libraries in the city. Library management software
<b>M26</b>	Legal	GAD	This department acts like a bridge between the Municipal Corporation and the Court and other Judicial systems. They are



			involved in <ul style="list-style-type: none"> <li>▪ Court cases against &amp; from corporation</li> <li>▪ Legal matters</li> <li>▪ Legal Opinion</li> </ul>
<b>M27</b>	Electrical	Electrical	This is responsible for upkeep and maintenance of the Road lighting and the electrical equipments and machinery in NMC
<b>M28</b>	Garden		Responsible for the upkeep and maintenance of the Gardens in the municipal area
<b>M29</b>	Records	GAD	This is responsible for copies of the all the records of NMC and does the management is issue and receipt of the NMC records
<b>M30</b>	Slum	Slum	Improvement and Rehabilitation
<b>M31</b>	Workshop	Health	This departments is responsible for the maintenance of all the NMC vehicles except Fire Brigades
<b>M32</b>	Roads	PWD	This section of PWD deals with the Construction of new roads as well as the maintenance works related to roads
<b>M33</b>	QC	PWD	This is responsible for the Quality testing of the construction materials like concrete block, Road Quality etc
<b>M34</b>	HMP	PWD	Hot Mix Plant plays a support function role for the development and maintenance of roads
<b>M35</b>	Zone	Commissioner	10 Zone offices are responsible for providing all municipal services within the zone
<b>M36</b>	CFC	GAD	Citizen facilitation centre, Complaint grievance records management and redressal system. Issue of Birth, Death

			<p>certificate and change of name. Processing of the new works till issue of Work order and acceptance of contractor bills for processing by Finance</p> <p>Additional functions of this section are</p> <ul style="list-style-type: none"> <li>▪ Computer section</li> <li>▪ Hardware maintenance</li> <li>▪ Website maintenance</li> <li>▪ Database server maintenance</li> </ul>
<b>M37</b>	Cattle Pond	Health	This is responsible for management of capture and return of the domestic animals freely moving in the municipal area and causing the disturbance
<b>M38</b>	RTI	GAD	This section is responsible for the data related to the Right to Information Applications and its disposal
<b>M39</b>	Marriage	GAD	Management of the data related to the Marriage registrations done at the municipal corporation.
<b>M40</b>	Committee	GAD	<ul style="list-style-type: none"> <li>▪ Prepare notices for standing committee &amp; general meetings.</li> <li>▪ Conducting meeting.</li> <li>▪ Prepare the resolutions &amp; proceeding of the meeting.</li> <li>▪ Resolve the issue of corporatist.</li> <li>▪ Distribution &amp; remuneration to corporators</li> </ul>
<b>M41</b>	Plumber	GAD	This section is responsible for the Conduct of plumber examination and then the registration in NMC and is then responsible for Plumber License management
<b>M42</b>	Drainage		
<b>M43</b>	Sports and Cultural		

<b>M44</b>	JNNURM cell		Responsible for management and monitoring of the JNNURM schemes and special projects
<b>M45</b>	Special desk office		
<b>M46</b>	Pench		Pench Project Cell
<b>M47</b>	Estimate		Estimation and costing of the Engineering projects
<b>M48</b>	Food	Health	This section is responsible for the record management for issue and renewal of the food out lets in the city
<b>M49</b>	Contractor Registration	PWD	This section deals with the record management related to the registration of contractors for the different functions of NMC
<b>M50</b>	File Tracking	GAD	Document management system
<b>M51</b>	Purchase	GAD	Centralised Procurement and the tendering of the NMC requirements
<b>M52</b>	Inventory		Stores and Inventory Management
<b>M53</b>	Portal	City engineer	NMC service delivery Portal for citizens and the employees of the NMC. This will be normally used by the citizen for various interactions and for paying the taxes
<b>M54</b>	DashBoard	IT	This is Business Intelligence layer which shall enable senior decision makers in NMC to get the information on PDA or laptop any where and any time
<b>M55</b>	Integration	City engineer	Design and Development of the bridge related to pulling & Pushing the Information with the existing Octroi management software, e-

			Tendering module, GIS data attachment, and for CFC software. Payment Gateway integration for on line payments of taxes and various fees to NMC.
<b>M56</b>	Porting	City engineer	One time porting of the old data in to new integrated platform from all existing systems.
<b>M57</b>	Security		Design and Development of the Digital Data Security management system at the top of all the applications and portal
<b>M58</b>	HRM	GAD	Recruitment, Personnel management, Salary Processing, Performance Management, Training and Development, Compensation section, leave management, Disciplinary actions, Advance and Loan
<b>M59</b>	DMS	IT	Document Management System for accessing, storage and retrieval of all old records and current records digitally
<b>M60</b>	Enforcement		This department deals with the removal of the encroachments and associated procedures
<b>M61</b>	Development Plan		

## Detailed Functional Requirements of some of the Modules for understanding the depth of coverage

### 4.1 Citizen Facilitation Center (CFC) Module

Functionality	Integration required with
A] Citizen Help Desk	
<ul style="list-style-type: none"> <li>▪ Facility to lodge New Complaints, Check Status</li> </ul>	Grievance Redressal Module
<ul style="list-style-type: none"> <li>▪ Facility to check citizen data                             <ul style="list-style-type: none"> <li>○ Birth / Death registrations</li> <li>○ Bill Dues</li> <li>○ Application Status</li> <li>○ Payment Status</li> <li>○ Renewal Status</li> </ul> </li> </ul>	All Departmental Modules
<ul style="list-style-type: none"> <li>▪ Citizen Charter</li> </ul>	Grievance Redressal Module
B] Application Acceptance & Delivery of Outputs	
<ul style="list-style-type: none"> <li>▪ Department-wise categorization</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Allow system to accept service specific inputs</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Capture of Mobile No. &amp; E-Mail of Applicant</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Re-submission of rejected application after compliance</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Check-list for documents to be submitted along-with application</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Define citizen charter (list of the officers &amp; duration for service delivery)</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Fees to be accepted</li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ Generate Token of Application acceptance</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Rejection Note in case of inadequate application</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Marking the application to Corresponding Department / Ward / Officer</li> </ul>	Workflow Module
<ul style="list-style-type: none"> <li>▪ Delivery of the output through CFC / Internet / KIOSK</li> </ul>	Departmental Modules
C] Payment Acceptance	
<ul style="list-style-type: none"> <li>▪ Property Tax</li> </ul>	Accounts,

▪ Water Bills	Departmental Modules
▪ License	
▪ All Departmental Services	
▪ Tender Document Fees	
▪ Any other	
D] Citizen Services (General) [ Such services won't have any department specific functionality. CFC module, by using Workflow Management System should be able to deliver these services]	
▪ Nursing Home Registration	Accounts, Departmental Modules
▪ Registration of Hospitals for Sonography	
▪ NOCs for other govt. departments	
▪ Tree Cutting / Trimming Service	
▪ Road / Water / Drainage / Electrical	
▪ Any other Service	
E] MIS	
▪ SMS alert to applicant upon decision	
▪ Services Statistics <ul style="list-style-type: none"> <li>▪ CFC-wise / KIOSK-wise</li> <li>▪ Department-wise</li> </ul>	
▪ Officer-wise list of services pending beyond the stipulated time	HRMS

## 4.2 Budget and reports Module

Sr. No.	Requirement
1	The budgets shall be prepared as per the Chart of Accounts in the Accounting System
2	Display warning messages in case the budgetary limits are exceeded
3	Provision for variance analysis between budget and actual with percentage
4	Provision to capture ward-wise budgets
5	Provision to monitor the budget on a timely basis
6	Allow for multiple budget periods and provide for monthly/quarterly/half-yearly breakup of the actual/ budget forecasts
<b>Reports</b>	
1	Incorporating all formats for reporting and books of accounts as prescribed in the National Municipal Accounts Manual
2	Incorporation of existing formats of registers in specific ULBs
3	<b>Financial Statements:</b>
	• Balance Sheet
	• Income and Expenditure Account
	• Receipts and Payment Account - Showing the receipts and payments of cash major head wise along with schedules
	• Cash Flow - Showing the receipts and payments of cash bifurcated into operating, investing and financing activities
4	<b>Books of Accounts:</b>
	• Vouchers
	• Cash Book
	• Ledger Book
	• Journal Book
	• Day Book
	• Trial Balance
5	<b>Regular Registers:</b>
	• Abstract Register of Receipts and Payments
	• Register of Adjustment
	• Register of Investments
	• Advance Ledger
	• Deposit Ledger
	• Loan Register

	• Fixed Assets Register
	• Appropriation Register
	• Register of unpaid bills
	• Register of dishonoured cheques
	• Budget
6	<b>MIS Reports:</b>
	• Borough/ Zone/ Ward wise Accounts
	• Ageing Reports for both debtor and creditor, (Ageing report should be user defined)
	• Variance Analysis of Budget Vs Actual
	• Party wise Statement
	• Ratio analysis reports
	• Revenue trend analysis statement
	• Bank Reconciliation Statement



### 4.3 Document & Workflow Management System

Functionality	Integration required with
A] File Tracking System	
<ul style="list-style-type: none"> <li>▪ Scanning &amp; Marking the inward to the respective department</li> </ul>	CFC
<ul style="list-style-type: none"> <li>▪ Incorporation of separate hierarchy for RTI letter movements               <ul style="list-style-type: none"> <li>▪ Fresh applications</li> <li>▪ Appeals</li> </ul> </li> </ul>	CFC, Web, KIOSK
<ul style="list-style-type: none"> <li>▪ Tracking of the Inward</li> </ul>	CFC
B] Document Management	
<ul style="list-style-type: none"> <li>▪ Storing of document (Image &amp; Metadata)</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Support for viewing a large number of file formats without the need of having the parent application. The system should support all commonly used file formats as MSOffice, Acrobat, TIF, JPEG, GIF, BMP, etc.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Association of the document with Workflow Management System</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Movement of the document based on selected parameters</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Provision to edit the document Metadata</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Versioning of the document</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Provision for marking comments</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Archival of data on pre-defined parameters</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Role based access to the documents</li> </ul>	HRMS
<ul style="list-style-type: none"> <li>▪ Final Decision by the Decision Authority</li> </ul>	
C] Workflow Management System	
<ul style="list-style-type: none"> <li>▪ Movement of Proposals on various parameters</li> </ul>	Projects
<ul style="list-style-type: none"> <li>▪ Facility to mark the application to pre-defined hierarchy</li> </ul>	HRMS
<ul style="list-style-type: none"> <li>▪ Inbox for officers (listing applications received)</li> </ul>	
<ul style="list-style-type: none"> <li>▪ FIFO principle for taking action on application</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Creation of a Note Sheet for Scanned Documents</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Alerts for delay in action</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Pre-defined scrutiny for citizen applications</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Display of all application data during scrutiny process</li> </ul>	Accounts

▪ Check-list for rejection	
▪ Facility to mark the application to other officer	
▪ Facility to mark the application to other department for their NOC / Comments / Input	Workflow Module
▪ Final Decision by the Decision Authority	

#### 4.4 Property Tax Department

Functionality	Integration required with
A] Capture of various details of the Property	
▪ Ward/ Zone/ Block/Route – Administration or Geographical divisions	
▪ Property Holder’s Name – One or multiple owners	
▪ Property Holder’s Email ID / Mobile No.	
▪ Property Holder’s Address (Present Address, Permanent Address)	
▪ Property Location details (Survey No., Chalta No., etc.)	GIS
▪ Property address	
▪ Linkage with Building Permission Module to carry forward building details	
B] Capture of various details required for Property Assessment	
▪ Type and Sub Type of Property	
▪ Usage of Property	
▪ Construction Class / Vicinity Factor / Amenity Factor	
▪ Age of Building	
▪ Property tax as per rent assessment.	
▪ Any other factor required for Assessment	
C] System based calculation of Ratable Value	
▪ Room-wise / Flat-wise/ Whole Property Assessment	
D] Tax Generation	
▪ Tax Generation as per Rate Chart	
▪ Tax Exemptions	
▪ Bifurcation of rates for General Tax, Fire Fighting, Vermiculture, etc.	
E] Other relevant Details for Property	
▪ Property history	
▪ Advance property tax payment	
▪ Property Rental details	
F] Other Departmental Process	

▪ Generation of Special Notice	
▪ Objection	
▪ Hearing	
▪ Property Billing <ul style="list-style-type: none"> <li>○ Individual flat-wise billing/ Property wise billing</li> <li>○ Interest Calculation</li> <li>○ Consideration of Advance paid earlier</li> </ul>	Accounts
▪ Demand Notice Generation	
▪ Issue of Warrant Notice	
▪ Seizure of Property	
▪ Auction of Property	
▪ Rebate Calculations	Accounts
▪ Automatic mailing of Bills / Notices to the E-Mail ID	
▪ Advance / Excess Collection / Refunds	Accounts
▪ Cheque Dishonor and Outstation Cheque charges	
▪ Facility for online tracking of bounced checks	
▪ E-Mail / SMS to be sent to the owner upon transactions	SMS Gateway / Web Server
G] Citizen Services	
▪ Change in Property Ownership	Accounts
▪ Splitting of Property Tax Assessment	
▪ Duplicate Bill	
▪ Assessment Certificate	
▪ Copy of Property Tax Assessment Extract	
▪ No Dues Certificate	
▪ Payment of Property Tax	
▪ Linkage with Grievance module for Property Tax related grievances	Grievance Redressal
H] MIS	
▪ Demand / Collection Register	GIS
▪ Assessment Register	GIS
▪ Closing Register	
▪ Ward-wise / Zone-wise Recovery reports	GIS

▪ Top Defaulters Report	GIS
▪ Occupancy wise / Flat wise report	
▪ Tax-wise Recovery Details	
▪ Tax-wise Demand Details	
▪ Advance Payment Reports	
▪ Objection / Hearing Details	
▪ Inspector wise report (Assessment of property as per Building permission / Citizen request / Inspection)	
▪ Assessment as per citizen / Assessment as per inspector	
▪ MIS reports for self assessment, concessions.	
▪ Alerts from License Module upon New License / change in business	License Module
I] Other Requirements	
▪ Data Porting / Data Entry Suite	
▪ Query of Property Dues	CFC, Web
▪ Scope to link up to Land Records / Registration system	

#### 4.5 Birth and Death

Functionality	Integration required with
A] Registration of Birth / Death	
<ul style="list-style-type: none"> <li>▪ Registration of Birth (Hospital / Home / Jail / etc.)               <ul style="list-style-type: none"> <li>○ Normal &amp; Delayed Registration</li> <li>○ Child Details – Gender, DOB, Time, Weight, Name, Birth Place, Birth Mark etc.</li> <li>○ Parent Details – Name, Address, Qualification, Occupation</li> <li>○ Delivery Method, Informant Details, Attachments in case of delayed registrations</li> </ul> </li> </ul>	GIS (for marking the hospital + parents address)
<ul style="list-style-type: none"> <li>▪ Registration of Still Birth               <ul style="list-style-type: none"> <li>○ Feotal Death Cause along with other birth registration details</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>▪ Child Name Insertion</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Registration of Death               <ul style="list-style-type: none"> <li>○ Normal &amp; Delayed Registration</li> <li>○ General Details – Gender, DOD, Time, Name, Attention type, Pregnancy related Death</li> <li>○ General Details –Death place type, death place, Cemetery type, Informants Details</li> <li>○ Medical Certificate Details - Death Cause, Death Manner</li> <li>○ Create link with Birth Database by giving lookup while registering the death</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>▪ Online Registration of Birth / Death by Hospitals through proper Authentication</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Defining charges For Birth and Death Services               <ul style="list-style-type: none"> <li>○ Delay Charges based on no. of days of delay</li> <li>○ Birth Certificate charges</li> <li>○ Death Certificate charges</li> <li>○ NAC charges For Birth &amp; Death</li> <li>○ Child Name Insertion charges</li> </ul> </li> </ul>	Web
<ul style="list-style-type: none"> <li>▪ Linking of Birth / Death with Property Tax &amp; GIS Database</li> </ul>	Accounts
B] Citizen Services	Property Tax / GIS
<ul style="list-style-type: none"> <li>▪ Issue of Birth Certificate               <ul style="list-style-type: none"> <li>○ Free Copy as per rule.</li> <li>○ Charges for additional copies</li> <li>○ Search Charges</li> </ul> </li> <li>▪ Generation of On-line Certificate with auto generated letter by the</li> </ul>	

department confirming the authenticity of the Certificate	
▪ Birth Registration Correction	CFC, Accounts
▪ Issue of NAC for Birth	
▪ Death Certificate	
▪ Death Registration Correction	
▪ Issue of NAC for Death	
▪ Issue of Cremation Certificate	
▪ Online Birth / Death Certification	
▪ Integration with Web to validate the Birth / Death Certificate	Web portal, Accounts
C] MIS	Web Portal
▪ Variety of Reports to be sent to State / Central govt. authority	
▪ Monthly Summary Report of Birth	
▪ Monthly Summary Report of Still Birth	
▪ Monthly Summary Report of Death	
▪ Birth Reports for Polio Vaccination Drives	
▪ Birth / Death reports for various Health Schemes	
▪ Reports to Health Department w.r.t. Death Causes in a particular period, for particular location	
▪ Reports to analyse services delivered through various delivery channels	
D] Other Requirements	
▪ Data Porting / Data Entry Suite	
▪ Search of Registration No. by various parameters like name, date of birth / death, hospital name etc.	

#### 4.6 License Food and breweries establishments

Functionality	Integration required with
A] Citizen Services	
▪ Issue of New License	CFC, Accounts, web portal for online payment of fees
▪ Duplicate License	
▪ Change in Name of Business	
▪ Change in Business	
▪ Transfer of License	
▪ Renewal Of License	
▪ Cancellation of License	
B] Issuance of License	
<ul style="list-style-type: none"> <li>▪ Capture of License Details <ul style="list-style-type: none"> <li>○ License Holder's Details – One or multiple owners</li> <li>○ Capture of Mobile No. / E-Mail ID</li> <li>○ License holder's photograph(s) (optional)</li> <li>○ Link to Property Number (optional)</li> <li>○ License Details – Temporary/ Permanent License, Name of Business, Business Address,</li> <li>○ Trade/ Business Details – License Type, Subtype - multiple levels to define types and sub types.</li> <li>○ License type, sub-type, unit of measure wise license amount.</li> </ul> </li> </ul>	Property Tax Assessment
▪ Calculation of License Fee	
▪ Letter of Intent	
▪ License Certificate	
C] Other Departmental Process	
▪ Scrutiny of Applications	Workflow System
▪ Inspection Entry	
▪ Generation of Show cause Notice	
▪ Hearing	
▪ Reminder Notice for Renewal	
▪ Cancellation of License by Force	
D] MIS	



▪ License Register	
▪ List of Defaulters	GIS
▪ Reminder Notice for Renewal	
▪ Demand / Collection Register	
▪ Reports showing Changes in License Types, Business Partners, Cancellation Licenses, etc.	
▪ Facility to forecast the impact of reduction / deduction of License Fee	
▪ Reports w.r.t. Bills / Notices generated	
▪ E-Mail / SMS to be sent to the owner upon transactions	SMS Gateway / Web Server
E] Other Requirements	
▪ Data Porting / Data Entry Suite	

#### 4.7 Building Permission

Functionality	Integration required with
A] Citizen Services	
▪ Layout Approval	CFC, Accounts, GIS
▪ Building Permission / Commencement Certificate	
▪ Revised Building Permission	
▪ Renewal of Building Permission	
▪ Plinth Completion Certificate	
▪ Occupancy Certificate	
▪ Cancellation of License	
▪ Architect License	
▪ Zone Certificate	
▪ Transfer of Development Rights	
▪ Certified copy of plan	
▪ Old property data retrieval	
▪ RTI – Apply online for information related to proposal	
▪ Single complaint can be handled by multiple department	
▪ Online submission facility should be made available for registered Architects	
B] Defining Charges	
▪ Development Charges	
▪ Scrutiny Charges	
▪ Other Charges	
C] Departmental Process	
▪ Scrutiny of Applications	Automatic Dimension Details capture software, GIS, HRMS
▪ Site Reports	
▪ NOCs from different departments	Workflow System
▪ Alert to be sent to Property Tax Department after issuance of Building permission, Plinth , Completion & Occupancy	Property

Certificate (Color code based GIS system)	Tax, GIS
<ul style="list-style-type: none"> <li>Versioning of proposal for more than one iterations</li> </ul>	Automatic Dimension Details capture software
<ul style="list-style-type: none"> <li>Facility for query for the stage of completion to be made available</li> </ul>	Automatic Dimension Details capture software
<ul style="list-style-type: none"> <li>Advocate dates for departmental cases</li> </ul>	Legal
<ul style="list-style-type: none"> <li>Audit objection / para for departmental cases</li> </ul>	Audit
<ul style="list-style-type: none"> <li>TDR awarded information</li> </ul>	Land & Estate
D] MIS	
<ul style="list-style-type: none"> <li>Application Pendency Report</li> </ul>	
<ul style="list-style-type: none"> <li>Building Permissions / Occupancy Certificates taken for a particular period</li> </ul>	GIS
<ul style="list-style-type: none"> <li>List of Building Permissions taken but Occupancy Certificate not Taken</li> </ul>	
<ul style="list-style-type: none"> <li>Impact analysis for Drainage / Water based on the building permission give.</li> </ul>	
<ul style="list-style-type: none"> <li>Revenue Related Reports (Scrutiny Charges / Development Charges)</li> </ul>	
<ul style="list-style-type: none"> <li>E-Mail / SMS to be sent to the applicants</li> </ul>	SMS Gateway / Web Server
F] Other Requirements	
<ul style="list-style-type: none"> <li>Data Porting / Data Entry Suite</li> </ul>	
<ul style="list-style-type: none"> <li>Integration with the automatic Dimension capture software</li> </ul>	
<ul style="list-style-type: none"> <li>Generation of Alerts to other departments w.r.t. infrastructure requirements, upon completion certificate</li> </ul>	Workflow, Projects, SWM, Water

#### 4.8 Water Department Module

Functionality	Integration required with
A] Citizen Services	
▪ New water Connection	Accounts
▪ Closing of Connection (Permanent / Temporary)	
▪ Change of use	
▪ Reconnection	
▪ Issuance of Plumber license	
▪ Water testing for citizens within NMC limits	
▪ Renewal of Plumber license	
B] Defining Various Charges	
▪ Water consumption Charges for metered and non-metered connections	Accounts
▪ Water connection charges	
▪ Scrutiny Charges	
▪ Deposit for various connection size & category.	
▪ Water testing rates	
C] Departmental Process	
<ul style="list-style-type: none"> <li>▪ Capture of various details of the Water Connection               <ul style="list-style-type: none"> <li>○ Consumer Details- Property Details, Owners Details, Link to Property Number.</li> <li>○ Metered/ Non Metered Connections</li> <li>○ Multiple Usage type - Domestic, Commercial, etc. Tariff Category.</li> </ul> </li> </ul>	Property Tax, GIS
▪ Connection Details- Connection Size, Distribution Line, Pressure	GIS
▪ Pressure drop due to new connection on a line.	
▪ Compliance for 'No dues' for property Tax	Property Tax
▪ Meter Information - Meter No. / Make / Cost	
▪ Meter Restoration Details	
▪ Scrutiny at various levels for citizen services	
▪ Road digging charges to be taken from GIS system	GIS
▪ Facility for recording details of site scrutiny through PDA	
▪ Work Order Printing for new connections, re-connections and closing of connections.	GIS

<ul style="list-style-type: none"> <li>▪ Meter Reading Entry <ul style="list-style-type: none"> <li>○ Meter Reading Data Entry</li> <li>○ Meter Cut off- Restoration</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>▪ Scope for PDA based Meter Reading Capture &amp; Bill Generation and uploading of PDA data to system</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Temporary Disconnection</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Bill Generation <ul style="list-style-type: none"> <li>○ Billing for Metered and non-metered connections</li> <li>○ Billing schedule for different connection category</li> <li>○ Consideration of advance paid if any</li> <li>○ Interest calculation on arrears</li> <li>○ Bill correction</li> </ul> </li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ Bill Printing</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Collection from CFC</li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ Handling Cheque dishonor and outstation Cheque charges</li> </ul>	Accounts
D] MIS	
<ul style="list-style-type: none"> <li>▪ Connection Outstanding Register</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Bill Acceptance Register</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Meter reading report</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Consumption statement</li> </ul>	
<ul style="list-style-type: none"> <li>▪ List of consumers ward, category &amp; size wise</li> </ul>	GIS
<ul style="list-style-type: none"> <li>▪ List of connections</li> </ul>	
<ul style="list-style-type: none"> <li>▪ List of closed connections</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ward-wise / Zone-wise Recovery reports</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Top Defaulters Report</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Tax-wise Recovery Details</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Tax-wise Demand Details</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Advance Payment Reports</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Bill status for bill generation</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Faulty Meter Report</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Illegal connection reports (Based on complains)</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Water quality test report</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ward wise / zone wise / line water pressure report</li> </ul>	
E] Other Requirements	
<ul style="list-style-type: none"> <li>▪ Data Porting / Data Entry Suite</li> </ul>	

▪ Query Water Dues	CFC, Web
▪ Scope for integration with SCADA system in future	

#### 4.9 Accounts (Accrual based Double Entry Accounting System)

Functionality	Integration required with
A] Masters	
▪ Account Head Definition	
▪ Account Grouping and Sub-Grouping	
▪ Bank Account Details	
▪ Vendor Details	
B] Departmental Process	
<ul style="list-style-type: none"> <li>▪ Budget Preparation, Distribution and Management System               <ul style="list-style-type: none"> <li>○ Budget Classification</li> <li>○ Department-wise estimated provision, revision for income and expenditure</li> <li>○ Budget Appropriation between different budget heads through approval process</li> <li>○ Administrative approval / dis-approval of works linked to budget availability</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>▪ Receipts through Internet / CFCs / KIOSKs               <ul style="list-style-type: none"> <li>○ Counter-wise Collection Detailed and Summary Reports</li> <li>○ Revenue Stamp Management</li> <li>○ Cheque/ Cash Deposit Slips into Bank</li> <li>○ Capture of Cheque Dis-honour cases, Remittance entry</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>▪ Payment Management               <ul style="list-style-type: none"> <li>○ Bill / Liability Entry</li> <li>○ Payment Authorization</li> <li>○ Payment Voucher (Full or Partial Amount)</li> <li>○ Maintaining Check details, Check Printing</li> <li>○ Recording of Check Issuance Details</li> <li>○ Recording of Cheque Cancellation details</li> </ul> </li> </ul>	
▪ Security Deposit / Earnest Money Deposit Management	
<ul style="list-style-type: none"> <li>▪ Loans Management               <ul style="list-style-type: none"> <li>○ Maintenance of Loan Details</li> <li>○ Alerts for Loan Installment Payments</li> <li>○ Loan Installment Payments</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>▪ Grants Management               <ul style="list-style-type: none"> <li>○ Maintenance of Grant Details</li> <li>○ Utilisation Details</li> <li>○ Utilisation Certificates</li> </ul> </li> </ul>	
▪ Debt Management	

▪ Accrued Payment Management	
▪ Investment Management <ul style="list-style-type: none"> <li>○ Maintenance of Investment Register</li> <li>○ Alerts on due dates</li> <li>○ Comparison of different options for Investments</li> </ul>	
▪ Advance Managements	
▪ Bank Reconciliation	
▪ TDS/ VAT Register, Online Payment of Tax	
▪ Maintenance of Bank Account wise balances	
▪ Integration of Ledger A/c with ECS Payment	
C] Reports	
▪ Cost Centered Accounting Reports	
▪ Ratio Analysis, Trend Analysis	
▪ Department-wise, Cost Center-wise Income / Expenditure reports	
▪ Generation of Deposit Slips	
▪ Security Deposit Register	
▪ Grants Register	
▪ Loans Register	
▪ Investment Register	
▪ Advance Register	
▪ Bill Register	
▪ Payment Register	
▪ Outstanding Bill Register	
▪ Reports on Receivables	
▪ Cash Book (Detailed & Summary)	
▪ Function-wise Expense Subsidiary Ledger	
▪ Journal Book	
▪ Ledger Book	
▪ Cheque Issue Register	
▪ Trial Balance, Income & Expenditure Statement	
▪ Balance Sheet	



▪ Bank Reconciliation Statement	
▪ Cheque Dis-honour Report	
▪ Analysis on unspent amount of previous years	
▪ Various reports required for submission to Standing Committee	

#### 4.10 Audit Department

Functionality	Integration required with
A] Departmental Process	
▪ Pre-Audit of Tenders, Estimates	Accounts
▪ Audit Para Entry	Accounts
▪ Post Audit of the Departments	
▪ Inspection of Contractor & Supplier Bills	Accounts
▪ Inspection of Other Bills like Telephone Bills	
▪ Inspection of Advance Adjustment proposals	
B] Reports	
▪ Department-wise Budget Provision v/s Expenditure Report	
▪ Status report on Audit Para	
▪ Various statutory reports to be submitted to Standing Committee	Accounts
▪ Exception Reports (w.r.t. deletion of records, adjustment entries, etc.)s	Accounts, Other Modules

#### 4.11 Solid Waste Management Department

Functionality	Integration required with
A] Area details	
<ul style="list-style-type: none"> <li>▪ Area information (Zone / Ward / Colony / Society)</li> <li>▪ Population details</li> <li>▪ Volume of the Solid waste which includes Wet &amp; Dry waste (Recycled &amp; Non Recycled)</li> <li>▪ Resources required</li> <li>▪ Collection procedure ( i.e. Primary : House to House &amp; Secondary : Community Bin to Garbage transport centre or mix)</li> </ul>	
A] Garbage Collection Scheduling	
<ul style="list-style-type: none"> <li>▪ Assign SWM Vehicles to pick-up the Garbage. Category wise assignment like A : Highly in demand , B : Medium , C: Low Demand.</li> </ul>	GIS, Fleet Mgmt.
<ul style="list-style-type: none"> <li>▪ Assignment of Ghanta Gadi</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Location-wise assignment of Sanitation Staff</li> </ul>	GIS, HRMS
<ul style="list-style-type: none"> <li>▪ Scheduling of garbage collection and cleaning activities with the objective of maximizing citizen friendliness on the one hand and optimum use of resources on the other.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Assigning routes to the SWM vehicles / Ghata Gadi's / Dumper placers / Compactor bucket vehicles /BRC / Hotel gadi</li> </ul>	GIS, Fleet Mgmt.
B] Primary Garbage Collection & Disposal	
<ul style="list-style-type: none"> <li>▪ Record the volume of garbage collected and disposed on a daily basis. Source segregation like Quantum of wet waste collected with further segregation for vermiculture, Bio dispose can be kept on Monthly / Yearly basis. The same can be used for RV benefit.</li> </ul>	Fleet Mgmt.
<ul style="list-style-type: none"> <li>▪ Linkage with Garbage Bins / Land Fill Sites, in case of Citizen Grievance</li> </ul>	Grievance Redressal Module
<ul style="list-style-type: none"> <li>▪ Keeping certain Checks as per environmental regulations, like minimum frequency of lifting garbage etc.</li> </ul>	
C] MIS	
<ul style="list-style-type: none"> <li>▪ Monitor the deployment of pickup trucks and personnel based on the schedule originally drawn.</li> </ul>	GIS
<ul style="list-style-type: none"> <li>▪ Info on the use of Land Fill Sites</li> </ul>	GIS
<ul style="list-style-type: none"> <li>▪ Land fill site: How much garbage received?</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Land fill site : How much as per target recycled?</li> </ul>	

<ul style="list-style-type: none"> <li>▪ Alerts if the use of Land Fill sites is above some thresh-hold</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Generation of registers like: Contracts Register for SWM, Site Register (land fills), Contractors Register, etc.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ SWM Contract Wise Status Reports, Site Wise Progress Summary, Contractor wise Performance Analysis, etc.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Comparison of expenditure on SWM activities over different geographical areas, years, agencies, etc.</li> </ul>	GIS
<ul style="list-style-type: none"> <li>▪ Daily / Monthly reports of comparison for how much garbage has to be lifted as per target &amp; how much garbage is actually lifted. If less lifted then reasons for the same for eg. Breakdown / Labour problem.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ MIS report for expenditure incurred on transportation</li> </ul>	Fleet Mgmt. System

#### 4.12 Welfare Schemes Module

Functionality	Integration required with
A] AIDS awareness B] Family planning and MCH C] School health program D] Stri suraksha E] Jeevan dey yogna F] RCH programs G] Other schemes	Health
H] Self employment slum / Non slum I] Training schemes J] Other schemes	Urban community development
K] Slum rehabilitation L] Others	Slum
M] Education	

#### 4.13 Human Resource Management System

Functionality	Integration required with
A] Generic Features – Mandatory requirements	
<ul style="list-style-type: none"> <li>▪ System should provide for Retrospective calculations to be handled for all types of scenarios (employee joining, leaving, pay hike, promotions, etc.)</li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ System should be able to handle all statutory regulations and maintain the details directly in the screens provided for data entry. All rules related to such acts should be preconfigured in the system.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Vendor to provide for Legal change patch to take care of any statutory changes.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ System should provide the capability to upload documents of employees like certificates, transfer, promotion letters in a scanned format into the system and ability to retrieve them whenever required</li> </ul>	Document Mgmt. System
<ul style="list-style-type: none"> <li>▪ Capability to integrate with NMC web portal for employees self service</li> </ul>	Web Portal
B] Recruitment and Manpower Planning	
<ul style="list-style-type: none"> <li>▪ Facility to carry out recruitment for different types of employees separately viz., Officers, Special Officers, Clerks, subordinates, Sanitation Staff, etc.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Provision to define requirement plans (periodic) in terms of specific skills, Qualifications, experience, designation, etc.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Provision for mainstream, specialist and part time employee recruitment</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Support to analyse the cadre-wise / ward or office-wise / department – wise staff strength – sanctioned/working strength and the gap for which recruitment is required</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Facility to capture the data relating to resignations / retirements / VRS / dismissals etc.</li> </ul>	
C] Employee Master Data	
<ul style="list-style-type: none"> <li>▪ System should be able to record and store Master Data Information for an Employee for following areas and should be able to provide a snapshot of employee’s history at any point in time on a click</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Name</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Address</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Education Qualification</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Previous Employment</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Phone Numbers / Contact Information / E-Mail ID</li> </ul>	

▪ Date of birth	
▪ Work Experience	
▪ Languages known	
▪ Family Information	
▪ Employee photo, Signature	
▪ Passport / PF number	
▪ Bank account information	
▪ Employee blood group	
▪ Property Tax No.	Property Tax Module
▪ Any other information that company may require should be easy to enter and report on	
▪ Employee Type- (Permanent / Temporary / contract workers / Project Based)	
▪ Employee category (SC/ST/OBC/Others)	
▪ Ex service man / Handicap / Sports man etc.	
▪ Location (HO/zone/ward/branch)	
▪ Department	
▪ Job code/designation	
▪ Grade/cadre	
▪ Job history covering details of appointments	
▪ Promotions, transfers	
▪ Deputation, temporary transfers	
▪ Increments	
▪ Date of pay rate change, etc – Increment	
▪ Date of joining	
▪ Date of probation/confirmation	
▪ Date of termination/retirement	
▪ Previous employment details	
▪ Union Information (if applicable)	
▪ Compensation data including components of pay	
▪ Compensation of pay for calculation of gratuity and pension	
▪ Family photo in case of pension, nominee photograph.	

D] Payroll Management	
<ul style="list-style-type: none"> <li>▪ Ability to define flexible periods such as day, week, month for pay calculation</li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ Ability to enable multiple payrolls that are generated based on employee's assignment</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to define payroll for pensioners</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to define the employee bank to credit the salary</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Bank-wise summary statement</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to provide automatic calculation of deductions / earnings based on leave, bonus declaration, loan, tax deductions, etc.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability for rule based pay calculation in case of pay hikes with retrospective effect</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to define unlimited pay elements. These pay elements should be classified as Earnings, Reimbursements, deductions, tax deductions, PF, etc. Pay elements should be also classified as Recurring &amp; non-recurring</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to apply the payment rules at personal / department / designation / organization level</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to allow exception definitions at employee / designation / department level</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to define all India specific taxation rules.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to automate increments (based on pre-defined rules – employee / designation / department / organization specific)</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Facility to run payroll processing any number of times before authorization to ensure accurate pay calculation</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Provision to allow deductions for specific purposes (like earthquake relief fund, CM relief fund, etc.)</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to share information with Accounting module of the current e-Governance solution with respect to payment or receipt related transactions</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to share information with the Accounting module of the current e-Governance solution for all necessary Double Entry Accounting related information (salary payable at the end of financial years, etc.)</li> </ul>	
E] General Provident Fund Management	
<ul style="list-style-type: none"> <li>▪ Issuing GPF no. to employees</li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ Application acceptance for advances / Loan against GPF</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Scrutiny of the applications</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Payment of Advance / Loan to Employees</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Repayment Installment adjustment against salary</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Generation of various MIS (Monthly / Yearly)</li> </ul>	
F] Employee Promotions / Transfers and Development	
<ul style="list-style-type: none"> <li>▪ Transfers</li> </ul>	



▪ Time bound Promotions	
▪ Grade and Pay changes	
▪ Ability to create standard career paths in the Corporation in terms of various possible moves from the current level / grade in the Corporation	
▪ Ability to define grade advancements within a level on the basis of time based as well as merit based criteria	
▪ Ability to define the rules for promotion eligibility in terms of tenure, consistent achievement of high performance grades, etc.	
▪ Ability to define additional rules specific to service in terms of suspensions, disciplinary actions	
▪ Facility to intimate employees of promotion / rejection through mail / workflow / letters	
▪ Facility to create offer letter on promotion	
▪ Ability to define short / long term goals for employees and provide a framework to assess and update completion of the same	
▪ Ability to identify key positions for the purpose of succession planning	
▪ Ability to plan for vacancy of the key position in advance	
▪ Identify the gaps / developmental areas between the slated employees and requirements of the key position	
▪ Maintenance of complete history of employee transfers since his recruitment	
▪ Transfer/redeployment of officers based on requirement/sanction strength of different regions/zones	
▪ Generation of seniority list	
▪ Posting / transfer of officers upon their promotions	
▪ Maintenance of records for officers transferred out of parent state and also officers to be transferred back to home state on completion of required tenure	
▪ Maintenance of transfer records of specialist transfer, identification of vacancies and issue of transfer orders based on the recommendations received from the respective specialist departments	
▪ Provision to maintain lateral transfer details and transfers on promotion	
▪ Generation of list of eligible staff members for transfer based on the user defined criteria (like those who completed 3 years service at one place, those who working more than 10 years in one region, those who have not worked outside the state in a particular scale or overall position	
▪ Maintenance of exemptions given in transfers with a facility to record the reasons for the same	

<ul style="list-style-type: none"> <li>▪ Provision to record the transfer orders cancelled/deferred/modified and follow up with the respective regional/zonal offices for implementation</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Capture of details of officers on deputation to outside agencies, etc.</li> </ul>	
<b>G] Time Management and Leave Management</b>	
<ul style="list-style-type: none"> <li>▪ Support attendance entry from various sources such as direct entry, rule-based and automatic (through biometric device / swipe card / smart card)</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Definition and maintenance of leave calendars for different types of leave depending upon the scales of the employee</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Provision to maintain all types of leave like CL, PL, ML SL extra-ordinary leave, special leave etc</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to maintain leave eligibilities for each type of leave depending on the rules specified by NMC</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Facility to identify Collisions when Employee goes for Leave and take appropriate action</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to maintain rules for leave taken in terms of rules for availing leave, enchasing leave, accrual of leaves, lapsing of leaves, ceilings for accumulation of leaves, rules for combination of leave types, etc.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to record actual leaves taken</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to calculate actual leave balance at any point in time</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Link Leave management to payroll and employee history</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Provision to accounting of leave including automatic credit of leave and also provision with manual credit / debit / modification / cancellation etc.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Leave cancellation and leave extension / amendments advancement, postponement of leave</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Supports extra-ordinary leave on loss of pay</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Leave availment / carry-over processes administration as per the statutes laid down by the government / KDMC</li> </ul>	
<b>H] Performance Appraisal</b>	
<ul style="list-style-type: none"> <li>▪ Capability to create Performance documents for employees depending on the cadre / grade in the organization</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to define competency wise / parameter wise desired levels of performance for each cadre / grade in the organization</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to define proficiency descriptions for each parameter for each cadre / grade so as to ensure that the same measures of performance are communicated to the appraiser as well as the appraise</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Facility to attach different rating model (5 point scale, 7 point scale) depending upon the cadre / grade in the organization</li> </ul>	

<ul style="list-style-type: none"> <li>▪ Ability to define the period for which appraisal is being carried out</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Capture appraisal details as given by the appraising authority, reviewing authority</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Support parameter wise ratings, final ratings, strengths / weakness and suggestions / recommendations for improvements by the appraising/reviewing authority</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Facility to give weightage to each parameter and points against each rating attained</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Facility to consolidate the overall points and calculate an overall grade for the appraise</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Facility to import Short / Long term goals (particularly at officer level and above) in the Performance appraisal document</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Support maintenance of history of performance appraisals and promotions</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Support maintenance of automatic release of time based increments</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Release of increments for qualifications acquired</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Increments released should automatically be integrated with the payroll module and other relevant modules</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Support generation of increments due for each month or for user defined period for employees – cadre wise/scale wise/other user defined combination</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Support to generate reminder letters / mails / workflows to the employees / appraising authorities in case of non-submission of self-appraisals, etc.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Support memo letters / mails / workflows to be issued to the employee in case of unsatisfactory performance</li> </ul>	
I] Departmental Enquiry	
<ul style="list-style-type: none"> <li>▪ Ability to note charges against the employees</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to record the enquiry scrutiny details</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to record the charge sheet details</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to record the details of Enquiry officer &amp; Presentation Officer</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to record the disciplinary action against the employee</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Ability to generate the Show Cause Notice / Enquiry Notice</li> </ul>	
J] Employee Self Service	
<ul style="list-style-type: none"> <li>▪ Ability to allow employee request to modify personal, skill, family details</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Employee should be able to make leave requests</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Supervisory officer should be able to get an alert when any Self Service Request of sub-ordinate staff is received by him</li> </ul>	

▪ Supervisor authorization of modification of the employee requests or leave application	
▪ Employees should be able to view the status of their requests	
▪ Ability to facilitate self-appraisal by employees	
▪ Ability to undertake online appraisal of the sub-ordinates (CRs)	
▪ Ability to define customized NOC requests (like NOC for Passport application, etc.)	
K] Reporting	
▪ Reporting capabilities for Ad-Hoc Reporting	
▪ Reports on Demographic	
▪ Reports on Vacancies	
▪ Report on Employees Salary Details	
▪ Report on Leave Availed	
▪ Report on Leave Entitlements	
▪ Employee Attendance List for a Business Event	
▪ List of the Departmental Enquiries being conducted at a point of time or for a specific time with drill down option to get further details on the enquiries	
▪ Headcount Report	
▪ Report on time spent in a grade	
▪ Transfer List	
▪ Form 16 with Form 12 BA	
▪ Summarized Pay Register	
▪ Form 24	
▪ Provident Fund Returns: Monthly returns to the Regional Provident Fund Commissioner for joining (Form 5) or leaving employees (Form 10) and the contributions paid (Form 12A) as well as monthly returns for Pension contributions for exempted trusts for joining (Form 4) or leaving employees (Form 5) and the contributions paid (Form 6)	
▪ Professional Tax returns	
▪ Form 6 and Form 7, the half yearly returns to be generated by the payroll for the eligible employees with the relevant annexure listing the employees and the amounts earned and deducted	
▪ Facility to configure and use the system to develop additional reports on a need basis with tools like Crystal Reports	
L] Additional Features	

<ul style="list-style-type: none"> <li>▪ Ability to define organizational events like training, seminars, workshops and capture the attendance for the same</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Maintain comprehensive record of employee grievance</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Track disciplinary action taken against employees, capturing the costs incurred along with the activities undertaken as part of the disciplinary action. Automate salary deductions, if proposed.</li> </ul>	
F] Other Requirements	
<ul style="list-style-type: none"> <li>▪ Data Porting / Data Entry Suite</li> </ul>	
<ul style="list-style-type: none"> <li>▪ E-Mail / SMS to be sent to all / selected categories / Selected employees <ul style="list-style-type: none"> <li>▪ Pay-Slips / Regular Communications</li> <li>▪ Urgent Communications</li> <li>▪ Notices</li> </ul> </li> </ul>	SMS Gateway / Web Server

#### 4.14 Legal Module

Functionality	Integration required with
A] Masters	
▪ Advocates, their fees	
▪ Court Master	
B] Case Management	
▪ Registration of new cases, allocate advocate, allocate NMC officer	HRMS
▪ Facility to attach various documents related to the case	
▪ Entry of Date of Hearing	
▪ Alerts to officers w.r.t. hearing date	
▪ Entry of hearing details	
▪ Capture of judgment	
▪ Details of payments to the advocates	
▪ Linkage to the departmental data	Departmental Modules
▪ Linkage to GIS to capture locational reference for cases	GIS
C] Legal Opinion on various departmental queries, agreement formats	Document Mgmt. Module
D] MIS	
▪ Case Pendency reports (Department-wise / advocate-wise / Officer-wise)	
▪ Reports w.r.t. Cases won / Lost / Appeals made	
▪ Payments to the Legal Advisors	
▪ Repository for various act and provision with search option	
▪ Integration / Link to Maharashtra Government site for GR references.	
▪ Repository of all the cases since 1950 by High court and Supreme Court with search feature.	

#### 4.15 Project Systems

Functionality	Integration required with
A] Project Initiation	
▪ Defining New Project	
▪ Selection of Department, Officers for scrutiny	HRMS
▪ Selection of Budget Code	Accounts
B] Project Estimation	
▪ Identification of different items, defining units	
▪ Selection of DSR / ESR / WSR rates	
▪ Preparation of Measurement Sheet	Accounts
▪ Preparation of Abstract sheet	
▪ Preparation of Rate Analysis Sheet	
▪ Preparation of Recapitulation Sheet	
▪ Defining various Milestones	
C] Technical Sanction	
▪ Workflow for Technical sanction as per chart of competent authorities	Workflow System
▪ Workflow system to support To & Fro movement of proposal	
D] Administrative Sanction	
▪ Workflow for Administrative sanction as per Delegation of Powers(DEP)	Workflow System
▪ Workflow system to support To & Fro movement of proposal	
▪ Negotiation	
E] Tendering	
▪ Generation of information for press Advertisements	
▪ Check-list for Tender Notice	
▪ Publish Tender Notice on Web Portal	Web Portal
▪ Publish Tender Document on Web Portal	
▪ Reports to assist Tender Document preparation	
▪ Check-list for Tender Terms & Conditions	
▪ Purchase of Tender Documents	Accounts,

	Web Portal, CFC
▪ Submission of bids	Manual
▪ Submission of bid	Web Portal
▪ Technical bid evaluation	
▪ Cross-check of vendors with Vendor Database and their previous records	
▪ Commercial bid evaluation	
▪ Cross-check of rates with similar projects in past	
▪ Award of contract	
▪ Milestone entry	
F] Project Execution	
▪ Project Scheduling	
▪ Measurement Book Entry	
▪ Monitoring of progress	
▪ Quality Control	
▪ Notices to vendors (for delay, for poor quality, any other reason)	
▪ Levy of Penalty	Accounts
G] Billing & Completion Certificate	
▪ Running Account Bills	Account
▪ Billing for Extra items	
▪ Completion certificate on completion of project	
H] MIS Reports	
▪ Project wise comparison of Budgeted Expenditure Vs. Actual Expenditure	Accounts
▪ Milestone Monitoring Report	GIS
▪ Measurement Sheet / Abstract Sheet / Rate Analysis Sheet / Recapitulation Sheet	
▪ Technical Bid Comparison	
▪ Financial Bid Comparison	
▪ Billing Information	
▪ Project Summary Sheet	
▪ Reasons for delay in achieving milestones to be tracked. The responsible party for delay to be identified like any NMC dept. or contractor.	



<ul style="list-style-type: none"> <li>▪ Reports / Alerts through other systems for New Projects <ul style="list-style-type: none"> <li>▪ Building Permission Module</li> <li>▪ Grievance Redressal Module</li> <li>▪ Alerts for Road Re-surfacing / Repairing</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>▪ Cross-departmental information as alerts while defining new projects <ul style="list-style-type: none"> <li>▪ Eg. : Water Department should get alerts for Pipeline laying, if the Road is being prepared / re-surfaced / Repaired</li> </ul> </li> </ul>	GIS
I] Other Requirement	
<ul style="list-style-type: none"> <li>▪ Registration of contractors</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Up-gradation of contractors data / Blacklisting of contractors</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Contractors Register</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Confidential Register of Contractors</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Road register (Traffic / Road history / Defect liability)</li> </ul>	
<ul style="list-style-type: none"> <li>▪ PWD register (Works manual/ accounts manual/)</li> </ul>	
<ul style="list-style-type: none"> <li>▪ IRC standard</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Bridges register (history / annual maintenance / Continuous monitoring)</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Monitoring of Sewerage treatment plants (BoD / Day, CoD / Day, Suspended solid, Electricity consumption)</li> </ul>	

#### 4.16 Hospital Management System

Functionality	Integration required with
A] Registration of Patients & Inquiry	
▪ Preparation of Case Papers	
▪ Payment of Registration Fees	Accounts
▪ Patient Inquiry	
▪ Date for next visit should be automatically generated. Facility for manual setting of date if patient does not turn up.	
B] OPD / IPD Management	
▪ Doctor Managing the OPD / IPD	HRMS
▪ Consultation / Investigation Detail	
▪ Medicine Proposed	
▪ Billing	Accounts
C] Ward Management	
▪ General / special / ICU / NICU	Accounts, Departmental Modules
▪ Patient Allocation to various Beds	
▪ Daily visit report	
▪ Discharge Summary	
▪ Tender Document Fees	
▪ Billing at the time of Discharge	
D] OT Management	
▪ OT Scheduling	
▪ Surgery Details	
▪ Doctor Details	HRMS
▪ Output Details	
▪ Billing	Accounts
E] X-Ray & ECG	
▪ Case details	
▪ Records & Data management	
▪ Generation of reports for PNDT & ANC	
F] Special Disease (ARV / TB / AIDS)	
▪ Case details	

▪ Location	GIS
▪ Forms	
▪ Auto Reports generation based on predefined time schedule	
G] Lab Management	
<ul style="list-style-type: none"> <li>▪ Sample Collection details</li> <li>▪ Inward details</li> <li>▪ Technician details</li> <li>▪ Report preparation</li> <li>▪ Record management</li> <li>▪ Pathology report</li> <li>▪ Culture report</li> <li>▪ Reports on various types of test conducted</li> </ul>	
H] Medical Board	
▪ Employee details	HRMS
▪ Inward, Case preparation	
▪ Test reports	
▪ Issuance of certificates	
I] Other Details	
▪ Casualty Case Details	
▪ Utilisation Reports for Nurses / Doctors	HRMS
▪ Capture of Patient Feedback	
N] Knowledge Centre	
▪ Patient Information on Web-site	Web Portal
▪ Area wise list of Multi Special Hospitals with contact numbers	Web Portal
▪ Area wise list of Ambulance services & Numbers	Web Portal
▪ Area wise list of Crematoriums	Web Portal
J] MIS	
▪ Patient Analysis	
▪ Casualty Case Details	
▪ Occupancy reports	
▪ Patient Feedback Analysis	
▪ Generation of Daily/Monthly/Quarterly reports	
▪ Generation of reports required for Governmental bodies	

#### 4.17 Committee Section

Functionality	Integration required with
A] Executive Wing Database	
<ul style="list-style-type: none"> <li>Database of members of various committee corporators, mayors etc</li> </ul>	Web
B] Agenda Preparation	
<ul style="list-style-type: none"> <li>Preparation of Goshwara by Department &amp; submission to Municipal Secretary Dept.</li> </ul>	Projects
<ul style="list-style-type: none"> <li>Submission of proposals from various Counselors</li> </ul>	
<ul style="list-style-type: none"> <li>Selection of Type of Meeting (General Body / Standing Committee / Ward Committee / etc.)</li> </ul>	
<ul style="list-style-type: none"> <li>Selection of different Goshwara's received for a meeting</li> </ul>	
<ul style="list-style-type: none"> <li>Schedule of meetings of various committees</li> </ul>	
<ul style="list-style-type: none"> <li>Generation of Agenda Copy</li> </ul>	
<ul style="list-style-type: none"> <li>Issue of Agenda to Members &amp; Administration after approval.</li> </ul>	Work-flow
<ul style="list-style-type: none"> <li>Issuance of letters received from the office bearers to various departments.</li> </ul>	
C] Minutes of Meeting	
<ul style="list-style-type: none"> <li>Capture of Proceedings</li> </ul>	
<ul style="list-style-type: none"> <li>Capture of Attendance of the members</li> </ul>	
<ul style="list-style-type: none"> <li>Printing of Minutes after approval</li> </ul>	Work-flow
<ul style="list-style-type: none"> <li>Printing of Minutes</li> </ul>	
D] Resolution Preparation	
<ul style="list-style-type: none"> <li>Preparation of Resolution</li> </ul>	
<ul style="list-style-type: none"> <li>Distribution of Resolution</li> </ul>	Document Management
<ul style="list-style-type: none"> <li>Publishing of resolutions on Web Portal</li> </ul>	Web Portal
E] MIS	
<ul style="list-style-type: none"> <li>List of issues discussed department-wise &amp; committee wise in a specific time period</li> </ul>	
<ul style="list-style-type: none"> <li>Attendance Details</li> </ul>	
<ul style="list-style-type: none"> <li>Resolution Details</li> </ul>	
<ul style="list-style-type: none"> <li>Data required for the preparation of annual report (Total number of resolutions passed, meetings held etc)</li> </ul>	

#### 4.18 Asset Management

Functionality	Integration required with
<b>A] Classification of Assets</b>	
<ul style="list-style-type: none"> <li>▪ Immovable Assets               <ul style="list-style-type: none"> <li>○ Land</li> <li>○ Building</li> <li>○ Roads, Footpaths</li> <li>○ Bridges, Culverts, Flyovers, Subways &amp; causeways</li> <li>○ Drains including underground drains</li> <li>○ Water Works Distribution</li> <li>○ Public Lighting System</li> <li>○ Lakes and Ponds</li> <li>○ Capital Work-in Progress</li> </ul> </li> </ul>	GIS
<ul style="list-style-type: none"> <li>▪ Movable Assets               <ul style="list-style-type: none"> <li>○ Plant and Machinery – including machinery of Water Works &amp; Drainage</li> <li>○ Vehicles</li> <li>○ Furniture &amp; Fixtures</li> <li>○ Office Equipments</li> <li>○ Other Equipments</li> <li>○ Live Stock</li> </ul> </li> </ul>	Vehicle Mgmt. System
<ul style="list-style-type: none"> <li>▪ Investments</li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ Capture Various details for the Assets               <ul style="list-style-type: none"> <li>○ Ownership</li> <li>○ Cost Details (construction / Purchase / Transfer)</li> <li>○ Depreciation Principles</li> <li>○ Other details to arrive at Current Value</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>▪ Preparation of Opening Balance for Asset Valuation</li> </ul>	Accounts
<b>B] Asset Transactions</b>	
<ul style="list-style-type: none"> <li>▪ Purchase of New Assets</li> </ul>	Municipal Secretary, Projects, Accounts
<ul style="list-style-type: none"> <li>▪ Acquisition of Land</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Asset Sale</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Investment on Assets (like construction of new floors, road re-surfacing, etc.)</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Insurance Details</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Insurance Claim Related Information capture</li> </ul>	Accounts
<b>C] MIS</b>	

▪ Asset Register	GIS
▪ Revenue Report	
▪ Outstanding Register	GIS
▪ Search facility for various information (like search for name of road)	GIS
G] Other Requirements	
▪ Data Porting / Data Entry Suite	

#### 4.19 Land & Estate Management

Functionality	Integration required with
A] Land Management	
<ul style="list-style-type: none"> <li>▪ Proposal for Land Acquisition</li> </ul>	GIS
<ul style="list-style-type: none"> <li>▪ Scrutiny of Land Details</li> </ul>	WorkFlow Mgmt. System
<ul style="list-style-type: none"> <li>▪ Valuation of Land</li> </ul>	
<ul style="list-style-type: none"> <li>▪ TDR Process &amp; Possession of Land</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Transfer of Details to Concerned Department (Bhavan for Construction, Other department for Information)</li> </ul>	Legal
B] Estate Management	
<ul style="list-style-type: none"> <li>▪ Creation of Record in the Estate Register               <ul style="list-style-type: none"> <li>○ Hand-over from other agencies</li> <li>○ Hand-over by Builders</li> <li>○ Construction by Projects Dept.</li> </ul> </li> </ul>	Projects
<ul style="list-style-type: none"> <li>▪ Issuance of Municipal Property on rent / lease</li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ Generation of Bills</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Acceptance of Payment</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Renewal of Rent / Lease agreement</li> </ul>	Legal
<ul style="list-style-type: none"> <li>▪ Allotment of House to the employee</li> </ul>	HRMS
<ul style="list-style-type: none"> <li>▪ Maintenance of Property on Contract</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Maintenance Inspection report</li> </ul>	
D] MIS	
<ul style="list-style-type: none"> <li>▪ NMC Land Register</li> </ul>	GIS
<ul style="list-style-type: none"> <li>▪ Land Acquisition related reports</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Revenue Reports for Estate on Rent / Lease</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Outstanding Register for Estate on Rent / Lease</li> </ul>	GIS
<ul style="list-style-type: none"> <li>▪ Top Defaulters List</li> </ul>	
H] Other Requirements	
<ul style="list-style-type: none"> <li>▪ Data Porting / Data Entry Suite</li> </ul>	

#### 4.20 Materials Management

Functionality	Integration required with
A] Masters	
<ul style="list-style-type: none"> <li>▪ Categorisation of Stores               <ul style="list-style-type: none"> <li>○ Central Stores</li> <li>○ Hospital Stores</li> <li>○ Street Light Department Stores</li> <li>○ Water Supply Dept.</li> <li>○ Road Dept.</li> <li>○ Other Stores</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>▪ Defining Various Items under each category</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Vendor List</li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ Price-list for the Rate Contract Items</li> </ul>	
B] Rate Contracting or Individual Orders	
<ul style="list-style-type: none"> <li>▪ Tendering</li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ Sanction from Standing Committee</li> </ul>	Municipal Secretary
<ul style="list-style-type: none"> <li>▪ Proposal submission for Individual Orders</li> </ul>	Workflow Mgmt. System
<ul style="list-style-type: none"> <li>▪ Purchase Orders</li> </ul>	
C] Indent Processing	
<ul style="list-style-type: none"> <li>▪ Facility to each department to indent material</li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ Issue of Material by Stores Staff</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Order to vendor by Stores Dept.</li> </ul>	Accounts
<ul style="list-style-type: none"> <li>▪ Material receipt forecast</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Reminder to vendor in case of delay in delivery</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Receipt of Material, Stock Updation, Capture of Sr. No., Batch No.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Capture of Date of Manufacture &amp; Validity Date for Food / Medical Items</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Maintenance of Reorder level i.e. procurement after reaching reorder level.</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Payment to Vendor</li> </ul>	Accounts
D] Disposal of Dead Stock	



▪ Department-wise submission of details	
▪ Tendering by Stores Dept.	Portal, Accounts
▪ Disposal of Dead Stock	Accounts
E] MIS	
▪ List of Vendor-wise / Material-wise orders	
▪ Material-wise, Department-wise consumption report	
▪ Disposal of Dead Stock	Accounts
▪ Status report to department w.r.t. their order	
▪ Comparison of price bids with history prices	
▪ Alerts if the Batch No.s or Sr. No. is not in order	
▪ ABC Analysis	
I] Other Requirements	
▪ Data Porting / Data Entry Suite	
▪ Logins to suppliers to update their status	

#### 4.21 Trade Licence Module

Sr. No.	Requirement
	Allow the addition/updation of following functions
1	ULB information in the ULB Master
2	Sanitary zone/division information in the Sanitary Zones/wards/Division Master
3	In the Revenue Wards Master
	(a) Revenue wards information under sanitary zones/wards/divisions
	(b) Revenue blocks under revenue wards information.
4	Election Wards Information
5	Locality categories
6	Sanitary zones/ward/division allocation to Sanitary Inspectors (SI)
7	Trade categories
8	Sub-trade categories.
9	Allow the configuration of:
	(a) Late fee details for the corresponding time periods in the penalty fee master
	(b) Trade rates
	© Revenue Block Categorizations
10	Details of an applicant for a new trade license.
11	Preparation of report of field inspection of the applicant's premises (with comments of the SI/HO)
12	Recording the NOC/Installation Permission Details,
13	Allow the Municipal Commissioner to view the recommendations of the SI/HO on a new license application.
14	Facilitate the Commissioner to enter his remarks in the above case
15	Capturing of the license fee/late fee details (Cheque/DD details, etc.)
16	Generation of a new license after the information on the necessary approvals are recorded in the system.
17	Allow printing of the license document from the system.
18	Recording the application details from the application form submitted by the applicant.
19	Data from the application collected for License renewal
20	Recording of the trade License renewal details

21	Recording of the Panchanama details collected from the SI reports
22	Generation of the list of defaulters of renewal fees
23	Generation of the list of license holders who wish to close their trades on their own
24	Update the status of a trade license as 'active' or 'closed', and the reasons for closure are entered
25	Recording of the details from the application submitted by the applicant for change of Title
26	Generation of license with changed title, after necessary steps completed
27	Allow printing of the above license
28	Details of the un-assessed trades-individuals performing trade without a proper trade license
29	Track the renewal notices sent to the license holders to renew their License.
30	Track response dates, late fee applicability, etc. for the above
31	Capture of grievances against a license, or in general.
32	Generation of demand collection and balances revenue ward-wise for the ULB

#### 4.22 Grievance Redressal System

Functionality	Integration required with
A] Masters & Initial Setup	
<ul style="list-style-type: none"> <li>Complaint Type, Sub-types, Capture of Mobile No. of citizen</li> </ul>	
<ul style="list-style-type: none"> <li>Mapping of Designation / Roles to Complaint Sub-type</li> </ul>	HRMS (Employee Master)
<ul style="list-style-type: none"> <li>Integration of Complaint Type / Sub-type with Departmental Modules</li> </ul>	Property Tax, Water, Licenses, Asset Management, etc.
<ul style="list-style-type: none"> <li>Citizen Charter for each Complaint Type (Define duration of complaint redressal &amp; escalation path in case of non-redressal)</li> </ul>	
B] Complaint Management	
<ul style="list-style-type: none"> <li>Complaint Acceptance through Citizen Facilitation Centers / Internet / KIOSKs</li> </ul>	Web / KIOSKs / GIS
<ul style="list-style-type: none"> <li>Facility to make Resident ID compulsory for certain complaints                             <ul style="list-style-type: none"> <li>Facility to check NMC dues for allowing certain complaints</li> </ul> </li> </ul>	Property / Water / Licenses Modules
<ul style="list-style-type: none"> <li>SMS alert to concerned employee</li> </ul>	
<ul style="list-style-type: none"> <li>Facility to mention the action on complaint</li> </ul>	
<ul style="list-style-type: none"> <li>Automatic escalation of Complaints (beyond stipulated time frame)</li> </ul>	
<ul style="list-style-type: none"> <li>SMS alert to citizen upon Action Taken Report</li> </ul>	
<ul style="list-style-type: none"> <li>Facility to accept citizen feedback on the Administration Action</li> </ul>	
<ul style="list-style-type: none"> <li>Facility to mark a complaint as fake / invalid (for not considering it in the normal reports or report for Project System)</li> </ul>	
C] MIS	
<ul style="list-style-type: none"> <li>Pendency reports (complaint-wise / Dept.-wise)</li> </ul>	GIS
<ul style="list-style-type: none"> <li>Top Performers / Least Performers</li> </ul>	
<ul style="list-style-type: none"> <li>Top Payer's / Top Defaulters</li> </ul>	

#### 4.23 Web Portal

Functionality	Integration required with
1 Home Page	
<ul style="list-style-type: none"> <li>▪ Message from Mayor, Commissioner</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Vision, Mission, Objectives</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Link to various sub-sections               <ul style="list-style-type: none"> <li>○ City Information</li> <li>○ Online Services</li> <li>○ About NMC</li> <li>○ Projects</li> <li>○ Citizen Grievances</li> <li>○ RTI</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>▪ RTI               <ul style="list-style-type: none"> <li>○ Names of PIO.</li> <li>○ Departments/Wards: Intro, Objectives, responsibilities, powers &amp; duties of officers, employees with gross salary, activities, time limit, directory with telephone no.</li> <li>○ Committee: Members, purpose, type, freq. of meeting, docs available for public.</li> <li>○ Projects/ Activities: Budget head, work activities, allocated amount, current statistics.</li> <li>○ Details of concessions, subsidies given, computerization done in various depts.</li> <li>○ Integration required for updation of data for RTI with projects, accounts, HRMS, Fleet, material ,asset.</li> <li>○ Scope as per RTI Act 2005 sec. 4(1).</li> </ul> </li> </ul>	<p>Projects, Accounts, HRMS, Material Mgmt., Fleet Mgmt., Hospital Mgmt., Asset Mgmt.</p>
<ul style="list-style-type: none"> <li>▪ Opinion Poll</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Photo Gallery</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Tenders</li> </ul>	<p>Accounts, Projects</p>
<ul style="list-style-type: none"> <li>▪ FAQ's</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Emergency Information</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Employee Login using LDAP</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Feedback</li> </ul>	<p>HRMS</p>
<ul style="list-style-type: none"> <li>▪ Contact Us</li> </ul>	
2 City Information	

<ul style="list-style-type: none"> <li>▪ History of Nagpur</li> <li>▪ Tourist Locations</li> <li>▪ City Map</li> </ul>	
	GIS
3 Online Services	
<ul style="list-style-type: none"> <li>▪ Birth / Death Certificates</li> </ul>	Accounts, Corresponding Module
<ul style="list-style-type: none"> <li>▪ Duplicate Bills</li> </ul>	
<ul style="list-style-type: none"> <li>▪ No Dues Certificates</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Work Orders</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Downloading of Forms</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Sale of Tender Forms</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Status on Applications / Complaints</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Payment Details, Bill Details</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Payment Gateway</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Self Assessment of Property Tax</li> </ul>	Property Tax Module
4 About NMC	
<ul style="list-style-type: none"> <li>▪ Administrative Information</li> </ul>	
<ul style="list-style-type: none"> <li>▪ Information on Elected Representatives, Various Committees</li> </ul>	

**Part II**

**5 Additional Services to be  
delivered**

Services that are imperative to achieve the integrated e-Governance based solution include:

NMC aims to adopt and implement the best practices followed across the globe. In view of the above, NMC expects the Bidder to propose workflows based on the best practices followed at the international level in the form of blue prints or workflows as part of this delivery. These workflows shall be shared with the key officials in the concerned departments through a series of workshops and their views taken into consideration during design of the final workflows. In case this has a significant impact on the duration of the assignment, the Evaluation Committee appointed by NMC study and give the necessary directives to the implementing team and the respective department.

## **5.1 Services Components**

One time

- Data Migration/ Master Files
- Integration with Legacy systems
- UAT
- Implementation
- Parallel / Independent runs
- Training/Documentation

Recurring (Post Implementation)

- Enhancements/ Upgrades/Customisation
- Additional Licenses
- Support (NMC) and ATS for the next 2 years beyond defect liability period of 6 months
- System Administration
- Database Base Administration
- Change Management Process
- Onsite and Online Support.



## **5.2 Enhancements, Bug Fixes**

Once the systems have been commissioned, the Bidder shall provide support for all future enhancements and bug fixing. The Bidder shall propose the teams for this along with their roles, job descriptions and profiles of key individuals. The Bidder will include their quote for 24 months support beyond defect liability period of 06 months.

## **5.3 Training**

The Bidder shall provide training to 3000 personnel identified by NMC at NMC site on the Workflows, Project on usage and customisation of the systems , data back up and retrieval procedures

The Bidder shall also provide hands on training to the end users as per the User Training Plan. NMC will measure the effectiveness after the completion of the training.

## **5.4 Help Desk Support**

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 24 months.

The Bidder shall provide an online support service for all internal users of NMC. This will function on all NMC working days from 09:00 A.M. to 8:00 P.M. It is hereby agreed that NMC shall provide office space of approx 700 sq feet on the NMC premises.

## **5.5 Project Management Service**

The following Project Management Services are required:

The Bidder shall develop a Project Management Plan. The Project Management Plan shall amongst other functions, detail all tasks including but not limited to the task / person in charge for the execution of the task/ effort resource allocation. This information shall be provided in the form of a detailed Gantt chart. The Project Management Plan shall also detail all milestones and

indicate when the required deliverable documentation will be available to NMC.

The Bidder shall develop a Risk Management Plan and shall identify, analyze and evaluate the project risks, and shall develop cost effective strategies and action plans to mitigate those risks. The Bidder shall monitor report and update the project risk profile.

The Bidder shall develop a Quality Assurance Plan for the execution of this project. The Quality Assurance Plan shall address at a minimum, the following project processes:

- Document Control
- Change Management
- Product Review and Approval
- Control of Customer Supplied Product
- Inspection and Testing
- Risk Management
- Control of Quality Records

The Quality Assurance Plan shall define the structure and scope of the required quality objectives.

Deliverables

- Project Management Plan
- Risk Management Plan
- Quality Assurance Plan

Review of Deliverables

On the receipt of each deliverable, NMC shall review each deliverable within a mutually agreed time frame. NMC shall issue "Permission to Proceed" or "Permission to Proceed subject to certain conditions".

## **5.6 Identified Risks**

- Govt. bureaucratic procedures for gathering data and digitize may take longer time than the normal one
- Competency development of NMC official to acceptable levels of managing operations & services will be a time consuming process and need to be planned very meticulously.
- In Automated tax bills generation process It may not be possible to make it rue based and all the rules and regulations can not be implemented in first instance

- Simplification of the process of various services and its change management is likely to take longer time than planned
- Integration between services
- Service restoration will be a key issue once the system goes down for any reason. All possible work around have to be thought ahead of time and should be verified from time to time.
- Reporting of the health of the system by no of transactions completed on the system at regular and predefined intervals
- Electrical power availability during the implementation and maintenance phase may create problems.

## **5.7 Project Reporting Services**

### **Fortnightly**

The Bidder shall submit to the NMC a written progress report every fortnight. The Bidder shall also report exceptions and issues that that requires action.

### **Monthly**

The Bidder shall attend monthly project execution committee meetings that shall be held at the NMC's premises. The date and time of the meeting shall be decided mutually between the parties. The Bidder shall to provide a written report on the following:

- Progress against the Project Management Plan
- Status of all risks and issues
- Status of testing

### **Ad-hoc**

The Bidder will assess ad-hoc requests for information or review meetings promptly on the delivery date that shall be given by the NMC. The Bidder shall deliver the required information in writing within the agreed time frame.

## **5.8 Design Services**

The following Design phase services are sought:

- Review of the proposed workflows/Blueprints/Functional Requirement Specifications by NMC
- Development of final Functional Requirement Specifications based on inputs from NMC teams

- Development of a prototype to progressively demonstrate the user interface to enable the user to evaluate the business system design and the user interface design

#### Deliverables

ToBe process blue prints based on best practices and NMC practices

### **5.9 Build & Testing Services**

The following build and testing services are sought:

Software Development Services:

The software will be developed and tested in accordance with the latest version of the following specifications:

- Functional Requirements Specifications
- Technical Requirements Specifications
- Performance Testing Benchmark Environment and the Performance Requirements Specifications

#### Development Environment

The Bidder shall provide the development environment including all hardware, software and office accommodation. The location of the Bidder's development premises shall not be moved from the nominated location as per the agreement, without the approval of the NMC.

#### Testing Services

- The Bidder shall develop a Test Plan to support Function Testing and System / Integration Testing.
- The Bidder shall ensure that the testing of the software is comprehensive and auditable.
- The Bidder shall undertake the complete testing of the entire new system, as part of system integration testing.
- The Bidder shall undertake the testing of the data conversion and migration to the new system, as part of system integration testing.
- The Bidder shall ensure that the re-testing of all software likely to be impacted by the correction of the "Non Compliances" identified during User Acceptance Testing (UAT) is comprehensive and auditable.
- The Bidder shall maintain a Test Defect Log. The Bidder shall make available the Test Defect Log to the NMC within 24 hours or next

business day of receiving a request for such from the Project Execution Committee.

- The Bidder shall provide a Testing Report on the current status of testing, as part of the Project Reporting.

#### Configuration Management Services

The Bidder shall ensure facilities exist for the control of documentation, program versions and program migrations between environments.

#### Deliverables

- Test Plan, covering all testing to be performed by the Bidder.
- Function Test Cases
- Test Log
- Testing Report
- Software Executables
- Revised Functional Specifications
- Revised Technical Design Document

All of the other deliverables referred to above, shall be delivered to the NMC on commencement of the initial User Acceptance Testing (UAT) and on the commencement of any subsequent UAT periods following the correction of any "Non Compliances".

### **5.10 User Acceptance Testing Services**

The following User Acceptance Testing Services are required:

User Acceptance Testing (UAT) will be performed by NMC at NMC site, in accordance with NMC approved UAT plan. The Bidder shall install the system in NMC UAT environment. The Bidder shall provide a representative to participate in the UAT. The Bidder must give NMC representatives a minimum notice of agreed period, of readiness to proceed to UAT.

NMC representatives will commence Pre-UAT on the Bidder's test environment as soon as NMC receives the notice of "Readiness to Proceed" to UAT date. NMC representatives will inspect the test log and execute a series of test cases on the Bidder's development environment, over agreed period of time.

For this Pre-UAT, the Bidder shall provide the necessary testing environment (hardware, software and system configuration data) to support a group of 3 - 5 NMC testing personnel.

Following the completion of Pre-UAT, NMC representatives will determine whether to proceed to user acceptance testing on NMC site. The software executables to be installed for user acceptance testing will have no defects outstanding at the time of installation. User acceptance testing may be terminated and rescheduled if NMC representative determines that further testing would be of little or no value as a consequence of the existence of critical or high level defects.

At the completion of UAT, the correction and retesting by the Bidder of the outstanding defects will be undertaken within the period as agreed. The UAT retesting procedures will be as for the initial UAT testing, as described above.

The acceptance of the system by NMC will be based on no defects outstanding in the above-specified "time boxed" user acceptance testing periods.

The services required of the Bidder during User Acceptance Testing are listed below:

- Software Installation
- Defect Analysis, Correction and Re-testing
- Documentation of the problem defect analysis and the solution details
- Performance Monitoring. This task will be undertaken jointly with NMC personnel.

### **5.11 Performance Testing**

Performance Testing will take place at NMC's site during user acceptance testing as per the approved Performance Testing plan.

During the Design Phase, the performance testing benchmark environment, the performance requirements and the method of conducting the performance testing to determine system performance against the response time targets will be specified by the Bidder in consultation with NMC.

If as a result of performance testing, NMC determines that one or more system performance requirements have not been satisfied, then each of these requirements will be recorded as a defect with a severity classification of "High". . The cost incurred for the fixing of the Problem shall be borne solely by the Bidder and such cost shall not be reimbursed by NMC.

The Bidder has to perform stress testing and load testing, as well assist NMC in performing the same.

## 5.12 Defect Severity Classifications

A brief description of the defect severity classification is given below.

- **Critical** - A failure of software evidenced by abnormal termination of programs or windows.
- **High** - A failure of software evidenced by incorrect results with respect to critical data and for which there is no 'work around'.
- **Medium** - A failure of software evidenced by either incorrect result with respect to critical data for which there is a 'work around', or incorrect presentation of information.
- **Low** - A minor or cosmetic flaw in the software normally involving screen layouts, report formats and error messages. Note: A 'work around' is defined as performing a system user action or actions to achieve the same physical result, i.e. the same database state, without unduly hindering normal operations.

## 5.13 Product Defect Management during UAT

Problems raised by NMC during user acceptance testing ("Problem") will be classified as follows –

- Problem within specifications. Such Problem shall be recorded on the defect log with the appropriate severity status of Critical, High, Medium or Low. The cost incurred for the fixing of the Problem shall be borne solely by the Bidder and such cost shall not be reimbursed by NMC.
- Problem is outside specifications but is attributable to changes in software within specifications. Problem will be recorded on the defect log with the appropriate severity status of Critical, High, Medium or Low. The cost incurred for the fixing of the Problem shall be borne solely by the Bidder and such cost shall not be reimbursed by NMC.

Problems raised by NMC during user acceptance testing will be documented on a Non Compliance Report (NCR) and communicated to the Bidder for analysis and solution. The classification of the problem and the severity of the problem will be determined by NMC. The Bidder will document their analysis of the problem and their proposed solution on the "NCR" document.

#### **5.14 Software System Deliverables**

- Blue print of workflows
- Software Executables
- Revised Functional Specification, including Logical Data Base Design and Data Dictionary
- Revised Technical Design Document
- Acceptance Test document
- Non Compliance Reports completed with problem defect analysis and solution details
- Integrated e-Governance Application / ERP Technical Manual
- Integrated e-Governance Application /ERP Administration Manual
- Integrated e-Governance Application /ERP User Manual
- Integrated e-Governance Application /ERP Security Manual System
- Installation Manual
- Back-up, Recovery and Restoration Manual
- Integrated e-Governance Application / ERP source code of customised portion

The deliverables referred to above, shall be delivered to NMC (via an acceptable medium such as CD) on successful completion of the User Acceptance Testing (UAT).

#### **5.15 Data Conversion and Migration**

The Bidder shall provide the data conversion and migration services as defined in the Requirements Specification document. The Bidder shall undertake the testing of the data conversion and migration software as part of system integration testing.

#### **5.16 Documentation Services**

- The Bidder shall provide NMC with two (2) hard copies and a soft copy of all documentation for the required deliverables specified in this section. Version control will apply to all documents.
- The Bidder grants NMC a perpetual license to copy the documentation and software for use by NMC in the maintenance and operation of the system, and for future changes to the system.



### **5.17 Training Services**

- NMC believes that key to successful implementation will be the Bidder's ability to train NMC's staff in the operation of the proposed business solutions.
- The Bidder shall provide training to 3000 personnel identified by the IT Cell on the Workflows, Project Technical Design & Implementation, covering Data Base Design, Application Design, Program Libraries and System Configuration at NMC site.

The Bidder shall also provide hands on training to the end users as per the User Training Plan. NMC will measure the effectiveness after the completion of the training. The Bidder must be able to train the users in Hindi and Marathi languages, apart from English language.

Deliverables

- Technical Training Materials
- User Training Plan
- User Training Materials

### **5.18 Warranty Period**

The Bidder shall provide software support for the Integrated e-governance system during the Warranty Period of 6 months, in accordance with the following:

Package warranty:

For Commercial off-the-shelf (COTS) software, a minimum warranty for 4 years or the prevailing warranty as provided by the Principal manufacturer, whichever is more will be applicable. The Bidder shall give a detailed explanation of what warranty constitutes in the case of their product

The Warranty Period for the custom-built software shall be 6 months from the date of notification of acceptance of the complete system including all modules by the NMC. For System Software, the prevailing warranty as provided by the Principle will be applicable.

The Bidder will correct problems raised by NMC during the Warranty Support Period, which are classified as a defect, with nil cost to NMC. The "Fixes" shall be delivered to NMC via a medium such as CD and/or any other new and developed medium that may be used.

In case additional user licenses are required in the next 3 years, the Bidder shall provide the same or better level of discount not exceeding the existing price or the market price prevailing at that time, whichever is lower.

#### **5.19 Maintenance Support Services**

The Bidder is expected to transfer the knowledge to the NMC nominated Technical Team but however shall commit one system administrator and one database administrator for a minimum period of defect liability from the completion and sign-off and the next two years of maintenance period. The system administrator and database administrator should have at least 3 years of relevant experience. They shall be at least graduates with appropriate industry certification in systems/ Database administration.

The Bidder is required to provide ongoing maintenance support and / or further system development services for the entire system over an initial two (2) year period. This support shall commence on a date to be agreed after the completion of defect liability period.

Maintenance Support Services are defined as ongoing production support and small software modifications. These software modifications will be specified through a "Software Change Management Request Form".

#### **5.20 Project Governance**

As part of the project governance, NMC and the bidder shall form a Joint Management Committee which will be further supported by:

- A Evaluation Committee, which shall evaluate the business solutions proposed by the bidders as well as the project timelines
- A User Team, which will evaluate the fit of the workflows as proposed by the Bidder. In addition, this team will be involved in the UAT during the implementation phase,
- Customisation Teams
- Project Manager
- Systems Administrators
- Systems Analyst
- Database Administrators

Post Implementation Team during defect liability period and the next two years maintenance period.

The successful Bidder shall, in consultation with NMC, appoint a team size of at least 10 persons. The structure of the team shall be follows:

NMC envisages a team size of at least 07 persons. The structure of the team could be follows:

- Project Manager (1)
- Systems Administrator and Database administrator (2)
- Systems Analyst customisation and enhancement (1)
- Online Help Desk (1)
- User support expert (5) (usage support, Functionality, Report preparation, Local Data Back up. First level H/W support etc) five member team

## 5.21 Technical Requirements of Payment Gateway

The portal should provide an online payment facility via a payment gateway. The following are the desired parameters of the gateway

Features to look for in a gateway

Product Features	Required Parameter
Credit Card Support	
Support for All Major Cards	YES
Branding	
Ability to Change the look and feel of the Payment Pages	easy and fully brandable (preferable) or API calls based
Integration Process	
Platform	
Method for passing integration parameters	Checksum based
Level of Integration Difficulty	LOW
Fraud Prevention and Risk Mitigation	
Instant Fraud Alert Mails for risky Transactions	YES
Heuristic Fraud Pattern Matching and detection engine	YES
Customisable Alert and Action criteria for Risky transactions	YES
Comprehensive daily reports with Risk Scores per Transaction	YES
Partial Captures and Refunds	YES
Support	
24 x 7 Helpdesk	YES
Comprehensive Online Knowledgebase	YES
MIS Interface	
Comprehensive MIS Interface	YES
Online Journal Entries for all Transactions	YES
Facility for online Capture & Reversals	YES
Transaction Features	
Auth & Capture Support	YES

## Annexure 1. Base Line Information

This table gives the idea of the no of transactions taking place in different departments and sections.

Sr. No	Name of Department	Process Name	Daily Transactions	Weekly	Monthly	Yearly
1	WATER					
		Billing procedure (consumers water bill)				700000
		About complaint				20000
		Quality checks	500			
		Bore well/Hand pump installation				100
		Maintenance work for amount <10,000	50			
		Maintenance work for amount >10,000			10	
		licence Plumber selection				1(in 3yrs)
		Tanker process for personal use			50	
		Tanker process for remote areas	250			
		Tillu pump Confiscation			10	
		Individual new connection residential(<15 mm)	5			
		New connection for areas(bulk connection)/other			20	
		Public well maintenance				120
2	Town planning	Procedure for building			10	
		Procedure for layout			2	
		Process for formation of development plan				1
3	PWD	Process for works which				

Sr. No	Name of Department	Process Name	Daily Transactions	Weekly	Monthly	Yearly
		comes under budget head				
		Leave procedure			30	
4	Traffic & transport	Installation of new signal				
		Process for repairs & maintenance			10	
		Improvement of square				25
		Zebra crossing marking				30
		Traffic sign boards				50
5	Projects	Process of civil maintenance/furniture supply			25	
	Quality control	Quality checking procedure	8			
		Purchasing of new instruments				3
6	Hot mix plant	Complaint solving procedure	10			
		Procedure for material & labor purchasing			3	
		Process of road cutting		8		
7	Lighting	Installation of street lights				500
		Maintenance of street lights			8000	
		Material procurement				5
		Building internal electrification				100
		Installation of motor pump				25
		Water pump maintenance			300	
8	Fire	Process for requisition of spare parts		5		
		Process for opinion form fire point of view for health		5		

Sr. No	Name of Department	Process Name	Daily Transactions	Weekly	Monthly	Yearly
		department				
		Emergency response procedure			40	
		Process for obtaining safety certificate				600
9	PRO	Process for release of press/adds/tenders to be published in press & billings			300	
		Process for citizen complaint	25			
		Process for condolence & congratulation resolution			7	
		Preparation of yearly dairy of contact numbers of selected personalities of NMC				1
		Process for arrangement of general functions			3	
		Process of arrangement of death & birth ceremony of statues				130
10	CFC	Process for birth & death certificate				
		Purchasing process	10			
11	Committee section	Process for preparation of the minute/proceedings				
		Process for policy decision making				
13	Legal	Court cases			35	
		Opinion			5	
		Payment procedure/(Temp advnc)			13	

Sr. No	Name of Department	Process Name	Daily Transactions	Weekly	Monthly	Yearly
14	GAD	Process of purchasing & distribution				
		Assembly question				90
		order & circular				30
16	Special desks	Appointment for backward classes				189
17	Record section	Issue of document			1000	
18	Labor	Compensation basis appointment			11	
19	Enforcement	Process of enforcement				
20	Tax	Process of assessment & mutation	5			
		Appeal procedure				
		Demand bill process	200			
		Generation of salary sheet process			1	
21	CAFO	Reappropriation process				1
		Revise & propose budget process				1
		Payment of bills of different departments	150			
	Pension	Issue of pension	100			
	GPF	GPF application process	150			
22	Estate	Process of application	5			
	Advertisement	Process for banners & hoardings(temporary)				1000
		Process for banners & hoardings(permanent)				200
23	Market	Collection by mohril	20			
		Collection of rent	20			
24	Octroi	Octroi collection process	6500			



Sr. No	Name of Department	Process Name	Daily Transactions	Weekly	Monthly	Yearly
		Issue/ surrender transit pass	5000			
		To refund the Octroi amount deposited under rule 21 & 29	10			
		To issue return pass (24 hours&1month)	100&30			
		To issue exemption certificate process	75			
		Disputed case procedure	rare			
		Credit for oil companies procedure	60			
26	JnNURM + Pench project cell	Process of W.T.P (O&M)	5			
		Process of STP	5			
		Process of JnNURM	5			
		Progress report process	10			
27	e tendering	Procedure of e tendering				
29	Social welfare	Process of Bachat Gat				3000
		Process of providing training				1
		Process of social development committee				2000
30	Sports & culture	Process of arrangement of sports				7
		Process of cultural programs				8
		Process of maintenance & use of stadium				25
		Process of maintenance & use of social house				50

Sr. No	Name of Department	Process Name	Daily Transactions	Weekly	Monthly	Yearly
		reservation				
31	Garden	Process of tendering			10	120
		Process of cutting trees				
		Process of cutting trees in public premises				
		Process of maintenance of garden				1
		Process of maintenance of Para grass				1
		Process of tree plantation on road sides				1
32	SRA	Process of slum rehabilitation				
33	Slum	Process of notified slum				5
		Process of court case		20		
		Issuing photopass for slum dwellers				150
34	Health					
35	Education	Purchase process of school				
		Primary education grant process				5
		Process of selection of mahila bachat gat				1

## Annexure 2 . Connectivity Status of Octroi Post

Naka no	Naka name	Data card Reliance	Tata	BSNL Leased lines
1	Koradi naka		TATA	
2	Kamtee naka in	RELIANCE		
4	Kalamna naka	RELIANCE		
5	Pardi naka (in)	RELIANCE		BSNL
5	Pardi naka (out)	RELIANCE		
7	Umred road	RELIANCE		
8	Khapri naka (in)		TATA	
8	Khapri naka (out)	RELIANCE		
9	Hingna naka (in)	RELIANCE		
9	Hingna naka (out)	RELIANCE		
10	Wadi naka (in)		TATA	BSNL
10	Wadi naka (out)	RELIANCE		
11	Katol naka		TATA	
11B	Dhaba naka (in)			BSNL
11B	Dhaba naka (out)			BSNL
12A	Railway station naka			
16	Air port naka			BSNL
20	Container depo		TATA	

### Annexure 3 Name and Address of NMC Infrastructures

Sr. No.	Name	Associated Office Address	Zone/ No ,
	Schools		
1	K. Baburaoji Bobde Higher Primary School	Laxminagar	Zone No.1
2	Ajani(East) Samarth Nagar Higher Primary School		
3	Ram Nagar Marathi Girls Higher Primary School	Dharampeth	Zone No.2
4	Dhaba Marathi Higher Primary School		
5	Hazari Pahad Marathi Primary School		
6	New Futala Marathi Primary School		
7	Makardhokda Hindi Primary School		
8	Mahtma Ghandhi Marathi Higher Primary School		
9	New Shukarwari Hindi Higher Primary School		
10	Hasanbaag Urdu Higher Primary School		
11	Sane Guruji Marathi Higher Primary School		
12	Mominpura Urdu Boys Higher Primary School		
13	Shanti Nagar Marathi Higher Primary School		
14	Bangali Panja Marathi Higher Primary School		
15	Nayapura Hindi Higher Primary School		
16	Bastrawari Hindi Primary School		
17	Pardi Marathi No.2 Higher Primary School		
18	Chintheshwar Hindi Higher Primary Secoundry School		

Sr. No.	Name	Associated Office Address	Zone/ No ,
19	Nara Marathi Higher Primary School		Zone No.9 Aashi Nagar
20	Lashakaribaag Marathi Higher Primary School		

Sr. No.	Name	Zone
	Hospitals	
21	Indira Gandhi Hospital	Zone No.1 Laxmi Nagar
22	Khamala Ayurvedic Dispensary	
23	Isolation Hospital	Zone No.3 Hunuman Nagar
24	Booti Hospital	Zone No.4 Dhantoli
25	Cotton Market Ayurvedic Dispensary	
26	Mominpura Alopathic Dispensary	
27	Shanti Nagar Alopathic Dispensary	
28	Binaki Female Clinic	
29	Indora Alopathic Dispensary	
	Fire Stations	
30	Civil Fire Station Civil Line	

Sr. No.	Name	Zone
31	Paachpawli Fire Station Opp. Kamal Square	
32	Ganjipeth Fire Station Bhaldarpura	
33	Lakkadganj Fire Station Timber Market	
34	Sakkardara Fire Station Near Nit Garden	
35	Cotton Market Fire Station Near Bus Station	
36	Laxmi Nagar Fire Station Laxmi Nagar Zone	
37	Kalamna Fire Station Near Kalamna Market	
	Octroi Nakas/Offices	
38	Naka No. 1 Koradi Road	
39	Naka No. 1 (A) Godhani	
40	Naka No. 1 (B) Nara	
41	Naka No. 2 Kamptee Road	
42	Naka No. 2 (A) Uppalwadi	
43	Naka No. 4 Kalamna Road	
44	Naka No. 5 Bhandara Road	
45	Naka No. 5 (A) Punapur	
46	Naka No. 5 (B) Bidgaon	
47	Naka No. 7 Umred Road	
48	Naka No. 7 (A) Hudkeshwar	
49	Naka No. 7 (B) Besa	
50	Naka No. 7 © Narsada	
51	Naka No. 7 (D) Sawarbandhe Layout	
52	Naka No. 8 Wardha Road	
53	Naka No. 8 (A) Shiwan Gaon	

<b>Sr. No.</b>	<b>Name</b>	<b>Zone</b>
54	Naka No. 8 (B) Beltarodi	
55	Naka No. 9 Hingna Road	
56	Naka No. 9 (A) Ekatmata Nagar	
57	Naka No. 10 Amaravati Road	
58	Naka No. 11 Katol Road	
59	Naka No. 11 (A) Gorewada	
60	Naka No. 11 (B) Dabha	
61	Naka No. 12 (A) Railway Station Jayastanbha Gate	
62	Naka No. 12 (B) Railway Parcel	
63	Naka No. 12 © Rail Station Santra Market Gate	
64	Naka No. 13 Santra Market	
65	Naka No. 13 Rahadari Section	
66	Naka No. 14 Marwadi Souare	
67	Naka No. 14 (A) Chikhali	
68	Naka No. 15 Itwari Dahi Bajar	
69	Naka No. 16 Sonegaon Airport	
70	Naka No. 18 Ganesh Peth S.T. Stand	
71	Naka No. 19 Ajni Railway Station	
72	Naka No. 20 Concor N Nagar	
73	Maskasath Record Section	
74	Fule Market Record Section	
	<b>Name Of Dahan Ghats</b>	<b>Zone No</b>
75	Ambazari Dahan Ghat	2

Sr. No.	Name	Zone
76	Mokshadam Ghat	4
77	Bhankheda Muslim Kabrastan	6
78	Pardi Ghat	8
79	Punapur Ghat	8
80	Taj Ngr Kabrastan	9
81	Mankapur Ghat Gorewada Ghat	10
82	Dabha Dahan Ghat	10
83	Gorewada Ghat	10
	The Zone Offices	
84	Zone 1 Laxmi Nagar	
85	Zone 2 Dharampeth	
86	Zone 3 Hanumaan Nagar	
87	Zone 4 Dhantoli	
88	Zone 5 Nehru Nagar	
89	Zone 6 Gandhibagh	
90	Zone 7 Satranji Pura	
91	Zone 8 Lakadganj	
92	Zone 9 Aasi Nagar	
93	Zone 10 Mangalwari	
	Water Tanks	Zone No
94	Hazari Pahad (Juni Taki)	2
95	Sitabuldi Killyachya Parisarat (Juni)	6
96	Sitabuldi Killyachya Parisarat (Navin)	6



Sr. No.	Name	Zone
97	Ram Nagar Tekdi	2
98	Ram Nagar	2
99	Shradhananda Peth(Lakshmi Nagar)	1
100	Medical College Chya Mage (Wanzari Nagar)	3&4
101	Gitti Khadaan (Pench Antargat Bandhleli)	2&10
102	Mahendra Nagar	9
103	Jari Patka	9
104	Subhan Nagar	8
105	Sakkardara	3&5
106	Lakkadganj	6&8
107	Minimatanagar	8
108	Nandanwan	5
109	Omkar Nagar	3&5
110	Pande Layout	2&5
111	Jayatala	1
112	Nara	9
113	Wanzari	7
114	Kalmana	8
115	Deshpande Layout	8
116	Gayatri Nagar	1
117	Reshimbagh	3&4
118	Khadan	6
119	Killa Mahal	6
120	Dadha	2

<b>Sr. No.</b>	<b>Name</b>	<b>Zone</b>
121	Dhantoli	1&2
122	Chincha Bhuwan	1&3
123	Taja Bagh(Dighori)	5
124	Malgi Nagar, Hudkeshwar	5
125	Bezan Bagh (Jari Patka)	9
	Other	
126	Workshop	
127	Water Treatment Plant Gorewada	
128	Water Treatment Plant Mahadula	
129	Water Treatment Plant Kanhan	
130	Hotmix Plant Midc, Kanhan Road Wadi	
131	Sewrage Treatment Plant Bhandewadi	
132	New Administrative Building –Civil Lines	
133	GB Hall	
134	CFC At H.Q.	

# Annexure-4

## LIST OF ELIGIBLE COUNTRIES

1. Australia
2. China, People's Republic
3. Hong Kong, ROC
4. India
5. Indonesia
6. Japan
7. Kazakhstan
8. Korea,
9. Malaysia
10. Maldives
11. Marshall Islands,
12. Austria
13. Belgium
14. Canada
15. Denmark
16. Finland
17. France
18. Germany
19. Italy
20. New Zealand
21. Philippines
22. Singapore
23. Sri Lanka
24. Taiwan, ROC
25. Thailand
26. Uzbekistan
27. Netherlands
28. Norway
29. Spain
30. Sweden
31. Switzerland
32. Turkey
33. United Kingdom
34. United States of America

# ANNEXURE-5

(to be attached to the covering letter)

SN	The Bidder/Lead Bidder should possess the following conditions of eligibility:	Confirmation of compliance	Documents Attached As annexure to bid
1	Bidder when a single company/corporation/or enterprise must be the original manufacturer/creator of the enterprise platform software. When a consortium is bidding one of the partners must be original manufacturer/creator of the enterprise platform software. Bidder must have experience in planning, designing, implementation and management of complete ICT infrastructure including Hardware, Firmware & software required for such project and of this magnitude.		
2	The Bidder should agree and give undertaking that they will create support and liaison office in Nagpur and keep it operational till the duration of contract.		
3	The Bidder must provide O&M, augmentation, modernization, up-gradation support for the System offered for the full period of contract and incase of closer of manufacturing company shall provide alternate state-of-the-art solution/equipments to match the performance and the need of the system at that time of eventuality.		
4	A consortium with legal agreements amongst its members consisting of not more than two different entities is allowed to bid through a lead Business Associate who is the original manufacturer/creator of the enterprise platform software or Authorized		

SN	The Bidder/Lead Bidder should possess the following conditions of eligibility:	Confirmation of compliance	Documents Attached As annexure to bid
	associated application product developer of the same technology/platform under the agreement that the Basic Platform developer shall remain jointly and severally responsible for this project in addition to the lead partner's commitment towards the project. The proof and other valid documents for all Business Associates of legally bound consortium should be produced a part of submission of the RFP along with the bid including Registered Joint Venture Agreement (JVA) or Special Purpose Vehicle (SPV) with mention of Lead member whose credentials are to be evaluated for the qualifications to bid. The lead member shall have at least 51% share in the SPV or JVA.		
5	Lead Bidder should have similar installations in India or abroad on same enterprise e-Governance platform in minimum 10 Municipal bodies out of which at least three municipal bodies should be in India.		
6	Proposed enterprise e-Governance platform should be in use for minimum 5 years and should have installations at 500 locations in India or abroad. Bidder will submit the certificate . This condition will be relaxed for the Bidder if they are approved or recommended by JNNURM for their product under e-Governance initiative.		
7	The proposed enterprise e-Governance platform should comply with the open standards and should work with the commercially available Personal Computers and networks through thin client in a		

SN	The Bidder/Lead Bidder should possess the following conditions of eligibility:	Confirmation of compliance	Documents Attached As annexure to bid
	w3c compliant web browser		
8	Lead bidder should be CMMi level-5 certified organization.		
9	Bidders should not be under a declaration of ineligibility for corrupt and fraudulent practices with any of its Client in accordance with the Clause 2.24.1 of GCC.		
10	The Bidder itself when bidding individually or at least one partner when bidding as a consortium should have a proven capability of Change management planning & implementation and capacity building in Government departments/ Institutions/PSUs in India.		
11	Enterprise e-Governance software solution offered by the bidder should be GIS enabled.		
12	Data Input method in the Enterprise e-Governance platform should be capable of bi-lingual Unicode based data entry i.e. enabled to input data in English as well as Deonagri script with a keyboard based toggle switch.		
13	The Bidder itself when bidding individually or at least one partner when bidding as a consortium should have proper knowledge and expertise in handholding the system and operation of the project to client.		
14	The Bidder itself when bidding individually or at least one partner when bidding as a consortium should have a proper and complete infrastructure and able manpower required to carry out the survey,		

SN	The Bidder/Lead Bidder should possess the following conditions of eligibility:	Confirmation of compliance	Documents Attached As annexure to bid
	study and analysis of the entire requirement of NMC.		
15	The Bidder itself when bidding individually or at least one partner when bidding as a consortium must have experience of developing PPP models for operation and running of services to the citizens using the web portal and Citizen Facility Centers.		

SN	Technical Bid shall contain the following;	Confirmation of compliance	Documents Attached As annexure to bid
1	The Overall approach to the Project		
2	The deployment methodology		
3	The proposed platform/technology and its appropriateness for NMC		
4	Maturity of the platform/technology		
5	Salient features of the proposed solution		
6	The Performance capabilities of the solution in terms of number of users and bandwidth requirement.		
7	Change management methodology		
8	Steps to complete the project		
9	Capacity building methodology		
10	Network architecture requirements		
11	Licensing scheme for software during implementation and post implementation for next 10 Years.		
12	The performance benchmark for the offered solution & services		
13	The Warrantee and post warrantee services available from manufacturer, and their terms & conditions		
14	The technology support strategy to the offered solution during its life time.		
15	Detailed approach strategy with respect to the NMC project for		



SN	Technical Bid shall contain the following;	Confirmation of compliance	Documents Attached As annexure to bid
	Augmentation/modernization/modifications adoptability in the same solution during the course of its Life time due to change in technology along with the features.		
16	The constraints, essentials and necessities if any for installation & commissioning of system		
17	Hardware specifications and sizing along with the networking equipments required for this project		
18	Special Infrastructure requirements		
19	Any other requirement which will be essential for consideration to complete the project and will have effect on cost considerations.		
20	Implementation, Operation & Management Plans with clearly marked hurdles and criticalities in implementation, management and O&M of project.		
21	Taxation, duties, Levies, License Fees, Royalties required to be considered for implementation and running of this project activities while considering the investment or Liabilities what so ever .		

SN	Description	Confirmation of compliance	Documents Attached As annexure to bid
1	The legal status, place of registration and principal place of business of the Bidder, whether a pvt. Ltd. or Ltd. company, firm or Consortium, etc;		
2	Details of experience and past performance of the Bidder and their performance of the solutions offered of similar nature within the past five years and details of current contracts in hand and other commitments.		
3	Reports on the financial standing of the Bidder, such as profit and loss statement, balance sheets and auditor's reports of last three years.		
4	PAN/TAN/CST/Service Tax Numbers along with certified copies of Registration Certificates.		

# ANNEXURE-6

## Financial Bid Form

Sr. No.	Description	Quote Amount for 3000 Operational Users (INR in Lakhs) In Figure	Quote Amount for 5000 Operational Users (INR in Lakhs) In words
<b>1</b>	<b>Packaged and Application Software</b>		
A	Operating system		
B	RDBMS with hot standby		
C	Office Productivity Tools		
D	e-Mail and Intranet servers and clients		
E	Anti-virus and other security systems		
F	Geographical Information System web server application		
G	Integrated enterprise e-Governance solution including portal		
H	Document Management System		
I	ESS		
<b>2</b>	<b>Consultancy and other Services</b>		
A	ERP implementation, BPR along with usage Training		
B	Design and development of NMC Portal		
C	DR and Business continuity Plan (BCP) Implementation		
D	Capacity building and change management		
E	Post implementation support for ERP(2 yrs)		

Sr. No.	Description	Quote Amount for 3000 Operational Users (INR in Lakhs) In Figure	Quote Amount for 5000 Operational Users (INR in Lakhs) In words
F	Annual maintenance for RDBMS for 2 years		
G	Annual maintenance for ERP for 2 years		
H	Annual maintenance for GIS web server for 2 years		
<b>3</b>	<b>Other Activities</b>		
A	Setting up of CFCs including Hardware, Software, complete Solution and the network Connectivity with Furniture and fixtures at 7 zone offices in a space provided by NMC		
	<b>TOTAL Amount in INR</b>		