

**This is version 6.1 of the RFP document and replaces version 6 of RFP issued on 04.2.2016**

*(In the version 6, issued on 04.2.2016; inadvertently some text was missing & some text was obscured due to overlapping on account of formatting issues)*

# Government of NCT of Delhi

## Request for Proposal

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# Integrated Citizen Health Information Management System

**DIRECTORATE OF HEALTH SERVICES**

1<sup>ST</sup> FLOOR, F-17, KARKARDOOMA, DELHI-110032

TELEFAX: 91-11-22309220, E-MAIL- [dirdhs@nic.in](mailto:dirdhs@nic.in)

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**Version Control sheet****Document revision history**

Version	Date	Description	Changes suggested by
Version 1.0	07 Nov 15	Initial draft	
Version 2.0	10 Nov 15		
Version 3.0	11 Nov 15		
Version 4.0	21 Nov 15		
Version 5.0	28 Nov 15		
Version 5.1	02 Dec 15	<ol style="list-style-type: none"> <li>Addition of following: <ul style="list-style-type: none"> <li>Definition of Go-Live (page:49)</li> <li>Four phases of project (page:48)</li> <li>Module for DHID generation (page:36)</li> <li>HR module (page:36)</li> <li>EWS module (page:35)</li> </ul> </li> <li>Revised definition of Citizen vault (page:27)</li> <li>Payment terms changed (page:55)</li> <li>Financial bid format changed and Net Present Value (NPV) provision removed.</li> <li>Connectivity to hospitals is now responsibility of Health department (page:47)</li> <li>Tenure of project changed to 5 years (page:10)</li> </ol>	
Version 6.0	29 Dec 2015	<ol style="list-style-type: none"> <li>Average annual turnover reduced to 200 Cr (Page: )</li> <li>Change in Citizen vault size (size reduced to 1 Mb/per citizen) &amp; Total space allocated for vaults will be 10 TB (Page: 31)</li> <li>Future requirement: Number of modules to be developed in future increased from 4 to 8. (page: 41)</li> <li>Following new modules are added (page: 39): <ul style="list-style-type: none"> <li>Insurance</li> <li>Postmortem modules</li> <li>Diet &amp; Kitchen</li> <li>Linen &amp; Laundry</li> <li>Instrument Management (Page:40)</li> </ul> </li> <li>Provision of Local storage (in hospital) - Page:53</li> <li>Creation of 5 Zone and O&amp;M team deployment in 5 zones added (Page:54)</li> <li>Provision for onboarding private hospital added (page 50)</li> <li>Change request provision added (Page:55)</li> </ol>	
Version 6.1	10 Feb 2016	No Change	No Change

## FACT SHEET

S. No.	Particular	Details
1	Tender ID	<b>2016_DHS_98104_1</b>
2	Tender date	<b>February 04, 2016</b>
3	Selection Method	Open e-tender, three bid system (PQ Bid, Technical Bid & Financial Bid)
4	RFP issued by	Directorate General of Health Services
5	Availability of RFP	RFP can be downloaded from e-Procurement platform of Delhi Government ( <a href="https://govtprocurement.delhi.gov.in">https://govtprocurement.delhi.gov.in</a> ) and from <a href="http://health.delhigovt.nic.in">http://health.delhigovt.nic.in</a>
6	EMD	<b>Earnest Money Deposit of Rs. One Crore only.</b> EMD shall be submitted in the form of Demand Draft / Bank FDR / Bank Guarantee in favour of <b>Director Health Services, Delhi</b> and payable at Delhi from any of the Nationalized Scheduled Commercial Bank to be submitted in original physical form to <b>AD-Projects,</b> at <b>Directorate of Health Services, F-17, Karkardooma, Delhi-110032</b> <b>011-22309220, dirdhs@nic.in</b> on or before last date and time of submission of bid proposal.
7	Performance Guarantee (PBG)	Bank PBG as mentioned in this RFP document, as mentioned in <b>Form-7 (10 % of total contract value)</b>
8	Nodal Officer for correspondence and clarification	<b>AD-Projects,</b> at <b>Directorate of Health Services, F-17, Karkardooma, Delhi-110032</b> <b>011-22309220, dirdhs@nic.in</b> with cc to <b>sanjay.a@nic.in</b>
9	Language of Proposal	Proposals should be submitted in <b>English</b> language only
10	Validity of Proposal	Proposals must remain valid for 180 days after the submission date
11	Last date for receipt of Pre bid queries	<b>February 14, 2016, 03:00 PM</b>
12	Pre bid Meeting	Pre-Bid meeting will be held on <b>February 17, 2016, 11:00 PM at conference Hall III, 2<sup>nd</sup> level, Delhi Secretariat, New Delhi.</b> If required, further pre-bid meetings may also be scheduled.
13	Issue of addendum /clarification (if any)	<b>February 24, 2016</b>
14	Last date of bid submission	Proposals must be submitted no later than the following date and time: <b>March 09, 2016, 03:00 PM</b>
15	Opening of technical qualification	<b>March 09, 2016, 04:00 PM</b>
16	Opening of Financial bid	To be communicated latter

## 1. REQUEST FOR PROPOSAL

Department of Health & family Welfare, GNCTD invites proposals to set up and maintenance of integrated Citizen Health Information Management System in Delhi. The purpose of this RFP is to provide a fair evaluation for all Companies, and to provide the Companies with the selection criteria against which they will be judged.

## 2. PROJECT BACKGROUND

The objective of integrated Citizen Health Information Management System in Delhi is to implement a state of the art ICT enabled Health Management System in order to improve productivity of the State Health Department and the state hospitals/ health institutions, ease of citizen and improve healthcare system in Delhi.

The main objectives of the above project are as follows:

- To provide Heath Card with Unique ID to all residents of Delhi
- Common webbased application that can be accessed by any hospitals (public and private), health professionals and individuals.
- Online availability of medical records/history of all registered patients
- Reduction in patient waiting time, efficient management and better user experience
- Simplification and automation of hospital processes
- Secured and availability of information for decision making
- Efficient grievance redressal mechanism for all stake holders with the help of 24x7 call center facility
- Optimal utilization of infrastructure, equipments, facilities, administration, drugs & Consumables
- Integration with external applications, hardware, medical equipments, healthcare programs of Government of India, Delhi government and schemes
- Real time reporting, efficient analytics and decision support

The entire project is divided in to the following three (3) components



- A. Preparation and distribution of Health cards with unique id (Delhi Health ID) to all citizens.
- B. Generation of unique ID for health card AND Development, deployment and maintenance of Centralized web based application for Integrated Citizen Health Information Management System AND procurement, installation, integration and maintenance of Hardware and Bandwidth required in Hospitals/Dispensaries etc.
- C. Accessing devices for users (doctors, health workers etc.)

***This RFP is prepared and floated to cover the requirement mentioned in “Point B” above. Separate RFPs will be floated for other two requirements.***

### 3. STRUCTURE OF RFP

The RFP is divided in following three sections:

- A. Instruction to Bidders**
- B. Scope of Work**
- C. Annexures & Templates**

## SECTION: 1

# Instructions to the Bidders

## 1. INSTRUCTIONS TO THE BIDDERS

### 1.1. GENERAL

- a) While every effort has been made to provide comprehensive & accurate background information, requirements & specifications, Bidders must form their own conclusions about the solution needed to meet the requirements.
- b) All information supplied by Bidders may be treated as contractually binding on the Bidders, on successful award of the assignment by the Department of Health & Family Welfare on the basis of this RFP.
- c) No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of Department of Health & Family Welfare. Any notification of preferred bidder status by Department of Health & Family Welfare shall not give rise to any enforceable rights by the Bidder. Department of Health & Family Welfare may cancel this public procurement at any time prior to a formal written contract being executed by or on behalf of Department of Health & Family Welfare.
- d) This RFP supersedes and replaces any previous public documentation & communications, and Bidders should place no reliance on such communications.

### 1.2. COMPLETENESS OF RESPONSE

- a) Bidders are advised to study all instructions, forms, terms, requirements and other information in the RFP documents carefully. Submission of the bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.
- b) Failure to comply with the requirements of this paragraph may render the Proposal non-compliant and the Proposal may be rejected. Bidders must:
  - Include all documentation specified in this RFP
  - Follow the format of this RFP and respond to each element in the order as set out in this RFP
  - Comply with all requirements as set out within this RFP

### 1.3. PRE-BID MEETING & CLARIFICATIONS

#### I. Pre-bid Conference

- a) Department of Health & Family Welfare shall hold a pre-bid meeting with prospective bidders on the date, time & venue as mentioned in the fact sheet.
- b) The queries should necessarily be submitted in the following format:

S. No.	RFP Document Reference & Page Number	Content of RFP requiring Clarification(s)	Points of clarification
1.			
2.			
3.			

- c) Department of Health & Family Welfare shall not be responsible for ensuring receipt of bidders' queries. Any request for clarifications after the indicated date and time may not be entertained by the DH&FW.

## II. **Responses to Pre-Bid Queries and Issue of Corrigendum**

- a) The Nodal Officer notified by the Department of Health & Family Welfare will endeavor to provide timely response to all queries. However, Department of Health & Family Welfare makes no representation or warranty as to the completeness or accuracy of any response made in good faith, nor does Department of Health & Family Welfare undertake to answer all the queries that have been posed by the bidders.
- b) At any time prior to the last date for receipt of bids, Department of Health & Family Welfare may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document by a corrigendum.
- c) The Corrigendum (if any) & clarifications to the queries from all bidders will be posted on the e-procurement website of GNCTD only.
- d) Any such corrigendum/addendum/clarifications shall be deemed to be incorporated into this RFP.
- e) In order to provide prospective Bidders reasonable time for taking the corrigendum into account, DH&FW may, at its discretion, extend the last date for the receipt of Proposals.

### 1.4. TENURE OF THE CONTRACT

The contract shall initially be awarded for a period of **Five years** (unless terminated premature as per RFP). However, the contract may be extended further for a period of **2 years** on annual basis on the same terms and conditions as on fifth year on mutual consent basis.

#### 1.5. KEY REQUIREMENTS OF THE BID

##### I. **Right to Terminate the Process**

- a) Department of Health & Family Welfare may terminate the RFP process at any time and without assigning any reason. Department of Health & Family Welfare makes no commitments, express or implied, that this process will result in a business transaction with anyone.
- b) This RFP does not constitute an offer by Department of Health & Family Welfare. The bidder's participation in this process may result in Department of Health & Family Welfare selecting the bidder to engage towards execution of the contract.

##### II. **RFP Document Fees**

RFP can be downloaded free of cost from e-Procurement portal (<https://govtprocurement.delhi.gov.in>) of Delhi Government.

##### III. **Earnest Money Deposit (EMD)**

- a) Bidders shall submit the EMD as per FACT SHEET point number 6 in the form of a Demand Draft OR FDR OR Bank Guarantee issued by any nationalized scheduled commercial bank in favor of DH&FW payable at New Delhi, and should be valid for 225 days from the due date of the tender / RFP. If instrument(s) own life is less than the validity period then it must be extended up to 225 days from the due date of the tender / RFP.
- b) EMD of all unsuccessful bidders would be refunded by Department of Health & Family Welfare within 30 working days of the bidder being notified as being unsuccessful. The EMD, for the amount mentioned above, of successful bidder(s) would be returned upon submission of Performance Bank Guarantee.
- c) The EMD amount is interest free and will be refundable to the bidders without any accrued interest on it.
- d) The bid / proposal submitted without EMD, mentioned above, will be summarily rejected.
- e) The EMD may be forfeited:

- If a bidder withdraws its bid during the period of bid validity.
  - If the bidder submits an EMD lesser than the number of constituencies to which financial bids have been submitted
- In case of a successful bidder, if the bidder fails to sign the contract in accordance with this RFP, the EMD of those constituencies will be forfeited.

#### IV. **Submission of Proposals**

- a) The bidders are expected to submit Pre-qualification, Technical and Financial bid for this project

A. Bidders are advised to submit followings on eProcurement platform:

- Pre-qualification
- Technical bid
- Financial bid

- b) Please Note that Prices should not be indicated in the Technical Proposal but should only be indicated in the Commercial Proposal.

#### V. **Tender Evaluation**

- a) Initial Bid scrutiny will be held and incomplete details as given below will be treated as non-responsive, if Proposals:
- Are not submitted in as specified in the RFP document
  - Received without the Letter of Authorization (Power of Attorney)
  - Are found with suppression of details
  - With incomplete information, subjective, conditional offers and partial offers submitted
  - Submitted without the documents requested in the checklist
  - Have non-compliance of any of the clauses stipulated in the RFP
  - With lesser validity period
  - Received without EMD or EMD of lesser value

#### VI. **Registration on e-Procurement Platform**

Bids must be submitted online through e-portal <https://govtprocurement.delhi.gov.in> on or before the stipulated time mentioned in the Fact Sheet. Department does not take any responsibility for the delay caused due to non-availability of internet connection or

network traffic jam for online bids. No bid will be accepted after the said date & time for submission of the bid.

#### Instructions to Bidders for Registration on e-Procurement Platform

- 1) In order to participate in e-procurement platform the vendor should register (if not already registered) on e-procurement platform of GNCTD after paying the registration fee of Rs.7,000/- + Service Tax in the form of Demand Draft only, in favour of Delhi e-Governance Society (DeGS).
- 2) The Demand Draft should be submitted physically at e-Procurement Cell, 6<sup>th</sup> Floor, B-Wing, Vikas Bhawan –II, Bela Road, near Metcalf House, Delhi.
- 3) The vendor should have class – II Digital Certificate.
- 4) The vendor can take the training on e-Procurement platform of GNCTD at e-Procurement Cell, 6<sup>th</sup> Floor, B-Wing, Vikas Bhawan –II, Bela Road, near Metcalf House, Delhi.
- 5) For any clarification on e-Procurement System, please contact at Help Desk number (011-23813523-24) and email [eproc.delhi@nic.in](mailto:eproc.delhi@nic.in)

#### VII. Authentication of Bids

A Proposal should be accompanied by a power-of-attorney in the name of the signatory of the Proposal issued by the company. All pages of the Technical proposal should be signed by the authorized representative physically or digitally.

#### 1.6. PREPARATION OF PROPOSAL

##### I. Proposal Preparation Costs

The bidder shall be responsible for all costs incurred in connection with participation in the RFP process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by DH&FW to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process.

DH&FW will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

##### II. Language

The Proposal should be filled by the Bidder in English language only. If any supporting documents submitted are in any language other than English, translation of the same in English language is to be duly attested by the Bidders. For purposes of interpretation of the Proposal, the English translation shall govern.

The bids submitted by telex/telegram/fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter.

#### 1.7. CONSORTIUM

Consortium is allowed for this project. The consortium partners shall enter in to an agreement delineating the roles and responsibilities of each of the consortium partners and they will be jointly and severally be responsible for execution of the project and terms and the conditions of the RFP. The number of partners in consortium should not exceed three including the prime bidder. However, the Prime bidder will be primarily responsible for the implementation of the complete project.

#### 1.8. TENDER VALIDITY

The offer submitted by the Bidders should be valid for minimum period of **180 days** from the date of submission of Bid.

#### 1.9. RIGHT TO ACCEPT ANY PROPOSAL AND TO REJECT ANY OR ALL PROPOSAL(S)

DH&FW reserves the right to accept or reject any proposal, and to annul the tendering process / Public procurement process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for DH&FW action.

#### 1.10. FRAUD AND CORRUPT PRACTICES

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



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

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

- “corrupt practice” means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of any person connected with the Selection Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of DH&FW who is or has been associated in any manner, directly or indirectly with the Selection Process or the LOI or has dealt with matters concerning the Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of DH&FW shall be deemed to constitute influencing the actions of a person connected with the Selection Process); or (ii) save as provided herein, engaging in any manner whatsoever, whether during the Selection Process or after the issue of the LOA or after the execution of the Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Agreement, who at any time has been or is a legal, financial or technical consultant/ adviser of DH&FW in relation to any matter concerning the Project;
- “fraudulent practice” means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence the Selection Process;
- “coercive practice” means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any persons participation or action in the Selection Process;
- “undesirable practice” means (i) establishing contact with any person connected with or employed or engaged by DH&FW with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or (ii) having a Conflict of Interest; and

- “restrictive practice” means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Selection Process.

#### 1.11. FORCE MAJEURE

Force Majeure is herein defined as any cause, which is beyond the control of the selected bidder or DH&FW as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance of the contract, such as:

- Natural phenomenon, including but not limited to floods, droughts, earthquakes and epidemics.
- Acts of any government, including but not limited to war, declared or undeclared priorities, quarantines and embargos

The bidder or DH&FW shall not be liable for delay in performing his/her obligations resulting from any force majeure cause as referred to and/or defined above. Any delay beyond 30 days shall lead to termination of contract by parties and all obligations expressed quantitatively shall be calculated as on date of termination. Notwithstanding this, provisions relating to indemnity, confidentiality survive termination of the contract.

#### 1.12. ARBITRATION

In case of any dispute between the Parties, both the parties will try to resolve the issue mutually within 20 days of dispute raised. Affected party will give notice in writing to other party indicating concern, proposed remedy to settle the issue. If the issue does not settle by negotiation in the manner as prescribed, the same may be resolved exclusively by arbitration and such dispute may be submitted by either party for arbitration within 20 days of the failure of negotiations. Arbitration shall be held in Delhi and conducted in accordance with the provisions of Arbitration and Conciliation Act, 1996 or any statutory modification or re-enactment thereof. Secretary (Health), Government of NCT of Delhi shall be the sole arbitrator.

#### 1.13. LIMITATION OF LIABILITY

The Selected bidder liability under this Agreement and /or its modifications shall be determined as per the Law in force for the time being. The Selected bidder shall be liable to DH&FW for loss or damage occurred or caused or likely to occur on account of

any act of omission on the part of the Selected bidder and its employees, including loss caused to DH&FW on account of defect in goods or deficiency in services on the part of SI or his agents or any person / persons claiming through or under said SI. ( please change it)

#### 1.14. CONFLICT OF INTEREST

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

#### 1.15. TERMINATION OF CONTRACT

DH&FW may, terminate this contract in whole or in part by giving the Selected bidder at least one month prior written notice indicating its intention to terminate the contract under the following circumstances:

##### **a) Termination for Default**

DH&FW may, without prejudice to any other remedy under this Contract and applicable law, reserves the right to terminate for breach of contract by providing a written notice of 30 days stating the reason for default to the Selected bidder and as it deems fit, terminate the contract either in whole or in part:

- i. If the selected bidder fails to deliver any or all of the project requirements / operationalization / go-live of project within the time frame specified in the contract; or
- ii. If the Selected bidder fails to perform any other obligation(s) under the contract; or
- iii. If there is a breach of SLAs beyond a limit; or
- iv. If there is a breach of representations & obligations

Prior to providing a notice of termination to the Selected Bidder, DH&FW shall provide the selected bidder with a written notice of 30 days instructing the selected bidder to

cure any breach/ default of the Contract, if DH&FW is of the view that the breach may be rectified.

On failure of the selected bidder to rectify such breach within 30 days, DH&FW may terminate the contract by providing a written notice of 30 days to the selected bidder, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to DH&FW. In such event, the selected bidder shall be liable for penalty/liquidated damages imposed by the DH&FW. The performance Guarantee shall be forfeited by the DH&FW.

#### **b) Termination for Convenience**

DH&FW may in its own discretion, by provision of a written notice sent to the selected bidder, terminate the contract, either in whole or in part at any time for its convenience. The notice of termination shall specify that termination is for DH&FW's convenience, the extent to which performance of work under the contract is terminated, and the date upon which such termination becomes effective. Subsequently, the pending dues and the payments up-to the date of termination will be settled accordingly after deduction of applicable taxes and liquidated damages if any.

#### **c) Consequences of Termination**

In the event of termination of this contract for any reason whatsoever, DH&FW is entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective continuity of the services which the Selected bidder shall be obliged to comply with and take all available steps to minimize the loss resulting from that termination/ breach, and further allow and provide all such assistance to DH&FW and/ or succeeding vendor, as may be required, to take over the obligations of the Selected bidder in relation to the execution/ continued execution of the requirements of this contract.

#### **d) Post termination rights and obligations of vendor**

All plans, drawings, specifications, designs, reports and other documents prepared by the Vendor in the execution of the contract shall become and remain the property of DH&FW and before termination or expiration of this contract the System Integrator shall deliver all such documents, prepared under this contract along with a detailed inventory thereof, to DH&FW.

## **2. EVALUATION PROCESS**

- I. Department of Health & Family Welfare shall constitute a Proposal Evaluation Committee to evaluate the responses of the bidders.
- II. The Proposal Evaluation Committee constituted by Department of Health & Family Welfare shall evaluate the responses to the RFP and all supporting documents / documentary evidence. Inability to submit requisite supporting documents / documentary evidence, may lead to rejection.
- III. The decision of the Proposal Evaluation Committee in the evaluation of responses to the RFP shall be final. No correspondence will be entertained outside the process of negotiation/ discussion with the Committee.
- IV. The Proposal Evaluation Committee may recommend for rejection of any or all proposals on the basis of any deviations.
- V. Each of the responses shall be evaluated as per the criteria and requirements specified in this RFP.
- VI. In case any bid is rejected by the competent authority, the concerned bidder may request DH&FW to disclose the reason of rejecting the bid. Department of Health & Family Welfare shall convey the reason to the concerned bidder.
- VII. Department of Health & Family Welfare will prepare a list of responsive bidders, who comply with all the Terms and Conditions of the Tender. All eligible bids will be considered for further evaluation by a Committee according to the Evaluation process define in this RFP document. The decision of the Committee will be final in this regard.

## 2.1. CRITERIA FOR EVALUATION

### 2.1.1. PRE QUALIFACTION CRITERIA

S. No	Criteria	Required Document
1	Prime Bidder should be a Company registered under the Indian companies act, 1956 (or) a firm registered under the Limited Liability Partnership Act,2008 (or) a firm registered under the Partnership Act,1932 for <b>last 5 years as on date</b>	Certificates of Incorporation

2	<p>Average Annual Turnover of the Prime bidder during the last <b>three</b> financial years 2012-13, 2013-14, 2014-15. In case of calendar year 3 years up to December 2014 would be taken in to account (as per the last published Income Statement), should be at least Rs. <b>200 crore</b>.</p> <p>[ The turnover should be on account of ICT Software Systems Development, Implementation &amp; support]</p>	Certificate from statutory auditor appointed by the company (for last three years)
3	<p>Company(s) should have a valid Service Tax Registration and Income Tax returns and PAN card</p>	<ul style="list-style-type: none"> <li>▪ Copy of Service Tax Registration</li> <li>▪ Income Tax returns for last 5 financial years (till 2014-15)</li> <li>▪ Audit report from CA for last 5 financial years (till 2014-15)</li> <li>▪ Copy of PAN card</li> </ul>
4	<p>The Prime bidder should have Positive Net Worth as on 31<sup>st</sup> March 2015</p>	Certificate from Chartered Accountant and Authorized Signatory
5	<p>Company/member of consortium should not be an entity which has been black-listed by Government</p>	Undertaking on company letter head certified by authorized signatory.
6	<p>The company/consortium partner must have experience of implementation of HMIS system in atleast one hospital of minimum 200 bed with atleast 6 modules* in the last 5 years (as on last date of bid submission)</p> <p><b>*Following modules will be considered:</b></p> <ol style="list-style-type: none"> <li>1. <b>IPD module</b></li> <li>2. <b>OPD Module</b></li> <li>3. <b>LAB module</b></li> <li>4. <b>Medico Legal/emergency cases</b></li> </ol>	<p>Completion Certificates from the client;</p> <p><b>OR</b></p> <p>Work Order + Self Certificate of Completion (Certified by the Authorized Signatory );</p> <p><b>OR</b></p> <p>Work Order + Phase completion certificate from client</p>

	<b>Module</b> 5. <b>OT Module</b> 6. <b>Pharmacy module</b> 7. <b>Radiology module</b> 8. <b>Blood Bank module</b> 9. <b>Stores module</b> 10. <b>Hospital accounting module</b> 11. <b>Telemedicine module</b> 12. <b>CSSD module</b> 13. <b>Canteen module</b> 14. <b>Ambulance fleet management module</b> 15. <b>Antenatal/ immunization/natal and post natal module</b>	
<b>7</b>	The bidder should have a geographical presence of the organization with an office in Delhi / NCR or shall submit an undertaking to open office in NCR if selected	Certificate by Authorized signatory with address of Office in NCR
<b>8</b>	Company/Consortium should have valid CMMi level 5 certificate	Copy of certificate

The Consortium(s) / individual bidder(s) who satisfy all the above PQ criteria requirements will qualify for the Technical Bid opening.

### 2.1.2. TECHNICAL CRITERIA

S. No	Criteria	Basis for evaluation	Max marks	Supporting
<b>(A)</b>	<b>Company Profile</b>		<b>30</b>	
1	Average Annual turnover of the prime bidder in last three financial years i.e. 2012-13, 2013-14, 2014-15  (Turnover in Rs. Crores)  [ The turnover should be	<ul style="list-style-type: none"> <li>• More than or equal to 400 Crores: 10 marks</li> <li>• More than or equal to 300 &amp; less than 400 Crores: 8 marks</li> <li>• 200 to than 300</li> </ul>	10	Extracts from the audited Profit & Loss account; <b>OR</b> Certificate from statutory auditor appointed by the company



S. No	Criteria	Basis for evaluation	Max marks	Supporting
	on account of ICT Software Systems Development, Implementation & support ]	Crores: 6 marks		
2	<p>Average Annual turnover of the company from the last three financial years i.e. 2012-13, 2013-14, 2014-15 from below mentioned businesses:</p> <ul style="list-style-type: none"> <li>Health Management System</li> <li>Hospital management System</li> <li>IT Enabled Health care system</li> </ul>	<ul style="list-style-type: none"> <li>More than or equal to 150 Crores: 20 marks</li> <li>More than or equal to 100 &amp; less than 150 Crores: 16 marks</li> <li>50 to less than 100 Crores: 12 marks</li> </ul>	20	
(B)	<b>Relevant Experience</b>		<b>30</b>	
3	<p>Number of patients catered by the HMIS system installed &amp; maintained by the bidder on annual basis. (For the purpose of this bid, the HMIS should have atleast 6 modules* in each of the hospitals taken for this purpose)</p> <ol style="list-style-type: none"> <li>IPD module</li> <li>OPD Module</li> <li>LAB module</li> <li>Medico Legal/emergency cases Module</li> <li>OT Module</li> <li>Pharmacy module</li> </ol>	<p>Number of patient handled by HMIS system in a hospital</p> <p><b>A. OPD (10 marks)</b></p> <ul style="list-style-type: none"> <li>&gt;=2 lakh OPD patient per annum: 10 marks</li> <li>&gt;1 &amp; &lt;2 lakh OPD patient per annum: 7 marks</li> <li>&gt;50,000 &amp; &lt;1 lakh OPD patient per annum: 4 marks</li> <li>&lt;50,000 OPD</li> </ul>	20	<p>Completion Certificates from the client with scope of work;</p> <p><b>OR</b></p> <p>Work Order + Self Certificate of Completion (Certified by Authorized Signatory with scope of work;</p> <p><b>OR</b></p> <p>Work Order + Phase Completion</p>



S. No	Criteria	Basis for evaluation	Max marks	Supporting
	7. <i>Radiology module</i> 8. <i>Blood Bank module</i> 9. <i>Stores module</i> 10. <i>Hospital accounting module</i> 11. <i>Telemedicine module</i> 12. <i>CSSD module</i> 13. <i>Canteen module</i> 14. <i>Ambulance fleet management module</i> 15. <i>Antenatal/immunization/natal and post natal module</i>	patient per annum: 0 marks  <b>B. IPD (10 marks)</b> • $\geq 50,000$ IPD patient per annum: 10 marks • $\geq 30,000$ & $< 50,000$ IPD patient per annum: 7 marks • $\geq 10,000$ & $< 30,000$ IPD patient per annum: 4 marks • $< 10,000$ IPD patient per annum: 0 marks		Certificate (for ongoing projects) with scope of work
4	Number of HIMS Projects completed (with 200 bedded or more & with atleast 6 common needed modules* in)  <b>Following modules will be considered:</b> 1. <i>IPD module</i> 2. <i>OPD Module</i> 3. <i>LAB module</i> 4. <i>Medico Legal/emergency cases Module</i> 5. <i>OT Module</i> 6. <i>Pharmacy module</i> 7. <i>Radiology module</i> 8. <i>Blood Bank module</i> 9. <i>Stores module</i>	• More than 10 projects : 10 marks • 09 to 10 projects: 08 marks • 08 to 09 projects: 06 marks	10	Completion Certificates from the client with scope of work; <b>OR</b> Work Order + Self Certificate of Completion (Certified by Authorized Signatory with scope of work; <b>OR</b> Work Order + Phase

S. No	Criteria	Basis for evaluation	Max marks	Supporting
	10. Hospital accounting module 11. Telemedicine module 12. CSSD module 13. Canteen module 14. Ambulance fleet management module 15. Antenatal/immunization/natal and post natal module			Completion Certificate (for ongoing projects) with scope of work
(C)	Demonstration		40	
5	Product Demonstration	Assessment to be based on following features of products: • 40 features to be mentioned : 20 marks • Change Management Plan: 3 marks • Mobility & MIS: 2 Marks	25	Presentation, Demo & Note
6	Proposed Infrastructure in Health institutions	• Hardware • Connectivity (Bandwidth)	4 3.5	Presentation & Note
7	Support services	• Resources deployment for support • Complaint handling mechanism • Escalation Matrix	3 2.5 2	Presentation & Note

The Consortium(s) / individual bidder(s) who score atleast 75 marks in all the above Technical criteria will qualify for the opening of financial bid.

### 2.1.3. FINANCIAL BID EVALUATION

The Commercial Bids of only the technically qualified bidders will be opened for evaluation.

#### 2.1.4. COMBINED AND FINAL EVALUATION

- a. The technical and financial scores secured by each bidder will be added using weightage of < 70% > and < 30% > respectively to compute a Composite Bid Score.
- b. The bidder securing the highest Composite Bid Score will be adjudicated as the most responsive Bidder for award of the Project. The overall score will be calculated as follows:-

$$B_n = 0.70 * T_n + 0.30 * F_n$$

Where

**B<sub>n</sub>** = overall score of bidder

**T<sub>n</sub>** = Technical score of the bidder (out of maximum of 100 marks)

**F<sub>n</sub>** = Normalized financial score of the bidder

- c. The bidder with lowest qualifying financial bid (L1) will be awarded 100% score. Financial Scores for other than L1 bidders will be evaluated using the following formula:

Normalized Financial Score of a Bidder:

$$F_n = (\text{Financial Bid of L1} / \text{Financial Bid of the Bidder}) \times 100$$

*(Adjusted to two decimal places)*

In the event the bid composite bid scores are tied, the bidder securing the highest technical score will be adjudicated as the Best Value Bidder for award of the Project.

### 3. APPOINTMENT OF SUCCESSFUL BIDDER

#### NOTIFICATION OF AWARD

Prior to the expiration of the validity period, DH&FW will notify the successful bidder in writing or by fax or email, that its proposal has been accepted. In case the tendering process / public procurement process has not been completed within the stipulated period, DH&FW may like to request the bidders to extend the validity period of the bid.

The notification of award will constitute the formation of the contract. Upon the successful bidders furnishing of Performance Bank Guarantee, DH&FW will notify each unsuccessful bidder and return their EMD. The EMD of successful bidder shall be returned only after furnishing of Performance Bank Guarantee and signing of Contract.

#### SIGNING OF CONTRACT

After DH&FW notifies the successful bidders that their proposals have been accepted, DH&FW shall enter into a contract, incorporating all clauses, pre-bid clarifications and the proposal of the bidder between DH&FW and the successful bidders.

#### FAILURE TO AGREE WITH THE TERMS AND CONDITIONS OF THE RFP

Failure of the successful bidder to agree with the Draft Legal Agreement and Terms & Conditions of the RFP shall constitute sufficient grounds for the annulment of the award, in which event DH&FW may award the contract to the next best value bidder or call for new proposals from the interested bidders.

In such a case, DH&FW shall invoke the EMD of the most selected bidder.

#### PERFORMANCE GUARANTEE

Department of Health & family Welfare will require the selected bidder to provide an irrevocably, unconditionally Performance Bank Guarantee, within 15 days from the Notification of award, for a value equivalent to 10% of the total cost. The Performance Guarantee should be valid for a period of 90 months. The Performance Guarantee shall be kept valid till completion of the project and Warranty period. The Performance Guarantee shall contain a claim period of three months from the last date of validity. The selected bidder shall be responsible for extending the validity date and claim period of the Performance Guarantee as and when it is due on account of non-completion of the project and Warranty period. In case the selected bidder fails to submit performance guarantee within the time stipulated, H&FW department at its discretion may cancel the order placed on the selected bidder without giving any notice. H&FW department shall invoke the performance guarantee in case the selected Vendor fails to discharge their contractual obligations during the period or H&FW department incurs any loss due to Vendors negligence in carrying out the project implementation as per the agreed terms & conditions

## SECTION: 2

# Terms of Reference (ToR)

## 1. SCOPE OF WORK

The Department of H & FW, GNCTD is the largest public healthcare provider in Delhi. The Department owns and operates 36 allopathic hospitals with over 10,000 beds, over 260 dispensaries, 30 mobile health clinics, 262 ambulances and a Medical college. <<Details of Ayurvedic, ISM, others like drug controller to be added>>. These hospitals/institutions provide a range of preventive, promotive, curative and rehabilitative healthcare services, teaching, training and research.

List of health institutions /Hospital/dispensaries/Mohalla clinic Annexure-2 and details pertaining to hospital/dispensaries/Mohalla are attached as Annexure-3. However the bidders are requested to visit the health institutions to get a clear idea.

H&FW department has engaged different categories of health staff, totaling over 30,000 including contractual, outsourced etc. to provide the services. The department also has about 4000 ASHA, ANM workers who are critical link to the field.

## 2. FLOW OF ACTIVITIES:

- A. A health card with unique number generated out of the software prepared by the selected bidder will be issued to each and every citizen of Delhi.
- B. A separate RFP will be floated for selection of agency for card procurement, generation/personalization, card issuance and mechanism for temporary and continuous card generation. However, the unique ID (DHID) shall be generated by the centralized application which will be developed and deployed by SI selected through this tender.
- C. The type of card will be decided subsequently as to whether it will be only number based or with magnetic strip/bar code or a smart card.
- D. The number generated should be able to identify the individual and the family he/she belongs and should have option to linkage with AADHAR, EPIC, mobile number, Ration card, bank account etc. The numbering logic and other details will be discussed and finalized with the selected bidder by the DoHFW.
- E. A centralized web (cloud) based application will be designed, developed and maintain by the selected bidder through this RFP . This application will cover all the functional modules of hospital e.g. OPD, IPD, LAB, Store, Operation Theater,

Emergency, CSSD, MLC, primary health infrastructure e.g. Mohalla clinic, polyclinic etc.

- F. Doctors/Health workers (including ANM and Asha worker) will access the centralized application through Computer, Laptop, iPad, smart phone etc. on wired or wireless connectivity. The doctor/health workers shall access the health record of particular patient after taking consent of patient (by using unique ID/card of patient). Every patient will be provided an online account (named **Past Patient Vault**) as part of this application through which the past medical history/health record of patient can be uploaded by the citizen him/her self. **The storage size of vault (for every citizen) will be atleast 1 MBs.** The vault will also contain metadata link of all prospective health data which can be viewed only using the unique number.
- G. Whenever citizen visits government hospitals/dispensary/Mohalla clinic to avail any medical service, the citizen will be registered through the unique ID (health card) and undergo the necessary required treatment. The entire flow of the patient in the health institution will be captured along with all inputs and outputs. Role based Editing / updating rights for different modules will be fixed.
- H. During the treatment, all the observations, advises, reports and other required information will be updated on the centralized server and the metadata within Patient Vault will also be updated.
- I. The health institutions may have local client and storage and processing capacity for uninterrupted operations. Heavy data (images like x rays, CT, MRI, ECHO, angioplasty) may be uploaded to centralized application within a specified time period of 12 hours. In case of patients are referred to another hospital, the data captured from the hospital referred will be uploaded immediately.

### 3. INCEPTION REPORT

The selected System Integrator shall prepare and submit an Inception Report, which will be the base document for all activities related to this project. Department of Health & Family Welfare shall accept and approve the Inception Report.

The Inception report shall cover the following:

- Details of proposed solution
- Preliminary suggestions on LAN/connectivity requirement in Hospitals

- Tentative timelines and deliverables etc.

#### 4. CITIZEN VAULT DEFINATION

- Citizen vault will be a virtual space which will be provided for each and every individual citizen. It will contain the medical/health record of citizen.
- Vault can be accessed by using the citizen Delhi Health ID (Health card ID/OTP/username & Pin)
- Vault will have two logical section:
  - **Section A-Citizen Section:** This section will contain the past history of patient. Citizen will have all the permissions to update this section and to upload the past reports/prescription/suggestion in chronological order. The size of this vault will be specified and limited. This section should also provide facility to fetch/get patient/citizen's data from wearable devices and mobile apps. (The Selected bidder shall provisioned the 10 TB online storage space for Citizen vaults for Section A )
  - **Section B-Medical Section:** This section will contain the medical history/record of patient which are entered through system. This section will be updated only by doctors/health profession and updation will be role based. Citizen can only view this section but cannot update or alter this section. This section will not contain any heavy data (x-ray images/MRI, CT scan etc.). Only link/metadata of heavy data will be placed in this section. However, all the heavy data will be stored at centralized server and can be downloaded from server whenever required. The size of this section will not be restricted
- The Citizen vault will act as storage of individual health record/history.

#### 5. FUNCTIONAL REQUIREMENT

##### 5.1. MEDICAL COMPONENTS OF THE APPLICATION

The proposed Health Information Management System application will be web based, mobile compliant and available on all hand held devices, covering all form factors. The centralized web based application will be accessed by Doctors/Health workers/patients through laptop, Desktop, smart mobile etc..



The software that will be prepared will be citizen/patient centric. Any health institution either public or private providing health services can utilize the application free of cost. Initially it will be voluntary for the private hospitals to utilize this software and **after a certain period of time it may be made compulsory for all** to use it by bringing suitable legislation. Private hospital will be encouraged to use it for their own patients. However they will be required to use it for EWS patient also for meeting their obligations. *The vendor might make app and popularize this by bringing more citizen on the platform. Citizen may insist their private doctor to use it or update their history on this platform*

Identification of the patients/citizens across different health institutions both private and public is very important aspect. The software will generate a unique number for each citizen linked to Aadhar/EPIC, mobile number etc. for easy identification of the patient the access to different modules and functionalities will be managed and controlled through the Application Admin module in the system, based on Role Based Access Control. The system integrator will develop a comprehensive information control and display feature through these modules as per requirement.

Each citizen would be given a unique ID (health card) to avail the health services from different government hospitals as well as private hospital (on later stage through appropriate legislation). This process will help in creating Electronic Health record (EHR) of each citizen.

The system to be prepared will include modules required for health data collection at the field level, modules for ASHA workers, modules for Mohalla Clinics, modules for Poly clinics, PHCs, modules for secondary care hospitals and modules for tertiary care hospitals. Apart from these, modules will also be available for state level health informatics, data analysis, prompt and decision support system.

The integrated Citizen Health Information Management System will have the following functional modules:

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#### 5.1.1. OUT PATIENT DEPARTMENT(OPD) AND ADMIT DISCHARGE AND TRANSFER (ADT):

- **Patient registration:** System will capture the Unique ID, demographic details from Delhi health ID card and other relevant medical information through OPD operator by using card reader, scanner etc.

- Application should have provisions for Follow up / Revisits and Change of department and Cross Referrals. Clinical Information including provisional and final diagnosis will be captured for patients as per ICD-10 standards
- The application should allow the facility to view OPD scheduling of various doctors within departments and Allotment of Doctor
- Patient registration record should be automatically forwarded to the dashboard of the concerned OPD doctor
- On selections of the Patient registration record, the system should display his / her token number on the display unit of queue management system.
- The system should provide other options to the OPD doctor's dashboard, like viewing past treatment details, investigation results, any allergies / health conditions, etc.
- Health records of the patients should be captured and collated through every touch points in the hospital electronically during the patient visits the OPD. The system should automatically forward the relevant sections of the information / data form, to concerned departments, for further action on the Patients case as required.
- For Radiology investigations or other such investigation, the system should display the available slots for getting the required test done.
- In case of admissions, the system should automatically forward the request to Admission counter dashboard, with the registration details, and any other relevant information captured in the system. In Emergency cases, the system should automatically forward the intimation to Emergency department, with required Patient details, as captured in the system.

Queue management system shall also be provided by SI in every hospital/dispensary

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#### **5.1.2. IN PATIENT DEPARTMENT (IPD)**

The IPD module should include following features/functionality (but not limited to):

- Mapping of patients to IPD doctors / specialist in a particular ward
- Registration record to be automatically forwarded to the dashboard of the admission counter operator and Nursing station
- Allocation of bed to patient by Nurse through application

- Generation of wrist barcode tag for patient
- Real time Status of bed
- Retrieval of information on scanning of barcode
- Availability of relevant section on the screen for entering diagnosis by doctor/nurse like - treatment, investigation, minor procedures, diet, drugs, referrals, transfers, blood requisition, etc.
- Generation the Nursing schedule / orders automatically.
- Patient wise usage of drugs and other consumables and maintain linkage to the inventory management process.
- At the time of discharge system shall display the pending task related to patient.
- Automatic preparation of discharge summary and follow-up instructions / discharge on Request / Left against Medical Advice (LAMA)

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#### 5.1.3. LABORATORY MODULE:

All the function related to Laboratory will be integrated with the centralized application. It will cover following function/features (not limited to):

- Laboratory orders registration
- Track requests from various departments like OPD, IPD, Emergency, Labour room, OT etc.
- defined list of Lab tests under various categories, available for selections by the concerned operator / Nurse / doctor
- Traceability to results and patients
- personalized dashboard with queue management of all the requests made through the system
- Generate unique sample IDs, which can be attached to the sample containers / tubes
- Automatic Invoice generation and billing integration to payable patients
- Integration to patient records
- Integration of Laboratory Equipments with this Laboratory Information System

- Integration of this LIS with OPD Software System, IPD and critical areas as defined by hospitals in contract
- Integrated inventory management for Lab Reagents & kits etc, consumption pattern and maintenance scheduling for lab instruments
- Administrative and clinic management reports

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#### 5.1.4. EMERGENCY DEPARTMENT

Radiology module shall have the following function/features (not limited to):

- Patient categorization and registration
- Tracking and tagging brought dead/ MLC and referral cases.
- In case of Medico-Legal case, the system should display a pre-defined checklist for the operator to complete the MLC formalities.
- Integration with MLC system to enable automatic generation of the Medico-Legal report in a pre-defined format.
- In case of admissions, the system should automatically forward the request to Admission counter dashboard, with the registration details
- In case of surgery, the Patient details should be forwarded to OT scheduler screen and to allocate a slot for surgery.
- In case of death of the Patient, the intimation should be forwarded to the concerned operator assigned for generating and providing Death certificates.
- Information transfer from emergency to mortuary should automatically happen through system.
- In case the Patient is referred from IPD the system should automatically forward the Patient record in Emergency department / EMO dashboard.
- The system should allow the EMO / Operator to select the relevant section on the screen for entering diagnosis, treatment and doctor orders like- investigation, minor procedures, drugs, Blood, referrals, etc. whichever applicable and required.

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#### 5.1.5. RADIOLOGY

Radiology module will cover following function/features (not limited to):

- Application should have integration capability for Picture Archiving & Communication Systems (PACS) for Hospitals.
- Readily available defined list of Radiology tests under various categories, available for selections by the concerned operator / Nurse / doctor.
- Feature for Radiology technician to accept the Patient sent for Radiology testing online
- The application shall capture results directly from the Radiology equipments and provide an option for the Radiologist to enter the investigation results / summary in a pre-defined format

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#### 5.1.6. OPERATION THEATRE

- Patient registration record to be automatically forwarded to the dashboard of the OT counter operator
- Provision for time scheduling one day before the actual date of surgery, as per available slots for the next day (Next day schedule should be visible in the system).
- Status of pre and post anesthetic check-up
- pre-defined checklist for the scheduled surgeries
- bar-coded wrist tag generation for OT patient and provision to retrieve information on scanning of Barcode
- Prioritizing of the Surgery schedule
- Provision for enter the details of OT staff e.g. doctor, Surgeons, anesthetists, staff nurses etc.
- Maintain the Supply chain of OT items.
- Provision to capture details on pre-operative and post-operative procedures and assessments done

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#### 5.1.7. MINOR OT

Minor OT module should have features/facility (not limited to):

- Track requests from various departments like OPD, IPD and Emergency etc.
- Personalized dashboard
- Provisioning of all required items, articles, tools, instruments, drugs, other supplies as per defined minor OT procedure.
- Provision for update the status of the minor procedure conducted as advised by the doctor.
- Provision to track the patients transfer to recovery room or ward.

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#### 5.1.8. ELECTRONIC MEDICAL RECORDS (EMR)

EMR module should have features/facility (not limited to):

- Collated & formatted information on patients, as required;
- Search on patient records by patient name, patient ID, etc.;
- Complete clinical data repository, capturing basic patient demographic details, medical history, consultations, diagnosis, laboratory reports, medical
- Images, medical treatment records, etc.
- Built-in reports and user-oriented report-writing capabilities, etc.

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#### 5.1.9. BLOOD BANK

Blood bank module should have features/facility (not limited to):

- Blood collection, storage & supply from voluntary donors;
- Maintenance of Blood Stock Register;
- Maintenance of Donor Database;
- Confirm availability for anticipated use (for operation, accident patients etc.);
- Capturing detailed information about blood samples;
- Replacement of blood against borrowings;
- Processing of service requests;
- Maintenance of inventory / interface to existing inventory system, billing, etc.

- Condemnation of blood, etc.

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#### 5.1.10. MEDICO-LEGAL CASE / REPORT (MLC / MLR)

- Provision to mark the Medico-Legal cases
- Predefined checklist to validate the legal requirements and status for the doctor / presiding Nurse. The system should generate auto alerts / intimations reminding the concerned doctor / Nurse of necessary action to complete the legal requirements and update the status in the system
- Pre-defined format for generating the MLR
- Provision to populate data from the assessment / treatment, as required into the MLR.
- Pre-defined checklist of jurisdiction of Hospital and Police stations
- Able to capture the details of the Postmortem conducted

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#### 5.1.11. LABOUR ROOM

<<To be enter>>

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#### 5.1.12. PHARMACY MODULE

- Available stock information
- Sub modules for OPD, emergency, injection and immunization Room, OT, Labor Room, Wards etc.

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#### 5.1.13. INVENTORY MASTER FILE AND STATUS OF EACH MEDICINE

- List of supplier etc.

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#### 5.1.14. POST MORTEM MODULE

<<Details to be added >>

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### 5.2. NON-MEDICAL MODULE

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#### 5.2.1. INSURANCE MODULE

The selected bidder shall develop the Insurance module to maintain and manage the health insurance claims of patients. This module should have atleast following features:

- Add patient details
- Prepare estimation for patient
- Send estimation to insurance company
- Add letter of credit details from insurance company
- Prepare final Bill settlement with insurance company etc.

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#### 5.2.2. CENTRAL STERILIZED SUPPLY DEPARTMENT (CSSD)

This module shall incorporate inventory management in CSSD, items/trays received from the different patient care units through unique identifiers for packs/trays with online check list.

The supplies to be sent in CSSD are entered by the staff nurse in the patient care unit. Upon receiving at CSSD, staff at CSSD will check the items and generate online receiving slip. At each stage of processing at CSSD the status of the pack/tray/item is updated. Before sterilization code for pack is generated and sterilization details of sterilization cycle and controls are entered. After successful sterilization, items are stored at CSSD storage and online status for availability of such items is available. These items then can be indented by the user department again and sent back to CSSD after usage. Module should allow keeping records for various sterilization and CSSD machinery controls in real time. It should have inventory management and consumable utilization linked to number of packs generated. Other processes and checks as per requirements of NABH standards in CSSD must be completely addressed through the module.

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#### 5.2.3. DIET & KITCHEN

<<Details to be added >>

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#### 5.2.4. LINEN & LAUNDRY

<<Details to be added >>

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#### 5.2.5. STORE & MATERIALS MANAGEMENT



This module should be capable to deal with Hospital Equipment/Material/Inventory Purchase and Supply to different Departments. Main features of store & inventory (not limited to):

- Item Master details
- Vendor Master details
- Area Master
- Supply Order Entry
- Challan Detail Entry
- Inspection of items
- Raising Indents from various Area Stores
- Issue of Items from the Central Store
- Issue of items by the Area Stores
- Material return / recall details
- Generation and printing of Purchase orders
- Inter linkages with store for inventory and stock management used for various tests and should have provision for alerts, if the supplied goes below a specified level.

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#### **5.2.6. BIOMEDICAL WASTE (BMW) MANAGEMENT MODULE**

This module shall keep track and records of disposal of biomedical waste in each and every hospital, monthly reports, and reports as per requirements of Health department. The application shall also contain Effluent Treatment Plants (ETP)/Sewage Treatment Plants (STP) details, monitoring of records, analysis of percentage of infectious waste from hospital and individual patient care units, sharps management, spillage management and training modules of patients and healthcare workers. Application should be able to generate reports in accordance with regulatory requirements of biomedical waste management rules and Environment Protection act revised from time to time.

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#### **5.2.7. INSTRUMENT/EQUIPEMENT MANAGEMENT**

This module shall be related to administration of equipment and assets used for patient care, support services, hospital administration within each and every health institution. Module shall have following features (atleast):

- Inventory of all equipment

- Separate record of each machine/equipment including make, model, manufacturer, location manufacturing date etc.
- Provision for entry of new equipment
- Unique ID generation for each equipment
- Provision to track & monitor the performance of equipment.
- Tracking of complaint related to equipment

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#### 5.2.8. ECONOMIC WEAKER SECTION (EWS) MODULE

Government provides medical benefits and exemption of charges to economic weaker section of the society. The centralized application shall have the provision for providing exemption to the patients belonging to EWS section. The section will have atleast following feature:

- Provision for entry of patient as EWS section
- Submission of required credentials in the application by the examiner (doctor/operator etc.)
- Approval by concerned authority
- Automatic exemption from hospital charges as per the Government rules.

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#### 5.2.9. MANAGEMENT REPORTING (BUSINESS INTELLIGENCE)

- Reporting on patient information (demographics, diagnoses, procedures, attending physician, acuity, etc.)
- Management reporting
- Ad hoc reporting
- Executive Dashboards
- The reporting module should be capable to generate data/information on desired format as per the requirement of Health department.

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#### 5.2.10. HR MANAGEMENT

The proposed system should cover the following aspects of HR function

- Leave Management
- Roster Management
- Salary and remuneration matters (other than government employees)

- Trainings
- Recruitment of contractual staff

#### 5.2.11. GENERATION OF DELHI HEALTH ID (DHID):

The centralized application shall have a separate module for generation of Delhi Health ID. The same ID will be printed on the card which will be issued to citizen. DHID shall be created after capturing basic details e.g. Name, Age, Gender etc. The DHID shall be linked with AADHAR, PAN number, Account number, Mobile number, EPIC number, ID issued by Food and Supply department, email id etc.

#### 5.2.12. <<EXHAUSTIVE LIST OF MODULES TO BE ADDED>>

***DoHFW will form a committee for different clinical, non-clinical and support services of various levels of hospitals to identify the functional requirements for the development of the software. Any changes required in the functional requirements will only be through the above committee and no separate changes will be carried out.***

#### 5.3. FUTURE REQUIREMENT

*The Selected bidder is expected to develop, implement and maintain **8 more modules** (medical/non-medical modules) as per the requirement of DoH&FW during the first year of project (after go-live). These modules will be different from the list of modules mentioned in this RFP document.*

#### 5.4. MOBILE/TABLET APPLICATION

The system integrator shall develop android/ios/windows based mobile/tablet application for following purposes:

##### 5.4.1. MOBILE APP FOR ANM/ASHA WORKER

The SI shall develop a mobile app through which ANM/ASHA worker will perform their activities.

The mobile application should be capable of integrating with any external device which can collect health data.

The Application will cover the following functionality:

- Pregnancy Registration Module

- Antenatal Care Module
- Delivery Registration
- Birth Registration
- Child Immunization and Growth Module
  - Child Immunization
  - Growth and Weight Monitoring and trend analysis
- Post Natal Care Module
- Abortion/Early loss before birth
- Daily Planner Module
- ASHA profile module
- Drug Kit Stock

#### 5.4.2. MOBILE FOR APP FOR PATIENT

Through this app, patient can view and update his/her medical record. This application shall also have following feature (not limited to):

- Details of doctors/specialty available in hospital
- Status of availability bed in hospitals
- Nearest health facility etc.

#### 5.4.3. MOBILE APPLICATION FOR DOCTORS

The selected bidder shall also develop a separate mobile application which will be exclusively used by doctors.

### 6. INTEGRATION FRAMEWORK

#### 6.1. INTEGRATION WITH OTHER SYSTEMS OF GNCTD AND GOI

The system should be capable to integrate / exchange data to and from any external application / system through an Interface by using a standard data exchange protocol through a secure channel. Following are the few external applications/system which are planned to be integrated:

- Emergency Ambulance services
- E-SLA
- Health Ministry, GoI Systems

- Payment Gateway Integration
- Telemedicine
- AYUSH
- Mother Child Tracking system (MCTS)
- CATS Control room
- Other National Programs and Schemes

(Details of above mentioned systems to be entered)

## 6.2. Integration with SMS Gateway

The system shall be integrated with the SMS gateway. SMS Gateway shall be used to deliver SMS based services to all citizens / Patients, doctors Health worker and other Hospital staff. SMS Gateway should support both Push and Pull services.

## 6.3. Integration with Payment Gateway

A Payment gateway will also be integrated with the system to facilitate the billing component.

The application shall:

- record and maintain all payment details against a unique service application number / invoice number and mapped to Patients Unique ID.
- be able to maintain all the payment records in a database and retrieve the same as and when required
- be able to maintain all records of part payments as well as consolidated payment amounts against all service requests
- automatically generate an online receipt / invoice in a pre-defined format against the payment and should allow printing of the payment receipt / invoice
- automatically update the payment information on the Patients record on successful payments made

## 6.4. Connector for non HL7 Compliant Equipments

The SI shall ensure that exchange, integration, sharing, and retrieval of electronic health information is as per the Health Level 7 (HL7) standard.

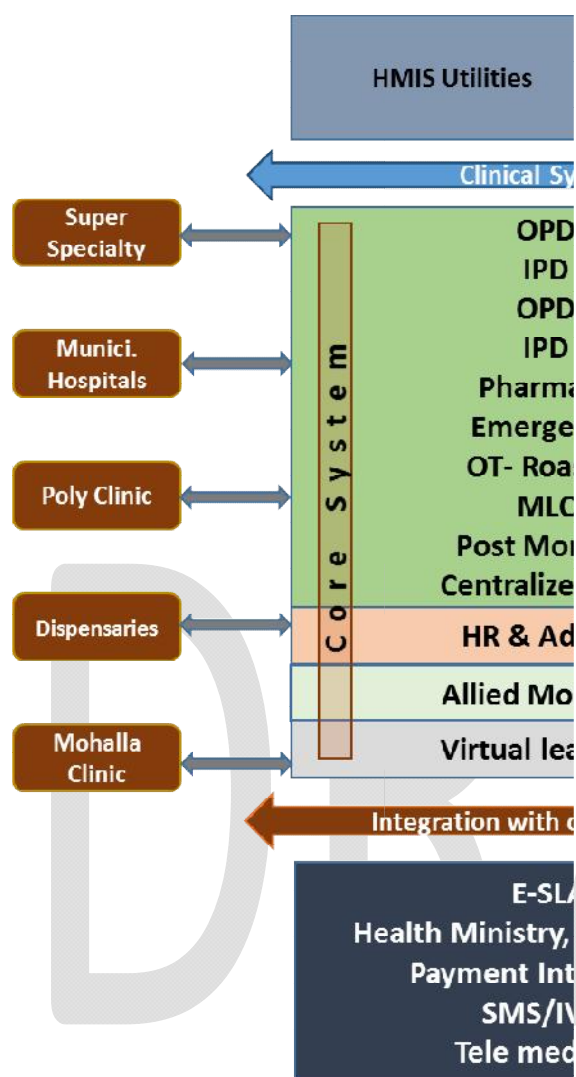
In most of the hospital of GNCTD, the existing medical equipments are not HL7 compliant (details of Non HL7 complaint medical equipment is attached at Annexure – 1).

HL7 allows the machines to talk to each another and exchange text data, including registration and discharge information, lab results, and reports.

The System integrator shall provide the necessary connectors to extract data/information from non HL7 complaint equipments. SI shall assess the requirement of HL7 connectors on the basis of information provided by in Annexure-1

## 7. SYSTEM DIAGRAM:

Below diagram depicts the all the major components of integrated Citizen Health Information Management System which will be covered in Scope of Work of this RFP.



## 8. NON FUNCTIONAL REQUIREMENT

The below mentioned requirements need to be considered while developing and implementing the system.

S.N.	Parameters	Description
1	<b>Scalability</b>	<ul style="list-style-type: none"> <li>The architecture proposed should take care of high volume critical applications.</li> <li>System maximum user concurrency shall be easily upgradeable through hardware enhancement; This hardware enhancement shall be in the form of</li> </ul>

		<p>both identified hardware upgrades of existing equipment that have the potential to be upgraded (vertical scaling) and also by way of adding new servers (horizontal scaling).</p> <ul style="list-style-type: none"> <li>Expected number of users of the system during the first year is approximately _____ users, second year this shall grow to approximately _____ users, third year these shall grow to approximately _____ users</li> </ul>
2	<b>Interoperability</b>	<ul style="list-style-type: none"> <li>Usage of standard APIs &amp; Service-oriented architecture (SOA) based</li> </ul>
3	<b>Availability</b>	<ul style="list-style-type: none"> <li>Web application has to be deployed on the load balanced cluster. The web servers will be configured in Active / Passive mode.</li> <li>High availability for the databases can also be achieved in following ways: <ul style="list-style-type: none"> <li>➤ By putting two database servers configured in an active/passive server cluster configuration.</li> <li>➤ 2. As the uptime requirement is high, it's suggestive to have near real time replication with DR site.</li> </ul> </li> </ul>
4	<b>Platform Flexibility</b>	<ul style="list-style-type: none"> <li>Web-centric, Compliance to SOA and Web-services, Open Standards and Interoperability</li> </ul>
5	<b>Extensibility</b>	<ul style="list-style-type: none"> <li>The design of the software should allow for easy addition of new functionality. This extension of</li> </ul>



		functionality or features should be with minimal changes to the existing software.
6	<b>Performance</b>	<ul style="list-style-type: none"> <li>▪ The performance of the application is expected to be monitored on an ongoing basis. This will help to forecast the traffic/data load for the future. This will serve as input to scale up the existing infrastructure.</li> </ul>
7	<b>User Friendly GUI</b>	<ul style="list-style-type: none"> <li>▪ The application GUI should be user friendly for ease of operation and keeping in mind the response time to attend to emergency.</li> <li>▪ System software should have a single comprehensive inbuilt Help file with user friendly search facility and/or tagging.</li> </ul>
8	<b>Language</b>	<ul style="list-style-type: none"> <li>▪ Application should be multilingual (English and Hindi).</li> </ul>
9	<b>Security</b>	<ul style="list-style-type: none"> <li>▪ Security has to be a most important design consideration. The application/system should comply with the standard guidelines of Information Security Management System (ISMS).</li> <li>▪ The system must address following: <ul style="list-style-type: none"> <li>➤ Authentication</li> <li>➤ Authorization</li> <li>➤ DoS attack</li> <li>➤ SQL Injection</li> <li>➤ Data Tampering and other ways to security threat</li> </ul> </li> <li>▪ System should be secure and feature an intelligent Log-in &amp; Log-out facility. The same user should not be able to Log-in simultaneously at different machines</li> </ul>

10	<b>Role Based Access Management and Data Access Restrictions</b>	<ul style="list-style-type: none"> <li>▪ System functionality access will be provided at the role and location level</li> <li>▪ In order to restrict the information access, system will ensure user will have access to the information he/she is entitled to.</li> </ul>
11	<b>Other design considerations</b>	<ul style="list-style-type: none"> <li>▪ Reduce the number of clicks of the forms &amp; automatic replication of similar data</li> <li>▪ Use of Simple language in the application and appropriate typography for accessibility of the content</li> <li>▪ Automatic de-duplication of data, wherever the data is same</li> <li>▪ One click validation of data forms and to pass on to next level</li> <li>▪ Images used should be light and of the type jpeg, gif, png.</li> <li>▪ Must provide meaningful alternate descriptions for non-text elements</li> </ul>
12	<b>SLA monitoring Tool</b>	<ul style="list-style-type: none"> <li>▪ The selected bidder shall also provide the SLA monitoring tool to monitor the SLAs.</li> </ul>
13	<b>Customization</b>	<ul style="list-style-type: none"> <li>▪ System should be customizable to address the stated user needs and future requirements that may arise.</li> </ul>
14	<b>Device Agnostic Design</b>	<ul style="list-style-type: none"> <li>▪ The application should be neutral/agnostic to browser/OS/Resolution etc.</li> </ul>

The Application Software would either directly or indirectly enable in performing various downstream operations like analytics, integrated data management, generating timely alerts to stakeholders

System should present an integrated view of information as required by various end users through providing intelligent analytics tools.

Entire solution should be backed by a System Management Software, providing comprehensive reports on down time, availability, system resumption, nature of fault, cause of fault etc. This system shall be a part of Go-Live of the project.

#### 8.1. INTEGRATION OF CARD SCANNER WITH APPLICATION

The centralized application shall capture the DHID from health card provided to every citizen. The application should be capable to capture data from card through a card reader/scanner. The card reader/scanner shall be provided by the separate vendor which will be selected through a separate tender

#### 8.2. INFORMATION SECURITY AND DATA PRIVACY

The successful bidder will be responsible for providing secure systems. The successful bidder is expected to adhere to Information Security Management procedures as per acceptable standards with best practices.

The vendor shall be responsible for guarding the Systems against virus, malware, spyware and spam infections using the latest Antivirus corporate/Enterprise edition suites which include anti-malware, anti-spyware and anti-spam solution for the entire system.

The vendor shall have to maintain strict privacy and confidentiality of all the data it gets access to.

#### 8.3. AUDIT TRAIL

The system shall maintain an audit trail which will be a detailed record showing all the activities of application and what transactions / operations have been performed by the concerned user during a given period of time. Audit trail must display the following details, but not limited to, with filter / sorting criteria options:

- Timestamp
- User Name
- Module – Sub Module – Screen – Section – Field Name
- Previous Value etc.

The system shall ensure that the audit trail must not be tampered by any user.

#### 8.4. AUTHENTICATION SERVICES

The system shall have the provision for secure authentication services.

- The user credentials from the user authentication server / Patient database must be verified and then only the access should be granted inside the application modules.
- Access of users should be dynamically controlled through the Access control module / Admin Module. Each user should be only one session at a time should be maintained i.e. when one User logs-in to the application using his / her own credentials, then the same credentials must not be allowed to be used for logging into the application through same or different computer.

#### 9. ONBOARDING PRIVATE HEALTH INSTITUTIONS

Selected Bidder shall ensure computational infrastructure to accommodate double transactional load, data size then that of load calculated for government health institutions so that, on later stage private health institutions can be on boarded to use this common application for their local use.

Selected bidder shall train internal team of GNCTD of required size which shall further support private health institutions for implementation of common application for their local operation.

#### 10. GRIEVANCE REDRESSAL / FEEDBACK / SUGGESTIONS

The system integrator shall provide a 24x7 helpline for feedback, suggestion, technical or operational support. The user of the system may register its grievance, even if any user is not registered in the system, they should be able to log their Grievances for taking necessary corrective actions through application. After registration of grievance, a ticket number will be raised and tracking of grievance shall be done with the help of ticket number.

The application should also allow unregistered users to send written requests (grievances / feedback / suggestions) etc. which may be suitably addressed and provide required details / information to the User on the contact details provided by him / her.

- Any citizen shall be able to reach the call center by phone. The call center must be able to support both Hindi and English languages. Call center should be accessible from all privately and PSU operated landline/mobile telephone lines.

- Dedicated and trained manpower should be deployed to attend the calls. The manpower should also be familiar with the features of application.
- The call center will be operated **24X7** excluding national holidays.
- Time to time reports should be generated to find out the quality of performance of the system and the level of satisfaction of the users.
- Database of all the calls, voice recording (if provision) and caller related information stored on call center infrastructure shall be provided to GNCTD.
- All man power, which shall be deployed on this call center, shall undergo one week training prior to deployment. Training material, process flows, call transcripts and other similar material shall be prepared by the successful bidder.

#### 10.1. HELP DESK FOR USERS

The SI shall also provide Help desk support for all the users. The help desk service will serve as a single point of contact for all ICT related incidents, information and service requests as well as grievance redressal.

- Log issues / complaints / Grievances related to Application, IT infrastructure, Bio-Medical Infrastructure, IT systems at client locations, grievances related to services availability and quality etc., as under different categories and issue an ID number against the issue / complaint / Grievance
- Assign severity level to each issue / complaint / Grievance
- Track each issue / complaint / Grievance to resolution
- Escalate the issues / complaints / Grievances, to State Authorities if necessary as per the escalation matrix defined in discussion with DoH&FW, GNCTD.
- Provide feedback and resolution to the callers.

7. Follow up on the collection of reports, revisit and recording general feedback / complaints on the services provided in the hospital facility.

#### 11. PERSONALIZED DASHBOARD

A personalized dashboard shall be provisioned in the centralized application for all the users (doctors & other health workers). User specific and hospital specific dashboard will be created to view the current status of transactions. The personal Dashboard

facility will be available for all the users after successful login. The type of information and content, to be displayed on the personal dashboard should be dynamically controlled and updated.

## **12. TRAINING AND CHANGE MANAGEMENT**

### **12.1. CHANGE MANAGEMENT PLAN**

The SI shall prepare and submit a change management Plan. The Change management team will be responsible for followings:

- Preparing key officers and their direct reports to meet the challenges and opportunities they will encounter as they implement new processes
- Implement and monitor training plans
- Helping to increase individual skills, and knowledge.
- Assessing and building staff capability to implement change quickly and effectively
- Developing and implementing change communication plans and Facilitation to concerned staff for transition to new roles

### **12.2. TRAINING**

- The system integrator shall impart training to all hospital/dispensary/Mohalla clinic staff and other key stakeholders on the usage and maintenance of the application.
- Indicative list of user group and modules is attached as annexure-4.
- The SI shall provide a change management plan which addresses the various aspects of capacity building and training and shall propose different training modules for different user profiles at appropriate timelines
- The SI shall provide such additional training as they deem necessary in order to ensure that the training imparted is comprehensive, complete and meets the Service Level Agreement as mentioned in the RFP. The SI shall also prepare Training Modules/content to enable the users for self-learning. The training material prepared will be owned by the GNCTD.

### **12.3. ONLINE HELP / REFERENCE**

The SI shall ensure that training contents / User Manuals are available to Users in downloadable (PDF) format so that the Users may refer / download it for their own personal reference as and when needed.

### 13. INFRASTRUCTURE REQUIREMENTS

#### 13.1. INFRASTRUCTURE REQUIREMENTS AT HOSPITALS

The Selected bidder shall provide the necessary storage in all the government hospitals. The Selected bidder shall assess the local storage in each hospital. The purpose of this storage is to store the heavy data related x-ray, MRI, CT scan etc. locally. This storage infrastructure shall be temporary and on a certain time interval (within 6 hours), entire data will be synced with the centralized system.

List of facilities in every hospital is attached as annexure-5.

#### 13.2. BANDWIDTH REQUIREMENTS AT HOSPITALS

***SI shall be not be responsible for provision of connectivity to Hospitals/Dispensaries/Mohalla Clinic.*** The connectivity to the hospital, Mohalla clinic and dispensaries will be provided by H&FW, GNCTD and internal LAN/connectivity like Wi-Fi shall be ensured by the Hospitals. The space and electrical expenses will be borne by the health institutions concerned. The SI will be required to include the hospital preparation report including for connectivity in the inception report for which GNCTD will make separate arrangements.

### 14. CHANGE REQUEST

During the contract, time to time, changes in application, processes may be necessitated in application. In case of any change request, the selected bidder must make any and all such changes for the duration of the contract. The change requests shall be considered during the first year after go-live. When provided the specifications of the change required, the selected bidder shall submit an estimate of work effort (man days) and cost for the change to Health Department, GNCTD.

### 15. VIRTUALIZATION

The application will be Government cloud infrastructure. SI shall use the Government of India cloud for this purpose. It is envisaged that the entire system should be virtualized for optimal infrastructure utilization.

Once the entire application will be mature enough (prior to go live), the infrastructure may then be shifted to Government of India Cloud (NIC cloud). This will be applicable to all infrastructures for application.

#### 15.1. DATA CENTER

The Selected bidder shall use the NIC data center services for hosting of application. The selected bidder is required to host the application and services on the server infrastructure at the facility of NIC DC. The centralized compute infrastructure should be able to accommodate any scaling up requirements arisen in future.

Following are the suggested features for core database to provide optimum performance:

- High Availability
- Scalability
- Data Security
- Automatic Workload Management
- Access Control
- High Performance

#### 16. BUSINESS CONTINUITY

In case of any Disaster, all the major module of the application should functional. However, Department of H&F shall decide that which module should be available and accessible on priority. The decision to change the prioritization of services shall solely lie with department of H&FW.

#### 17. OPERATION AND MAINTENANCE

The SI shall be responsible for Operation and Maintenance of the entire system including Application&IT infrastructure for a period of seven years from the date of Go-Live till the end of contractual period.



After GO Live, the entire Delhi will be divided in to 5 zones for O&M purposes. Selected bidder must deploy minimum of **10 resident engineer** per zone dispensary/Mohalla clinic to provide handholding support/technical support to the users (doctors/health workers etc.). These engineer shall be deployed till the end of contract. The deployment to O&M team shall be based on the size of hospital in concerned zone. In case if in a particular zone, the requirement of more resources arises, resources for other may be shifted from other zones.

The SI must provide a centralized Helpdesk and Incident Management Support from Go-live till end of contractual period.

## 18. PHASES OF THE PROJECT

The entire project (as per the scope of work mentioned in this RFP) shall be divided in to following four Phases:

Modules	Type of Hospital		
	Super-Specialty	Multi-Specialty	Dispensary Clinic / Poly-Clinic / Mohalla Clinic
Registration (Generation of DHID)	Phase 1	Phase 1	Phase 1
OPD	Phase 1	Phase 1	Phase 1
Pharmacy	Phase 1	Phase 1	Phase 1
Laboratory	Phase 1	Phase 1	Phase 1
Citizen Vault creation	Phase 1	Phase 1	Phase 1
Minor OT	Phase 1	Phase 1	NA
Radiology	Phase 1	Phase 1	NA
IPD	Phase 2	Phase 2	NA
EMR	Phase 2	Phase 2	NA
Emergency	Phase 2	Phase 2	NA
Medico Legal cases	Phase 2	Phase 2	NA
Labor Room	Phase 2	Phase 2	NA
OT	Phase 2	Phase 2	NA
Store & material management	Phase 3	Phase 3	NA
Blood Bank	Phase 3	Phase 3	NA

HR Management	Phase 3	Phase 3	
CSSD	Phase 3	Phase 3	NA
Other Medical modules	Phase 3		
Biomedical waste	Phase 4	Phase 4	NA
Mobile apps	Phase 4	Phase 4	Phase 4
ASHA & ANM Module	Phase 4	Phase 4	Phase 4
e-Learning Module	Phase 4	Phase 4	Phase 4
All other non-medical Modules & other requirements	Phase 4		

**Definition of Go-Live:** The entire project has been divided in four above mentioned phases. Definition of phase wise go-live is mentioned below:

**A. Phase 1 Go-live:** Phase 1 shall be considered Go-Live only when all modules (of phase 1) are operational in atleast **50%** of each type of Public health institutions e.g. Super-specialty, Multi-specialty, Dispensaries, Poly Clinic hospitals and Mohalla Clinic.

**B. Phase 2 Go-Live:** All modules of Phase two are operational in at-least **60%** of each type of publichealth institutions e.g. Super-specialty, Multi-specialty.

**C. Phase 3 Go Live:**All modules of Phase three are operational in at-least **60%** of each type of public health institutions e.g. Super-specialty, Multi-specialty.

**D. Phase 4 Go Live:** All modules of Phase four are operational in at-least **60%** of each type of public health institutions e.g. Super-specialty, Multi-specialty.

**E. Final Go-Live :** Final go live shall be considered only when all modules & other requirements mentioned of this RFP (e.g. mobile apps etc.) are operational in atleast **85%** of each type of public health institutions (e.g. Super-specialty, Multi-specialty, Dispensaries, Poly Clinic hospitals and Mohalla Clinic) wherever applicable.

***The entire project will be considered live only after the final (fourth) phase go-Live and maintenance phase shall also be started only after the final go live.***

## 19. SERVICE LEVELS

### SERVICE LEVEL AGREEMENTS (SLAS)

The purpose of this Service Level Agreement (hereinafter referred to as SLA) is to clearly define the levels of service which shall be provided by the Bidder to **Health & Family Welfare department** for the duration of this contract.

#### 19.1.1. IMPLEMENTATION SERVICE LEVELS

S.N.	Measurement	Target(Weeks)	Severity	Penalty
1.	Delivery of Hardware	T+16	Medium	Penalty of 0.5% per week on total value of Contract.
2.	Site Preparation & Installation of Hardware at Local Hospitals	T+20	Critical	Penalty of 1.0% per week on total value of Contract.  <b>The penalty shall be imposed subject to space provided for site by department.</b>
3.	Partial Acceptance Test	T+22	Critical	Penalty of 1.0% per week on total value of Contract.  <b>The penalty shall be imposed subject to time taken for acceptance test by department.</b>
4.	First Phase of Project Go Live with defined modules	T+ 24	Critical	Penalty of 2.0% per week on total value of Contract.  The penalty will be imposed if any of milestones mentioned in project timelines is not achieved.
5.	Second Phase of Project Go Live with defined modules	T+33	Critical	Penalty of 2.0% per week on total value of Contract.  The penalty will be imposed if any of milestones mentioned in project timelines is not achieved.

S.N.	Measurement	Target(Weeks)	Severity	Penalty
6.	Third Phase of Project Go Live with defined modules	T+37	Critical	Penalty of 2.0% per week on total value of Contract.  The penalty will be imposed if any of milestones mentioned in project timelines is not achieved.
7.	Fourth Phase of Project Go Live with defined modules	T+42	Critical	Penalty of 2.0% per week on total value of Contract.  The penalty will be imposed if any of milestones mentioned in project timelines is not achieved.
<p><b>*Note:</b></p> <p>1. T stands for start time i.e. Contract Signing.</p> <p>2. Maximum penalty that can be imposed on bidder shall be 10% of total value of Contract (inclusive of taxes).</p>				

#### 19.1.2. POST IMPLEMENTATION SLAS

S.N.	Measurement	Target	Penalty
	<b>IT Infrastructure Availability</b>		
1.	Centralized application with proper security measures	99.95% uptime on 24x7 basis, calculated on quarterly basis. Bidder shall provide backup arrangement if scheduled down time is required.	1.0% of quarterly payment for every 30 minutes of downtime beyond target.

2.				
		<b>Call Center</b>		
3.		Call Center with all functional equipments	99.90% uptime on 24x7 basis calculated on quarterly basis.	1.0% of quarterly payment for every 60 minutes of downtime beyond target.
4.		<p>Call abandon rate (unanswered call ) at Call Center</p> <p>This measures % of calls that requested for an agent but got disconnected before being answered by the agent.</p>	Less than 5% of calls calculated on quarterly basis.	1.0% of quarterly payment for every 1% of abandon call beyond target.
5.		<p>Average Hold time at Call Center</p> <p>This is a measure that refers to how long does the agent keep the caller on hold for any reason</p>	Less than 5% of calls on hold for more than 2 minute calculated on quarterly basis.	1.0% of quarterly payment for every 1% of on hold calls beyond target.
		<b>Application Performance</b>		
6.				
7.		Data Accuracy both at Central and	100% accurate data availability in	1.0% of quarterly payment for every

		Local deployments	database	defaulted data reported beyond 5.
			98% of reports generation with 100% accurate data	0.05% of quarterly payment for every defaulted report beyond mentioned target.
8.		Report Generation Response time	98% of simple query (1 week data) reports: < 5 Secs  98% of complex query (1 week data) reports: < 15 Secs	0.20% of quarterly payment for every defaulted report beyond mentioned target.
		<b>Issue Tracking</b>		
9.		Issue Monitoring Tool	99.95% uptime on 24x7 basis, calculated on quarterly basis.	1.0% of quarterly payment for every 30 minutes of downtime beyond target.
10.		Issue logging and tracking including Software, Hardware, Mobile Applications, and any other system issues	Issue Resolution time should as per mentioned below:  Critical issue < 2 hours  Medium Level	0.05% of quarterly payment for every defaulted issue.

			<p>Issue &lt; 6 hours</p> <p>Low Level Issue &lt; 2 days</p> <p><i>*Note Critical:</i> <i>Impacts field</i> <i>operations</i></p> <p><i>Medium: Defect</i> <i>but no impact on</i> <i>field operations</i></p> <p><i>Low: Upgrade,</i> <i>preventive</i> <i>maintenance</i></p>	
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The system/equipment/component down time should not exceed 48 hours from the time at which the complaint was made. Service provider may provide an equivalent standby system/equipment/hardware/software. In case the system is not repaired or an equivalent standby system/equipment/hardware/software is not supplied within 48 hours from the system down time reporting, then H&FW may choose to get the same repaired by or replaced from any other agency and the expenditure incurred along with penalty therein shall be recoverable from the successful bidder.

*\*Note:*

1. Maximum penalty that can be imposed on bidder shall be 10% of total value of Contract (inclusive of taxes).
2. Bidder shall provide automated Issue logging & tracking system to monitor the issues.

## 20. INDUSTRY STANDARDS

The application and other component of the Integrated Citizen Health Information Management System should compliant with industry standards. Few of them are mention below (the list is non exhaustive):

- A. **Medical standards:** DICOM 3.0 Compliant
- B. **Imaging:** Picture Archiving & Communications System (PACS)

- C. **HL7 Clinical Document Architecture:** Interoperability standard for exchange of electronic health information To be used for exchanging the clinical documentation between two EHR solutions
- D. **HL 7 V2.x:** For Seamless handling of inbound and outbound HL7 messages from any system that has similar capabilities; V2.3 or above
- E. **HL 7 V3.0 RIM Reference Information Model:** Intermediate recommendation; to be replaced with HL7 FHIR when it is accepted by BIS/HL7-India
- F. **Centralized application:** Web based and HTML5 compliant application
- G. **Universal standard for identifying medical laboratory observations:** Logical Observation Identifiers Names and Codes
- H. **WHO ICD 10** for Disease Classification: The international standard diagnostic classification for all general epidemiological, many health management purposes and clinical use
- I. **Clinical Healthcare Terminology:** SNOMED-CT Coding (when available), is a Systematized Nomenclature of Medicine – Clinical Terms, Provide comprehensive clinical granularity, used to capture problem list, allergies, diagnosis, procedures etc. – will immensely aid in clinical analytics, clinical decision support systems, automated clinical care pathway management systems, support evidence based practice, etc.
- J. **International Classification of Traditional Medicine (ICTM):** For Ayurveda, Yoga, Unani, Siddha, Homeopathy systems of medicine
- K. **Equipments:** All equipments should be used with international bench-marks
- L. **Information Security:** ISO27001 compliant
- M. **Internet Protocol:** IPv6 ready equipments

*Apart from above, the SI need to adhere all the international and national industry standards.*



## 21. PAYMENT SCHEDULE

S. No	Milestone	Payment (%)	Document required
1	First phase of Project Go Live	20 % of Total project cost	Signed report of successful Go-Live by H&FW department
2	Second phase of Project Go Live	20 % of Total project cost	Signed report of Go-Live by DoH&FW
3	Third phase of Project Go Live	10 % of Total project cost	Signed report of Go-Live by DoH&FW
4	Fourth phase of Project Go Live	10 % of Total project cost	Signed report of Go-Live by DoH&FW
5	Comprehensive Warranty and Support	Quarterly payment of remaining amount till next 5 years.	Quarterly MIS reports

### Terms and Conditions for payment of Phases:

The payment of First phase will be based on the operationalization of modules in hospitals. Bidder shall be eligible to claim the payment only after when all relevant modules (of phase 1) are operational in atleast 50% of each type of Public health institutions.

- In such case when all relevant modules are operational in atleast **50% Public health institutions (of each type)**, a payment equivalent to 50% of the first phase payment will be released
- If all relevant modules are operational in atleast **70% Public health institutions (of each type)**, a cumulative payment equivalent to 70% of the first phase payment will be released.
- If all relevant modules are operational in atleast **90% Public health institutions (of each type)**, a cumulative payment equivalent to 90% of the first phase payment will be released.

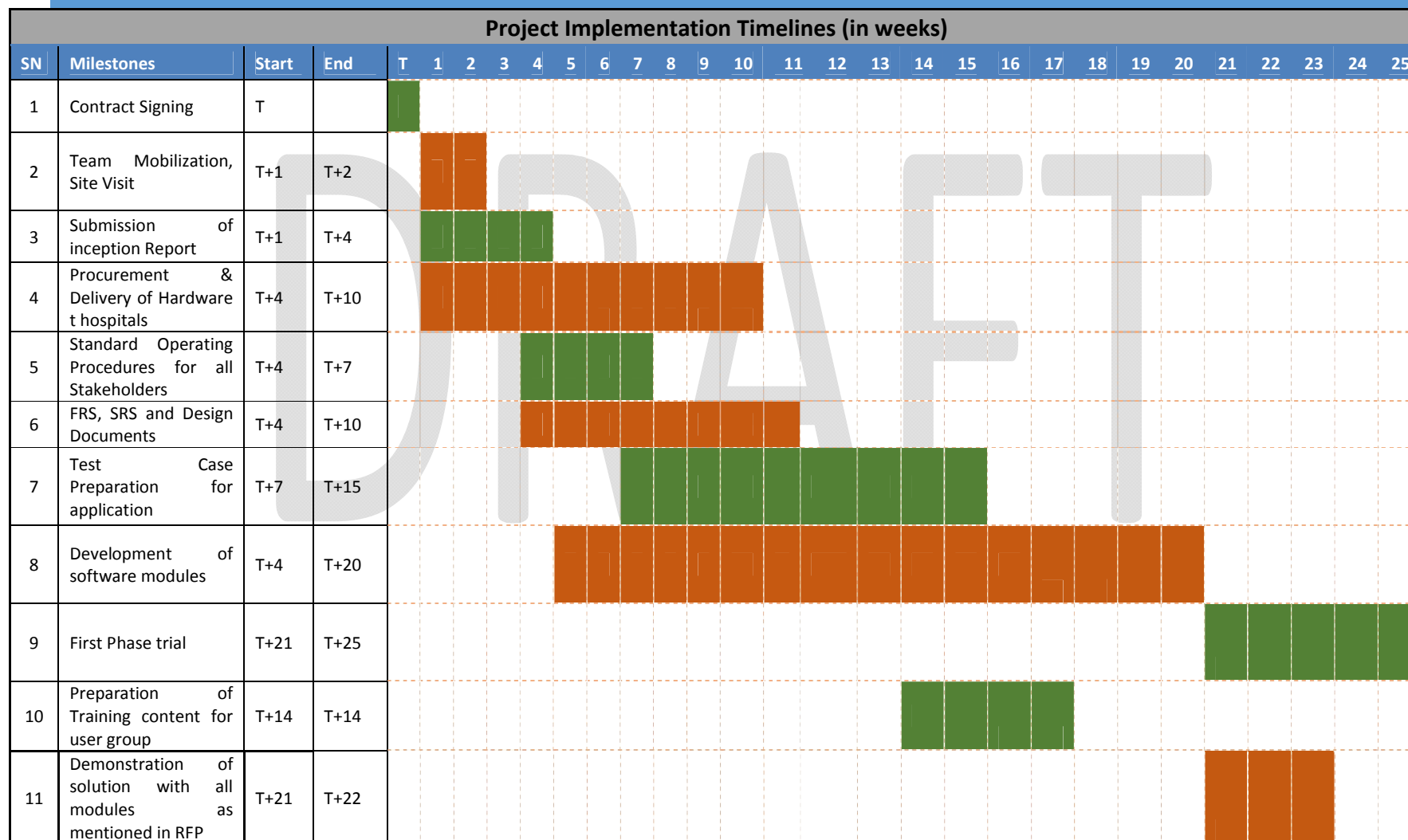
- 100% payment of first will be released only when all relevant modules are operational in all Hospitals/Public health institutions.

Same terms & condition will be applicable on all other phases of the project.

Bidder shall raise the invoice only when above mentioned milestones are achieved.

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## 22. PROJECT TIMELINES



12	Full Acceptance Test (FAT)		
13	First phase Go Live	T+25	T +25
14	Second phase Go Live	T+25	T+32
15	Third phase Go Live	T+32	T+37
16	Fourth phase Go Live	T+27	T+42
17	Training for users	T+ 18	T+ 42

## SECTION: 3

# Annexures & Templates

**APPENDIX I: TEMPLATES****FORM 1: PARTICULARS OF THE BIDDER**

S.No.	Information Sought	Details to be Furnished
A	Name and address of the bidding Company (Prime Bidder)	
B	Local address of the bidding Company (In NCR)	
C	Incorporation status of the firm (public limited / private limited, etc.)	
D	Year of Establishment	
E	Date of registration	
F	ROC Reference No.	
G	Details of company registration	
H	Details of registration with appropriate authorities for service tax	
I	Name, Address, email, Phone nos. and Mobile Number of Contact Person(s)	

**Details of all other consortium partner(s)**

S.No.	Information Sought	Details to be Furnished
A	Name and address of the Company	
B	Local address of the Company (In NCR), if any	
C	Incorporation status of the firm (public limited / private limited, etc.)	
D	Year of Establishment	
E	Date of registration	
F	ROC Reference No.	

G	Details of company registration	
H	Details of registration with appropriate authorities for service tax	

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## FORM 2: LETTER OF PROPOSAL

To

**Pr. Secretary,**

**Department of Health & Family Welfare**

**9<sup>th</sup> Leve, B Wing, Delhi Secretariat**

**New Delhi**

**Subject:** Submission of the Technical bid for **Integrated Citizen Health Information Management System in Delhi**

Dear Sir/Madam,

We, the undersigned, offer to provide solutions to DH&FW on **Integrated Citizen Health Information Management System in Delhi** with your Request for Proposal dated **< insert date >** and our Proposal. We are hereby submitting our Proposal, which includes this PQ bid, Technical bid and the Financial Bid.

We hereby declare that all the information and statements made in this Technical bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

We undertake, if our Proposal is accepted, to initiate the Implementation services related to the assignment not later than the date indicated in Fact Sheet.

We agree to abide by all the terms and conditions of the RFP document. We would hold the terms of our bid valid for **180** days as stipulated in the RFP document.

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

Yours sincerely,

Authorized Signature [*In full and initials*]: \_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_

Name of Firm: \_\_\_\_\_

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

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



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## FORM 3: COMPLIANCE SHEET FOR PRE QUALIFICATION

S. N	Criteria	Required Document	Provided Yes/No	Page No.
1.	EMD	Details of EMD		
2.	Company Registration	Certificates of Incorporation		
3.	Average Annual Turnover	Extracts from the audited Balance sheet and Profit & Loss account; OR Certificate from statutory auditor appointed by the company		
4.	Service Registration Tax and Tax Income returns and PAN card	<ul style="list-style-type: none"> <li>▪ Copy of Service Tax Registration</li> <li>▪ Income Tax returns for last 5 financial years (till 2014-15)</li> <li>▪ Audit report from CA for last 5 financial years (till 2014-15)</li> <li>▪ Copy of PAN card</li> </ul>		
5.	Positive Net Worth as on 31 <sup>st</sup> March 2015	Extracts from the audited Balance sheet; <b>OR</b> Certificate from Chartered Accountant and Authorized Signatory		
6.	Company/member of consortium should not be an entity which has been black-listed by Government	Undertaking on company letter head certified by authorized signatory.		
7.	Experience	Completion Certificates from the client;		

		<b>OR</b> Work Order + Self Certificate of Completion (Certified by the Authorized Signatory ); <b>OR</b> Work Order + Phase completion certificate from client		
8.	Geographical presence in Delhi / NCR	Certificate by Authorized signatory with address of Office in NCR		
9.	CMMi level 5 certificate	Copy of certificate		

## FORM 3: COMPLIANCE SHEET FOR TECHNICAL PROPOSAL

The Technical proposal should comprise of the following basic requirements. The documents mentioned in this compliance sheet along with this form, needs to be a part of the Technical proposal:

S. No	Criteria	Supporting	Provided	Reference & Page Number
1.	Letter of Proposal	Form 2		
2.	Average Annual turnover	Extracts from the audited Profit & Loss account; OR Certificate from statutory auditor appointed by the company		
3.	Average Annual turnover of the company from in last three financial years from below mentioned businesses: <ul style="list-style-type: none"> <li>• Health Management System</li> <li>• Hospital management System</li> <li>• IT Enabled Health care system</li> </ul>	-Do-		
4.	Experience of HMIS system installation & maintenance with atleast 6 modules* in single hospital			
5.	Experience of HIMS Projects (with 200 bedded or more & with atleast 8 common modules* in)			
6.	Project Understanding	Presentation & Note		
7.	Proposed Infrastructure in Hospitals	Presentation & Note		

8.	Support services	Presentation & Note		
9.	Team deployment	Presentation & Note		

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**APPENDIX II: FINANCIAL PROPOSAL TEMPLATE****FORM 4: COVERING LETTER**

To

**Pr. Secretary,**

**Department of Health & Family Welfare**

**9<sup>th</sup> Leve, A Wing, Delhi Secretariat**

**New Delhi**

**Subject:** Submission of the Financial bid for **Integrated Citizen Health Information Management System in Delhi** for Department of Health & Family Welfare.

Dear Sir/Madam,

We, the undersigned, offer to provide the services/solution for **Integrated Citizen Health Information Management System in Delhi** in accordance with your Request for Proposal dated <<Date >> and our Proposal (Technical and Financial Proposals). This amount mentioned in financial proposal is inclusive of the local taxes except the Service Tax.

**1. PRICE AND VALIDITY**

- All the prices mentioned in our Tender are in accordance with the terms as specified in the RFP documents. All the prices and other terms and conditions of this Bid are valid for a period of 180 calendar days from the date of opening of the Bid.
- We hereby confirm that our prices include all taxes except the Service Tax. However, all the taxes are quoted separately under relevant sections.
- We understand that the actual payment would be made as per the existing indirect tax rates during the time of payment.

**2. TENDER PRICING**

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

**3. QUALIFYING DATA**

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

#### **4. PERFORMANCE BANK GUARANTEE**

We hereby declare that in case the contract is awarded to us, we shall submit the Performance Bank Guarantee as specified in this RFP document.

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

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

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

Thanking you,

Yours sincerely,

Authorized Signature:

Name and Title of Signatory:

Name of Firm:

Address:

## FORM 5: FINANCIAL PROPOSAL

To,

Date

**Pr. Secretary,**  
**Department of Health & Family Welfare**  
**9<sup>th</sup> Leve, A Wing, Delhi Secretariat**  
**New Delhi**

Dear Sir,

I/We hereby submit our price bid for **Integrated Citizen Health Information Management System in Delhi** for H&FW, GNCTD.

**Part A: Project Capital Cost**

Particulars	Total Rate in INR (in figure)
CAPEX - On delivery & commissioning of the hardware, Application development, customization, integration of system at all Hospitals/dispensaries/mohalla clinic , training to user, submission of all Invoices in original, Delivery Challan, Installation reports signed by the authorized person of the vendor and its verification, acceptance by DH&FW.	
<b>Sub Total A</b>	

**Part B: Project Operational Cost for 5 years**

Particulars							
Warranty & AMC, Technical & Operational support Cost for 5 years							
<b>Sub Total B</b>							

Grand Total (A + B) in Figures	
Grand Total (A +B) in Words	

*The amount shall be considered as final 'price' quoted by the bidder. This will be including all the taxes, duties, cess, levies etc. except the Service Tax.*

**APPENDIX III: TEMPLATE FOR PBG**



## FORM 7: PERFORMANCE BANK GUARANTEE

To,  
**Pr. Secretary,**  
**Department of Health & Family Welfare,**  
**9<sup>th</sup> Leve, B Wing, Delhi Secretariat**  
**New Delhi**

WHEREAS \_\_\_\_\_ (Name of  
bidder) has undertaken, Agreement No.  
\_\_\_\_\_ dated, \_\_\_\_\_ 2015

\_\_\_\_\_  
(Description of Services) hereinafter called "the Agreement".

**AND WHEREAS** it has been stipulated by you in the said Agreement that the agency/firm/company selected shall furnish you with a bank Guarantee by a nationalized bank for the sum specified therein as security for compliance with the performance obligations in accordance with the Agreement.

**AND WHEREAS** we have agreed to give the agency/firm/company a guarantee:-

THEREFORE WE (Name of the Bank) hereby affirm that we are Guarantors and responsible to you, on behalf of firm (herein after referred to "the Second Party" up to a total of \_\_\_\_\_ (Amount of the guarantee in Words and Figures) and we hereby absolutely undertake to immediately pay you, upon your first written demand declaring the Second Party to be in default under the Agreement and without cavil or argument, any sum or sums within the limit of \_\_\_\_\_ as aforesaid, without your needing to prove or to show this grounds or reasons for your demand or the sum specified therein. This guarantee is valid until the \_\_\_\_\_ day of \_\_\_\_\_.

This bank Guarantee shall be **irrevocable, unconditional** & shall incorporate in accordance with the laws of India.

We represent that this Bank Guarantee has been established in such form and such content that is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

The Guarantee shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

Date Signature and Seal of Guarantors

Address:

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**ANNEXURE: 1- LIST OF NON HL7 COMPLAINT MEDICAL EQUIPMENT**

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ANNEXURE-2 LIST OF HOSPITALS/DISPENSARIES/MOHALLA CLINIC

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ANNEXURE-3 DETAILS OF HOSPITALS/DISPENSARIES/MOHALLA CLINIC

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**ANNEXURE-4 INDICATIVE LIST OF USER GROUP AND TRAINING MODULES**

## User Group

Group	Participants
<b>Group 1</b>	Seniors officers of Health department, District Level Administrators, CMO
<b>Group 2</b>	Doctors, Nurses, Paramedics, and other Technicians, in-charge of the Health institutions, ASHA and ANM
<b>Group 3</b>	Operators, System Administrators, Other IT support staff

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ANNEXURE-5 LIST OF FACILITIES AVAILABLE IN HOSPITALS

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