



**Customization of
Hospital Management Information System (HMIS)
for Centralization of All Federally Administrative Hospitals**

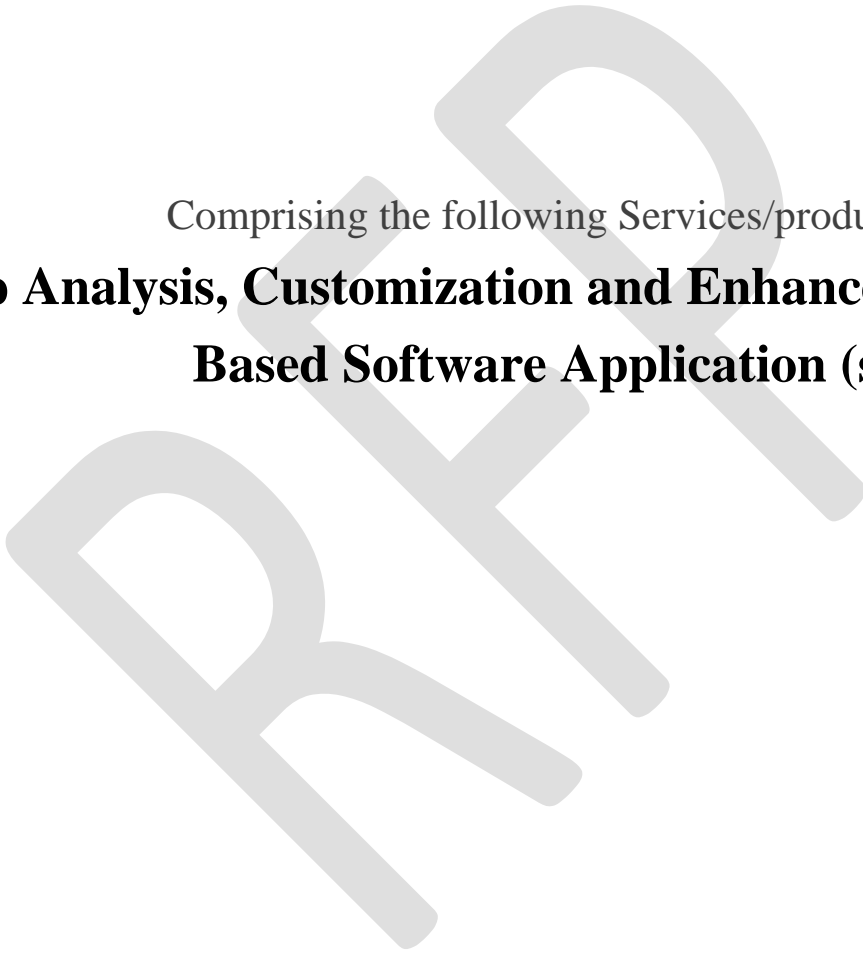
Under Project Titled

**“One Patient One ID”
Federally Administrative Hospitals of Federal Government,
Islamabad**



Comprising the following Services/products

**Gap Analysis, Customization and Enhancement of Web
Based Software Application (s)**



Government of Pakistan
Ministry of Information Technology
NATIONAL INFORMATION TECHNOLOGY BOARD,
ISLAMABAD
www.nitb.gov.pk
2020-21



1. Data Sheet

Bid Selection Method	The method of selection is: Concept, Service, Quality and Cost Based Selection (QCBS). Single stage two envelope: RFP is available on https://nitb.gov.pk and https://www.ppra.org.pk
Bid Security	2% bid security of the total quoted price
Deliverables	As mentioned in Section 20
Contact Person	For queries/ clarifications, if any please contact: Project Manager (NITB) tariq.rahim@nitb.gov.pk Ph : 051-9265046, cell : 0300 8509710
Language	Proposals should be submitted in English language.
Currency	All prices should be quoted in Pak Rupees.
Estimated Time	Delivery of Solution (Stage 1) will be 28 – 30 weeks (calendar days) from the award of the contract date or any other mutually agreed earlier date. For Implementation (Stage-2) it will be 20 – 24 weeks after go ahead date, or any other mutually agreed earlier date between the parties. PMI Methodology will be reference methodology for both parties regarding Project Management, Implementation & Execution of contract.
Taxes	<ol style="list-style-type: none">1. The price should include all applicable taxes.2. The Bid Must Indicate all taxes applicable on Domestic & International Transactions, Setup, Processing & Servicing Facilities or arrangement offered under this RFP which are applicable on both Bidder & NITB for such Services. Selected Vendor will be responsible for paying off all the taxes for above mentioned services.3. After award of contract to successful Bidder, all taxes applicable as per Pakistan Laws should be implemented and added in Bid.
Proposal Validity	Proposals must remain valid for 180 days after the submission date.
Bidder must submit	<ol style="list-style-type: none">1. Two (02) copies of both technical and financial proposals (one original and one photocopy)2. A printable and searchable PDF copy in a CD/ USB flash drive of technical proposal.3. Technical and financial proposals should be submitted in separate envelopes and CD/USB must be part of technical proposal and should be clearly marked.
Proposal Submission	National Information Technology Board Plot # 24, B, Street No 06, Sector H-9/1, Islamabad.



Address	
Submission Date & Time	Both Technical proposal & Financial bid must be submitted in two different sealed envelopes on or before 20th April 2021 at 11: 00 AM . Technical Bids shall be opened on the same date at 011:30 AM . Pre-Bid Meeting will be held on 12th April, 2021 11:00 AM . In the Committee Room of NITB.

2. Scope of Work

The proposed project is the customization of an Information System that is to be deployed and used in the Federal Government Hospitals. This project will greatly enhance medical treatment and improve management of patients of all federally administrative hospitals. The patient's medical history will be retrievable from all hospitals on just one click and on a single ID. It will improve record keeping, training of manpower and management in the following:

- a. Medical and surgical follow-up and medication checks.
- b. Routine consultations and follow up based on history, physical exam findings, available test data.
- c. Transmission of diagnostic images.

The project is the replication of the HMIS model which has been successfully implemented in Children Hospital, PIMS under the NITB's project "Extension of Islamabad Hospital HMIS & Networking Facilities to Children Hospital PIMS".

The following table provides a listing what is in the scope of work of this project and also any items that have been excluded as out of scope for the project.

In Scope		
GAP Analysis & Submission of SRS		
	SRS/GAP Analysis	New SRS document will be prepared by RO on the basis of existing SRS, available Gap Analysis of Children Hospital, PIMS and requirement gathering survey of all hospitals. Note: Existing SRS/Gap Analysis document will be provided on demand. GAP analysis method needs to be defined and shared by the RO.
Customization of Developed Software Application		
Clinical Modules		
1.	Patient Registration System	This module will cover the process of patient registration according to specified categories (inpatient, outpatient and emergency), in which each patient will have its own unique Medical Record Number (MRN), allotted at the time of registration. Demographic data of the patient will be recorded in order to facilitate the research work and to standardize the details entered. The user will have to select a pre-defined value for certain fields. This module will have provision of finding any patient on the basis of multiple search criteria. After the patient registration the appointment to



		clinic (Scheduling) will be done on the MRN assigned to them. Note: The RO must provide the Bar Code Scanners for each hospital to access patient information, as a part of HMIS. Item quantity is mentioned in Financial proposal Template.
2.	Outpatient & Specialties/Consultant Management System	This module will provide all clinical functions required for outdoor patient department including but not limited to Patient Master Data, Medical Documentation, diagnosis and treatment certificates, requests for clinical examinations, administration of medical record and printing of forms through an Order Entry Module. This will also cover patient scheduling, visit planning, pre-admission and post discharge treatment. it will also cover specific diagnostic and treatment protocols for specific specialties of medicine and surgery along with integration to patient registration, diagnostic modules, patient data, pharmacy and patient billing modules (Pharmacy and Billing is suggested to be separate module, which may not be integrated here but should be interlinked with said module; as on basis of this info specific pharmacy items and bills will be generated). Note: The RO must provide the digital writing pads for Outpatient & Specialties/Filter clinics for each hospital, as a part of HMIS. Item quantity is mentioned in Financial proposal Template.
3.	In-Patient & Emergency/Casualty Management System	This module covers the details of patient admission and discharge within the hospital. The allocation and transfer of the patient from one bed to the other as well as history of his transfer. Estimated length of stay, cost of stay, cost of drugs and procedures. Discharge information summary including time, history, investigations and recommendations. This will have integration with patient registration, diagnostic modules, and patient data, Pharmacy, nursing counters/ward management and patient billing and outpatient system. Emergency pharmacy should be catered separately and integrated with emergency management system.
4.	Operations Theatre Management System	This module will cover functions of operation theatre management, surgical procedures management, patient data and integration with relevant clinical and non-clinical module.
5.	Intensive Care Unit Management System	This module will cover specific procedures and functions of intensive care in addition to In-patient management system. This will have integration with patient registration, diagnostic modules, patient data, pharmacy, nursing counters/ward management and patient accounting systems.
6.	Diagnostic Information Management System	This Module is integrated with the imaging module of the In/Out-patients management system. Through this integration the consultant can suggest orders for different Diagnostic Investigations. Reports of the tests performed are generated, reviewed and verify electronically. All the results and other information are available online and patient or hospital user can access the information at any point and time. More over consultant can access the Diagnostic history of the patient and can suggest right treatment for specific patient.



7.	Clinical Laboratory Modules	The Clinical Lab Module will be tightly integrated with In/Out-patients management system. Through this integration the consultant can suggest orders for different investigations. Reports of the tests performed are generated, reviewed and verify electronically. All the results and other information are available online and patient or hospital user can access the information at any point and time. Moreover, the consultant can access the clinical history of the patient and can suggest right treatment for specific patient.
Non-Clinical Modules		
8.	Patient Billing & Income Management System	This module will handle the patient billing against each service utilized, calculation and distribution of consultant and paramedic staff share, daily cash collection at different counters, payments of bait-ul-mall / zakat patients and corporate clients. The integration with patient registration module will provide all necessary patient information at the time of preparation of expense bills. The financial module will fetch the payment information against each patient and share calculation details of authorized employees. The daily income statement will also be generated through this module based on the cash collection. The payment claim against the patients of bait-ul-mall, Zakat and corporate client will be generated through this module.
9.	Medical Record Management System	This module will cover provisions for defining records based on user requirements, creation of new medical record, provision to manage data regarding existence, location and movement, Medical record administration and access. It will be integrated to all relevant clinical and non-clinical modules.
10.	Asset Management System	This module will cover complete information on Human and Physical Assets linking with HRM, General Inventory, Material Management, Medical Equipment Inventory, Building Structures and Financial Management.
11.	Medical Stores & Pharmacy Management System	This module will automate various functions of medical store e.g. purchase of inventory, medicines, consumables / non-consumable medical items etc. The stock management and issuance of inventory items to various units like dispensaries, pharmacy and wards. Tracking of expiry dates for different drugs and re-order levels of all stocks will also be handled. This module will also maintain the detailed information of suppliers, contracts and supply orders. The integration of the system with relevant clinical / non-clinical module will facilitate the other users to access their own demands and inventory status. This module will commence through the Order Entry Module, the pharmacist / dispensers will view the doctor's orders to distribute the medicine. Drugs are categorized into different groups e.g. formulary / non-formulary, restricted / non-restricted and therapeutic groups etc. The periodic maintenance of pharmacy inventory, random stock audit, drugs dispensing, internal / external invoice generation and label printing, are handled through this



		module. The module will be integrated to all relevant clinical / non-clinical modules.
12.	Web Portal	Web Portal will provide complete information regarding the Federally Administrative Hospitals, its employee's and physical resources, facilities and different offered services, user roles and rights and separate accessing panel of each hospital. This will also provide linkage between various research and related organization, hospitals and institutions through dissemination of information.
13.	Dietary Management System	This module will manage all information regarding patient diets, including menu printing, patients' choices of meals and restrictions set by allergies or doctors' orders. In addition, it supports the logistics of food preparation and distribution including the creation and maintenance of menus and menu planning. It will provide the options necessary to accurately calculate dietary intake requirements and gives dieticians the relevant information to ensure that all meals with restrictions from doctors are crosschecked and verified by dieticians, prior to delivery to patients.
14.	Sterilizing Services management System	This Module manages the process of overall washing and sterilizing of the multiple items of the different department (like Operation theatre, wards, ICU etc). Sterilization department receives the items and after processing issues the items to specific department. All the information about the receiving and issuing of the different items are entered in this module and retrieved when're required.
15.	Complaint Management System	This module will maintain complete information of all types of Complaints. The system will also maintain information about the inventory of installed medical equipment, devices and instruments along with the equipment history, preventive maintenance, repair history, online service request, suppliers data, warranty period monitoring, classification, new and replacement purchase plans, repair through third parties, suppliers/vendors information and integration with other related modules like admin, finance, procurement and inventory management.
16.	Payroll Management System	The monthly payroll for employees of hospitals will be prepared through this module. The details of existing/new employee will be fetched through HR module. The monthly pay will be calculated based on the pay scales configuration and office orders issued from HR department time to time against each employee e.g. increments, deductions, loans/advance etc. The preparation of monthly payroll summaries and disbursement of pay is also handled through this module. Employee can view its monthly salary electronically, along with the details of installments of loan/advance (if any). This module is integrated with different other module e.g. Estate Management System etc.
17.	Financial Assets Management System	This module will maintain the records against the financial assets e.g. investment certificates etc. in order to monitor its expiry and proper handover / encashment of the assets.



18.	Estate & Nursing Hostel Management System	This Module manages over all allocation and cancellation of the assets of the estate and nursing hostel. Estate office persons use this module to enter and view information about the estate records, allotment and cancellation of the accommodations. Allotment and cancellation of room to nurses can be handled through this module.
19.	Library Management System	The Library Management System used to provide the librarian and the library users an easy and intuitive way of managing and using the library. The system will consist of very user-friendly, attractive and easy navigable interfaces. The module will also provide the options to manage the day to day activities of the library starting from the addition and modification of book information to allotment of books to users, tracking of new book orders, sending alerts to late returns, etc. The registered users of the system will be able to locate the books in the library, make a reservation, view reservation status and borrow history from the library.
20.	Application based Interface for Patients and Doctors	This Module will be used for interface between Patients and Doctors regarding patient medical history. For doctors this portal will acts as platform to look into the detail history of their patients and can be accessible from anywhere by using their particular credentials. For patients this portal will provide ease to them for accessing their lab reports online, this part also includes delivery of SMS about report.
21.	Cafeteria Management System	This module will provide complete features of a Cafeteria management system that begins with taking the guest order and ends with billing reports. It should provide complete picture of restaurant operations and life cycles: menu consumption, reservation frequency, hours of high restaurant load, busiest tables, most active employees, and payment methods. The software should be easy to use.
22.	Help Desk / Public Relation Centre	This module will cover to main areas, Patient feedback and News clipping record management. For Patients feedback a standard Performa is used regarding the hospital services from the patient and in News clipping, all the news and related activities related to hospitals, which are published in newspapers, are maintained.
Additional Modules		
23.	Blood Bank Management System	This module will cover all management of blood bank. The main aim of this system is to monitor blood bank data, blood cells, blood stock, donor list. Blood Bank module will automate the manual work of blood bank, donor and blood group management.
24.	Transport Management System	This module will cover complete management of hospital vehicles. Using this system user can computerize transport office work including vehicle sign-in, sing-out record, fuel consumption record and monitoring of all operations of transport office.
25.	Waste Control Management System	This module will cover the proper management of both types of hospital's waste risk waste and non-risk waste. User of this module will be able to manage and keep record of all operations of waste



		control and management department including waste segregation, waste collection, waste transportation, waste transportation, waste storage, waste disposal, and waste minimization.
Enterprise Resource Planning Applications		
26.	Human Resource Management System	This module with high degree of flexibility and integration with Financial Accounting System, will cover Personnel Planning, Recruitment, Personnel Data Management, Promotions, Demotions, Leave Records, Duty Locations and basic data for payroll module to calculate monthly pay and other benefits.
27.	Procurement Management System	This module will completely covers the functions of procurement including, tendering, contract management and linkage with relevant inventory management, and financial accounting systems
28.	Inventory Management System	This module will cover generalized inventory including stationary, general consumable items, kitchen food items, hospital furniture and fixture etc, integrated with Procurement Management and Financial Management and Accounting System.
29.	Finance Planning & Budgeting	This module will cover all aspects of Financial Management and Financial Accounting. Integrated with Financial Controlling, Financial Assets Management, Funds Management, Common Charts of Accounts, Accounts Receivables, Accounts Payables, Real Time Processing and Integrated Interactive Processing.
Non-Functional Requirement		
4	Compliance with International Standard (e.g. HL7)	<p>The Medical Record Face Sheet of HMIS must follow the sequence of International Standard i.e. SOAP (Subjective, Objective, Assessment Plan)</p> <p>Subjective:</p> <ul style="list-style-type: none"> o Problem/Complaint o Review from old record, <p>Objective:</p> <ul style="list-style-type: none"> o Vital Signs, <p>Assessment:</p> <ul style="list-style-type: none"> o Problem Diagnosis <p>Plan:</p> <ul style="list-style-type: none"> o Prescription o Lab Order etc <p>Note: The architecture of the application and the standard interfaces for data exchange and interconnectivity with other hospitals will be required to mention in the proposal.</p>
5	Integration with state-of-the-art medical equipment	The proposed HMIS will be integrated with 15+ state-of-the-art medical equipment like X-Ray's, MRI, C.T Scans, Ultrasounds, Echocardiography and Color Doppler's Examination machines. After the integration of state-of-the-art medical equipment, the results/reports will be stored and utilized in HMIS which produce the fast access, with less error possibility.
6	Software Technology,	



Architecture and Framework etc.	Description	Existing HMIS Application	Required HMIS Application
	Front end	HTML 5.0	HTML 5.0, CSS 3 with Bootstrap
	Backend	.NET ASP	.NET ASP MVC
	Database	SQL Server 2012	SQL Server 2016
	Technology/Architecture	WEB FORMS	MVC
	Framework	Microsoft 4.0	Microsoft 4.5
	Application Server	IIS	IIS
Note: Proposed HMIS is required to be customized with latest versions of existing technology, architecture and framework.			
7	Health Decision Support System	The proposed HMIS will have a databank of questionnaire on symptoms of different diseases. This questionnaire will be filled by senior consultants of specialist fields. The junior doctors will be getting help from this questionnaire for assessment & diagnosis of patients. The HMIS will indicate the drug interaction with each other during the time of drug selection for patients.	
8	Multi Language Support (English & Urdu)	The proposed HMIS should be multi lingual.	

3. Invitation of Bid

As per PPRA Rule 36 (b), single stage-Two Envelops procedure shall be followed. This is as follows

- The bid shall comprise of a single sealed package containing two separate sealed envelopes. Each envelope shall contain separately the financial proposal and the technical proposal :
- The envelopes shall be marked as “ FINANCIAL PROPOSAL” and “ TECHNICAL PROPOSAL” in bold and legible letters to avoid confusion
- Initially, only the envelope marked as “ TECHNICAL PROPOSAL” shall be opened:
- The envelope marked as “ FINANCIAL PROPOSAL” shall be retained in the custody of the procuring agency without being opened;
- The technical proposal will be evaluated in a manner as per the clauses mentioned in this document: and proposals, which do not conform, to the specified requirements as listed inn said document will be rejected
- The bidders will be first checked for the eligibility, as per the requirements in eligibility criteria, Thereafter, all eligible bidders shall be shortlisted against the technical requirements
- The shortlisted bidders will be technically evaluated and those securing a minimum of 60 marks out of 70 in the technical evaluation will be qualified for Financial Evaluation;
- During the technical evaluation no amendments by the bidder in the technical proposal shall be permitted
- After the evaluation and approval of the technical proposals, the procuring agency shall open the financial proposals of the technically accepted bids, publically at the time, date and venue announced and communicated to the bidders in advance, within the bid validity period;



- The financial proposal of bids found technically non-responsive shall be returned unopened to the respective bidders;
- The contract may be awarded to bidder(s) securing highest combined score of Technical plus Financial bids. The overall bid score has been divided as follows
 - a. Technical Proposal Evaluation carries 70% weightage; whereas
 - b. Financial Proposal Evaluation carries 30% weightage.
- The procuring agency may **reject** all bids or proposals at any time prior to the acceptance of a bid or proposal. The procuring agency shall upon request communicate to any bidder who submitted a bid or proposal, the grounds for its rejection of all bids or proposals, but is not required to justify those grounds
- Notice of the **rejection** of all bids or proposals shall be given promptly to all bidders who submitted the proposals.

4. Instructions to bidders

4.1 Preparation of Bids

- 4.1.1 The Bid Bond to be enclosed in a separate envelope, labelled as “Bid Bond”, and which should be sealed. It must be ensured that bid bond should not be in the same envelope as the financial proposal. In the technical bid, RO must confirm on company’s letter head that the Bid Bond is being submitted as required by NITB. A bid bond, in the shape of a Bank Draft/Pay Order in the name of Project Manager, National Information Technology Board, equivalent to 2% of the total cost of bid should be submitted along with the tender.
- 4.1.2 Envelope for financial proposals should clearly mark: “Financial Proposal”. Two hard copies of Technical Proposal and Financial proposal are required.
- 4.1.3 Main Envelope for Technical proposal should clearly mark “Technical Proposal”. Main envelope for technical proposal should contain 02 hard copies and 02 soft copies of the technical proposal (each being physically separated, bound, sealed and labelled as “Technical Proposal”). Each envelope should contain similar supporting documents.
- 4.1.4 Responding Organizations should duly fill in and submit the bid bond (**Annexure-II**)
- 4.1.5 All proposal and price shall remain valid for a period of **180 days** from the closing date of the submission of the proposal. However, the responding organization is encouraged to state a longer period of validity for the proposal.
- 4.1.6 RO should clearly indicate the duration of delivery (MUST be in requested timeframe) after the award of contract.
- 4.1.7 Any queries relating to RFQ may be addressed on following email: tariq.rahim@nitb.gov.pk or postal address of NITB. The query shall reach to NITB at least 04 days before the Bid opening date.



5. Milestones & Payment Schedule

This section contains the payment schedule associated with milestones defined for the project. The milestones defined here have been taken from the standard milestones defined for the lifecycle of a Solution in the NITB Framework. A particular project may not include all components of this lifecycle.

	Miles Stones	Time Period	Payment
1.	Micro Design		
	Mobilization Advance for Software Customization, Data Migration/ Data Entry & Scanning.	Signing of Contract	10% against the Bank Guarantee
	Gap Analysis with existing SRS Documents and RO's module-wise requirement gathering survey of hospitals.	5 Weeks from signing of contract	10%
	Review and Approval of Gap Analysis and finalized SRS vetted by the concerned quarters.	1 Week from submission of SRS/Gap analysis report	
	Finalization of application prototype and front end	3 weeks from approval of new SRS document.	5%
2.	Customization		
	Customization of Software Applications along with deployment and configuration at NTC Datacenter. Payment will be made after the approval of concerned quarters.	10 weeks after finalization of prototype	15%
3.	Testing		
	White box, black box, Unit and integration testing of the developed software applications on actual data,	4 weeks development of software applications	10%
	User acceptance testing and test run of the developed software applications	2 weeks from Unit and integration testing of the developed software applications on actual data	
	Data Migration/ Data Entry & Scanning of existing data	4 Weeks in parallel to the completion of unit and integration testing	10%
	Load/Stress Testing	2 weeks in parallel to the Data Migration /Data entry and scanning of existing data	



4.	Documentation		
	Documentation: <ul style="list-style-type: none"> • SRS • Functional Model • Operational Model • Architectural Decisions • Test Model (detail) • Migration Concept • Operations Manual • Documented Code • Deployment and Installation Manuals • Programmer’s Guide • User Manual • Online Help • ERD 	1 Week	5%
5.	Implementation, Trainings & Rollout		
	User Training <ul style="list-style-type: none"> • Technical User • Management (PMU) 	2 Weeks	10%
	Implementation of Software Application (All Modules) at all hospital locations Delivery of Bar Code Scanners and Digital Writing Pads	6 Weeks	
	End user training of the developed software applications and tools & technologies used for the development <ul style="list-style-type: none"> • Submission of User Acceptance Testing Document 	12Weeks from development of software application	15%
6.	Operation & Maintenance		
	The software warranty will include providing on-site Help Desk support for technical issues by deputing at least one senior level resource.	2 years from deployment and acceptance of the software applications	10% upon successful completion of two year Against the performance bond (in the form of bank guarantee). And at the end Release of performance bond upon successful completion of the committed time
	Software bugs, deficiency removal and upgrades/enhancements warranty.		



7.	Exit & Sun downing		
	Exit of RO from Development of Software Applications and Software Platform used for Applications Development	3 months after successful completion of Operations & Maintenance phase	Release of performance bond upon successful completion of the committed time

6. Submission of Bids

- 6.1 Proposals shall be delivered by hand or courier so as to reach the address given below by the last date indicated for submission. PROPOSALS RECEIVED BY FAX OR EMAIL SHALL NOT BE ACCEPTED. Courier delay will not be considered, and only on time bids shall be processed
- 6.2 **Project Manager (One Patient One ID , NITB)** National Information Technology Board, Plot no 24-B, Street No 6, Sector H-9/1, Islamabad. Phone: 051- 9265046
- 6.3 Date and time for the opening of the Financial Bids, after thorough technical evaluation of the bids, shall be communicated to the technically qualified bidders only, whereas the Financial bids of technically disqualified bidders shall be returned un-opened. In this connection, see PPRA Rule: 36(b).

7. Acceptance of Bid and Award of Contract Criteria

The bidder after qualifying through given criteria will be called in for financial opening. In financial opening, the bidder with highest consolidated score will be selected as per PPRA rules, if not in conflict with any other law, rules, regulations or policy of the Government of Pakistan, shall be awarded the Contract, within the original or extended period of bid validity.

7.1 Procuring Agency's Right over quantities at the time of Award

The Procuring Agency reserves the right at/after the time of award of contract to increase or decrease, the quantity of modules up to 20% as originally specified in the Schedule of requirements without any change in unit price or other terms and conditions. Payment will be made for the items actually delivered as per rate per module provided by the bidder.

7.2 Notification of Award

- 7.2.1 Prior to the expiration of the period of bid validity, the Procuring Agency shall notify the successful Bidder in writing that the bid has been accepted.
- 7.2.2 The notification of award shall constitute the formation of the Contract between the procuring agency and the successful Bidder.
- 7.2.3 The enforcement of the Contract shall be governed by Rule 44 of the PPRA-

7.3 Award of Contract

- 7.3.1 After the notification of award, the Procuring Agency shall send the successful Bidder the Contract Form/Document (if required).
- 7.3.2 The Contract shall become effective upon affixation of signature of the Procuring Agency and the selected Bidder on the Contract document
- 7.3.3 If the successful Bidder, after completion of all codal formalities shows an inability to sign the Contract then its Bid Security shall stand forfeited and the firm may be blacklisted and de- barred from future participation, whether temporarily or



permanently. In such situation the Procuring Agency may award the contract to the 2nd highest scored Bidder or call for new bids.

8. Joint Venture (JV)

Bids submitted by a joint venture of two or more firms as partners shall also comply with the following requirements:

- 8.1 One of the partners shall be nominated as being in charge, and this nomination shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners.
- 8.2 The bid bond i.e. equivalent to 2% of bid amount in the shape of Bank Draft/Pay Order/Bank Guarantee must be submitted by the partner in charge.
- 8.3 All financial constraints to determine the eligibility of bidder will be evaluated of the partner in charge.
- 8.4 The partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture, and the entire execution of the Contract, including payment, shall be done exclusively with the partner in charge.
- 8.5 The partner or combination of partners that is responsible for a specific component(s) of the Information System must meet the relevant minimum qualification criteria for that component.
- 8.6 A firm may be a partner in only one joint venture or consortium that submits a bid in response to these Bidding Documents. This restriction shall not apply to commercially available software manufactured or produced by a Bidder that may be offered by more than one Bidder.
- 8.7 All partners of the joint venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a statement to this effect shall be included in the authorization mentioned above, as well as in the bid and in the Contract (in case of a successful bid)

9. Sub-Contracting

- 9.1 Sub-contracting any part of the Bid shall not be allowed and Bids that include an element of subcontracting shall be rejected as non-responsive.
- 9.2 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser will in no case be responsible or liable for those costs.
- 9.3 The Bidder may wish to visit and examine the site or sites of the system and obtain for itself, at its own responsibility and risk, all information that may be necessary for preparing the bid and entering into the Contract. The costs of visiting the site or sites shall be at the Bidder's own expense.
- 9.4 No site visits shall be arranged or scheduled after the deadline for the submission of the Bids and prior to the award of Contract.
- 9.5 Bidders are expected to examine all instructions, forms, terms, specifications, and other information in the RFQ. Failure to furnish all information required by the RFQ or to submit a bid not substantially responsive in every respect will be at the Bidder's risk and may result in the rejection of its bid.

Note: It is hereby informed that, NITB has the intellectual Property Rights on All the SRS and FS Documents (mentioned above) provided to the probable bidders. Bidders are not authorized to use these documents for any purpose without the express written permission for Government of Pakistan through NITB/ Ministry of Information Technology.



10. General Terms & Conditions

10.1 Responding Organizations (ROs)

- 10.1.1 The Responding Organization-RO must be registered with Sales Tax Registration Department and should be in possession of valid NTN number. Copies of the certificates must be provided with the bid.
- 10.1.2 The RO must provide on letter head, Name of organization, details of offices across Pakistan and location of Head office, size of company (number of employees), number of years of being incorporated (at least last **03 years in existence**).
- 10.1.3 The RO to provide information as per template available at Annexures.
- 10.1.4 The RO shall be responsible for payment of any duties/taxes etc. that are imposed by the GOP.
- 10.1.5 The RO price MUST be inclusive of all taxes.
- 10.1.6 The RO is hereby informed that the Government shall deduct tax at the rate prescribed under the tax laws of Pakistan, from all payments for services rendered by any responding organization who signs a contract with the Government.
- 10.1.7 Onsite installation, commissioning & relevant services to be provided by the vendor.
- 10.1.8 The RO should never have been black listed by any government or semi-government department and should not be involved in any such litigation.
- 10.1.9 The RO should retain at least ten (10) full time relevant technical resources for last one year.
- 10.1.10 That it has ISO or CMM or Tick IT or HL.7 level quality assurance certification or following the processes and are working towards achieving these certifications (documentary proof will need to be provided)

10.2 Performance Requirements

- 10.2.1 Till the end of the Warranty period, as upgrades are announced for any Commercial-Off-The-Shelf (COTS) software included in the proposed system, the Vendor shall carefully review the upgrade and report to the Client on the potential benefits and risks associated with the upgrade. After this review, the Vendor shall apply the upgrade if so directed by Client.
- 10.2.2 The central database shall have high availability so as to ensure that downtime is in accordance with the application requirements.
- 10.2.3 All servers and application processing, passport production, and passport delivery workstations shall be protected by a UPS with sufficient battery capacity to allow for graceful shutdown after a 30-minute interruption in power. The UPS shall detect loss of power and automatically signal the server and work stations to begin shutdown. Particular hospitals shall have back-up generator power to allow full continuous operation of the system.
- 10.2.4 All servers shall include the capability for automatic data backup at the end of each processing day.
- 10.2.5 The Vendor shall agree with the Client on the maximum response time that is acceptable when the "Enter" key is hit and the screen changes to display the next set of information. These times shall form the basis for the performance tests that will be carried out to determine the performance of the overall system. The agreement on the



response times will be formally signed off before the Notice to Proceed is given to the Vendor.

- 10.2.6 The Vendor would make sure that if it desires to terminate the networking services, at any time during or at the end of the contract, at least a six months prior notice would be given to the client and it would also make all necessary arrangements to switch the network to an alternate Telco carrier. The vendor would arrange at its own cost, the required communication circuits for the network from the new Telco carrier. The vendor shall not shut off its communication services unless the system gets shifted to the new network and becomes fully operational.
- 10.2.7 If due to any reason the vendor provided communication network is down, it shall be the responsibility of the vendor to arrange alternate communication links for the Network within 2 hours at its own cost, if the problem is not resolved during that time.

11. Delivery Time or Completion Schedule

For delivery time or completion schedule see Milestones

12. Bid Evaluation Criteria

For Evaluation criteria see annexure-I

13. Securities Requirements

- 13.1 Make security recommendations to Client.
- 13.2 Provide for computer, network, and system security.
- 13.3 Provide fingerprint-based access control to Printing and Assistant Director workstations
- 13.4 Provide firewalls, encryption, VPN, network addressing schemes, and connection controls.
- 13.5 Ensure that intrusions are detected and LANs monitored.
- 13.6 Ensure that computer equipment is electronically secured.
- 13.7 Ensure that no software can be copied without authorization
- 13.8 Ensure that documents, forms, and consumables are inventoried and securely stored.
- 13.9 Provide centralized security management system at the control center and ensure that all the information entering into the <Name of the beneficiary organization> network gets scanned through this security system.

14. Details of Standards

14.1 Technology Roadmap

The RO to clearly mention the roadmap for the products and/or services that are quoted as part of the total solution, a detailed chapter covering at least the following:

- 14.1.1 Support of various IEEE standards
- 14.1.2 Support of various Information Security standards
- 14.1.3 Future products of same series, proposed by the Vendor
- 14.1.4 Commitment on Research & Development by the Vendor towards solving IT Security Issues (Details of R & D Budget may be provided here)
- 14.1.5 Technology Refresh (strategy for the renewal and/or upgrade of technology employed at different times during the lifecycle of the project)
- 14.1.6 Investment Robustness (avenues to safeguard investment in technology, e.g., using industry standards, modularizing the system, upgradeability and scalability)



Any other supporting documents, graphs or charts which describe the technology roadmap of licensed Software, of software platform used for applications may also be provided.

15. Performance Guarantee

- 15.1 On successful commissioning, Bidder shall furnish a Performance Guarantee @ 10% of the total Contract Cost
- 15.2 The Bid Security submitted by the successful bidder at the time of submitting its bid shall be returned to the Bidder upon signing of contract, furnishing of the performance/bank guarantee and confirmation of the performance/bank guarantee by the NITB with the Bank of the successful bidder.
- 15.3 Failure to provide a Performance Guarantee by the successful Bidder is a sufficient ground for annulment of the award and forfeiture of Bid Security. In such event the Procuring Agency may award the contract to the next lowest evaluated bidder or call for new bid.

16. Annexures

16.1 Annexure-I Preliminary Evaluation / Eligibility Criteria

General terms and conditions compliance	Yes/No
1. The Responding Organization-RO must be registered with Sales Tax Registration Department and should be in possession of valid NTN number. Copies of the certificates must be provided with the bid.	
2. Financial capability and yearly growth rate (business revenue) in past 02 years	
3. RO must be in Software business for at least last three (03) years.	
4. RO should have successfully deployed HMIS application at least in 3 different hospitals	
5. A bid bond, in the shape of a Bank Draft/Pay Order in the name of Project Manager (One Patient One ID), National Information Technology Board, equivalent to 2% of the total cost of bid should be submitted along with the tender.	
6. RO shall submit affidavit that it is not blacklisted by any Federal, Provincial Public sector organization and neither involved in such litigation.	
7. RO must provide at least three (03) successful HMIS implementation completion certificates	

Note: Bid's evaluation shall be subject to 100% compliance to the above-mentioned criteria for vendor's qualification. Failing to qualify on any of the above criteria will not be considered for further evaluation.

16.2 Annexure- II (BID FORM)

Name of the Firm: _____

Bid Reference No: _____ Date of opening of Bid: _____

Documentary Evidence for Determining Eligibility of the Bidders & Evaluation of bids, Bidders should only initial against those requirements that they are attaching with the form. Bidders are required to mention the exact page number of relevant documents placed in the Bid.



Bidders are advised to attach all Supporting documents with this form in the order of the requirement as mentioned in column-1.

Required Documentation	Signature of Bidder	Supporting Document's Name	Page Number in the Bid
NTN Certificate			
GST Certificate			
On Active Tax Payers List of FBR			
Growth Rate of Past 03 years			
Registration/Incorporation/Business Certificate			
Complete Company profile			
Operational Office in Islamabad			
Evidence of Firm's Last 3-Years Performance (Projects of similar nature)			
Affidavit: bidder is not blacklisted by any Federal, Provincial Public sector organization.			
Bid Validity period of 180 days			
Compliance with schedule of requirements			
Submission of required amount of bid security with Financial Bid			
Original Bidding Documents duly signed/stamped			

17. Relevant Experience

17.1 Responding Organizations must demonstrate relevant experience in HMIS projects with similar nature, industry sector, size and geography.

17.2 Responding organization should provide the details of experience in similar projects according to the following format.

An ideal reference will include projects of similar nature in the national level government sector with same size and geography and internationally in South Asia/Western Asia etc. regions. The number of references is restricted to five.

Sr.	Name of Project of same nature	Total value Rs. Million	Geography	Size of Project	Customer, contact person & contact details

Note: Only those Projects should be considered where RO can provide the successful completion certificate from the Client Organization (Photocopies of documents should be provided).



18. Staff assigned to the Project

Responding Organizations are required to name and provide resumes of at least the planned project manager, lead IT architect, development team lead, processes consultant, testing team lead, requirements management analyst and database analyst. Also, a list of the number of persons and their roles for the project is to be provided. Particular focus should be on core skills set required for implementation of project of this nature.

NITB requires the resumes of staff, assigned to this project as per format given in Appendix-B, in the following three categories.

- a) Total Staff assigned for Project Development/Customization/Implementation.
- b) Total Staff assigned to the project for Support purposes.
- c) Total staff assigned to the project for Training purposes.

Total Staff assigned to the project (Please specify role of each person, as per minimum requirements mentioned above)

19. Project Implementation/Management Plan

- 19.1 The responding organization shall provide a detailed implementation plan and project management plan. Responding Organization should provide the **timeline** (preferably according to the milestones provided in clause
- 19.2 Responding Organization should cover **tasks assigned to the employees and resource allocation** of responding organization during the course of the project. This should not be in generic terms but should be specific to the project. Project plans in tabular form, mentioning names of tasks, sub tasks, start date, finish date, resources and milestones will also be appreciated. In the training category, ROs to provide detailed training schedules along with the names of resources.
- 19.3 NITB employees and requires all ROs to use PMI methodology for the project management of this project.
- 19.4 Further information regarding PMI may be accessed at: <http://www.pmi.org>

20. Deliverables

The responding organization should clearly mention and list all the deliverables to be completed under the proposed project. All architectural deliverables must comply with industry standards. Generic project deliverables are defined in the NITB Frame work, of which an overview is given below:

Solution Architecture	Functional Model
	Operational Model
	Architectural Decisions
	Test Model (detail)
Additional Deliverables	Migration Concept
	User Manual
	Operations Manual
	Documented Code
	Deployment and Installation Manuals



	Programmer's Guide
	ERD
	User Acceptance Testing Documents
	Technical user and End user Training
	Technical Guidance during Implementation

21. Support Capabilities

ROs must provide support for the solution for the duration of the entire lifecycle of the project, i.e., up to the time of exit of the RO from the project. For certain projects a longer duration for support services to be provided may be arranged. Please refer to the following table for guidelines for support time periods:

Service Provision	Ends with Sun downing: For the entire lifecycle of the project up to Sun downing
Solution Development	<i>Ends with Implementation or Rollout:</i> At least two year after the rollout.
Macro Design	<i>Ends with Macro Design:</i> At least for the duration of the first release of the solution.

The RO should indicate the support capabilities for Application and Licensed software. Number, qualifications and relevant certifications of support personnel must be indicated. The selected vendor will provide support for the following for the larger of the duration of the project or three years:

22. Software bugs and upgrades/enhancements warranty.

The software warranty will include providing onsite Help Desk support for technical issues. The detailed support plan should also include the following information other than mentioned above:

Sr. No	Items	Software bugs / upgrades / Enhancements warranty	Response time (in hours)	Resolution time(in hours)	Contact person name, email & Mobile No.

The chapter on Support plan should cover following categories in detail:

- a) Comprehensive Support plan
- b) Issue handling (software warranty/Bug fixing) Plan as mentioned above.
- c) Details of Support Experience of the projects of same size and nature
- d) Staff Assigned Expertise
 - i. System administration Certifications (MCSE etc.):
 - ii. Vendor Specific RDBMS administration/management Certifications
- e) Technical Support staff location (Office Locations)
- f) Support experience of Government Projects

23. Training Capabilities

The Responding organization should indicate its training capabilities to provide training on software application and Licensed Software. Responding Organization should also provide a



detailed training schedule. Training premises (on-site) and necessary equipment will be arranged by the vendor.

The chapter on Training plan should cover following categories in detail:

1	Comprehensive Systems Training plan, including the following:
1.1	Details of Training Experience of the projects of same size and nature
1.2	Staff Assigned Expertise
1.2.1	System administration Certifications
1.2.2	Licensed Software Certifications
2	Comprehensive Application Training plan, including the following:
2.1	Details of Training Experience of the projects of same size and nature
2.2	Staff Assigned Expertise
2.2.1	Deployment
2.2.2	Configuration
2.2.3	Operations
2.2.4	Troubleshooting
2.2.5	Maintenance
2.2.6	Trainer Certifications (if any)
3	Training experience of Government Projects
4	Training staff location (Office Locations)

24. Penalty Clause

The contract to be executed between NITB and the selected vendor will contain penalty clauses for delay in the implementation schedule given at section 5 as well as failure to comply with the provision of providing the required services during the post-approval phase.

25. Technical Evaluation

Detailed technical evaluation will be done for firms who qualify the preliminary evaluation. These firms may be asked to give presentations on their solution. The *Government's Evaluation & Contract Award Committee* on the parameters given in the technical proposal will make the technical evaluation. Ratings for the technical evaluation will be as follows:

S. No.	Category	Score	Description
1.	Business	10	<p>Includes all business aspects of the solution, e.g. Financial Stability. Licensing Model, ability of non-IT people to use and change the process, etc.</p> <p>Bidder's business in Pakistan? Bidder's business in Pakistan for 10 years=3 Bidder's business in Pakistan for 6 years=2 Bidder's business in Pakistan for 3 years=1</p> <p>How much is the bidder's financial turnover? (Bidder has an annual average turnover as analyzed in submitted past 5</p>



			<p>consecutive years financials) More than 40 million=2 Less than 40 million but more than or equal to 10 million=1</p> <p>How is the Bidder's ability to execute? (Successful implementation of HMIS in Govt/Private hospitals of Pakistan). More than 5 implementations =3 Within 3 to 5 implementations=2 Within 1 to 3 implementations=1</p> <p>Number of technical staff of the bidder to provide support related to the proposed solution? 10 + employees =2 >5 & <10+ employees=1.5 <5 employees=1</p>
2.	Functional Parameters	15	<p>All modules of the HMIS system Already developed/ Available = 3 Can be developed / Can be made Available = 1.5</p> <p>Is able to integrate with Lab Machines / Radiology Modalities such as CR, CT, MRI and others like endoscopy etc Yes = 2, No = 0</p> <p>Does the system is Web Based and responsive Applications Completely Web Based = 2 Desktop Based=1</p> <p>Search Records according to predefined/dynamic criteria More than 5 criteria = 2 Less than 5 criteria = 1</p> <p>Management Reports for Decision Making / Dashboard Dashboard developed = 2 Can be developed = 1</p> <p>Use of Version Control Software Application Yes = 2, No=0</p> <p>Support automatic notifications and trigger events according to business rules e.g. an item reaching the threshold limit and needs to be procured Yes = 2, No = 1</p>
3.	Technical Parameters	10	<p>The fulfilment of all technical requirements will be evaluated here:</p> <ol style="list-style-type: none"> 1. Technology compatibility High = 2 Low= 1 2. Modularity High = 1 Low= 0.5 3. Technical Scalability High = 1 Low= 0.5



			<p>4. Upgradeability High = 1 Low= 0.5</p> <p>5. Portability High = 1 Low= 0.5</p> <p>Is the base technologies like OS, DB, webserver is open source, however reliable widely used in world renowned services are used in the offered solution and compatible with existing solution? Yes=2 No=0</p> <p>Does the bidder perceive its core competency as software development/ implementation? Yes=2 No=0</p>
4.	Risk	10	<p>Risks of the proposed solution will be evaluated here, e.g., Development /Customization/ Testing time, Within 20 weeks= 4 Within 20 to 30 weeks=2 Within 30 to 40 weeks-1 More than 40 weeks-0</p> <p>Number of Years of experience of Project Manager {s) to be assigned on this project? More than 15 years=3 Between 10 to 15 years=2 Between 5 to 10 years=1 Less than 5 years=0</p> <p>Is Backup project manager provided? (data porting/migration, exit, change in vendor etc.) Yes=3 No=0</p>
5.	References	5	As per details mentioned in Appendix-C.
6.	Presentation	20	All the bidders will give the presentation on proposed HMIS solution

For further details of the Detailed Technical Evaluation Criteria, please refer to Appendix-C.

Financial bids of firms who qualified in detailed technical evaluation with minimum 60 score out of 70 will be opened before the representatives. The formula for financial scoring is that the lowest bidder gets 30 points and the other bidders score 30 multiplied by the ratio of the lowest bid divided by the quoted price

Example:

- a) Value quoted by lowest bidder = A
- b) Value quoted by second lowest bidder = B
- c) Value quoted by third lowest bidder = C
- d) Financial scoring of the lowest bidder will be = 30



- e) Financial scoring of the second lowest bidder will be= (A/B)*30
- f) Financial scoring of the third lowest bidder will be = (A/C)*30
- g) Technical scoring out of 70 = A
- h) Points obtained in the detailed technical evaluation will be carried forward & prorated.

Tender will be awarded to the Responding Organization with maximum accumulative points (Technical Evaluation Score + Financial Evaluation Score).

The decision of this Committee will be binding on all concerned and will in no case be challengeable in any forum.

26. Ownership

NITB has the intellectual Property Rights for all the Requirement Analysis Report and Software Design Documents (mentioned above) provided to the probable bidders. Bidders are not authorized to use these documents for any purpose without the express written permission of Government of Pakistan through NITB/ Ministry of Information Technology.

The ownership of all products and services rendered under any contract arising as a result of this RFP, including any source code developed, will be the sole property of Government of Pakistan.

The RO will be bound to provide the source code to purchaser for usage/modifications for its own use and train the purchaser staff so that some modifications can be done on purchaser side. The Purchaser will have full right to modify the source code according to its changing business requirements. The RO can modify and sell the code anywhere else, only with the express written consent of Government of Pakistan through Ministry of IT.

27. APPENDIXES

27.1 Appendix A: Format for Financial Proposal

27.1.1 Software Customization

Sr.	Item	Quantity	Unit Price (RS)	Total Price
a : Customized Application				
<u>Clinical Modules</u>				
1.	Patient Registration System Total price should include the items mentioned in section 1 (quantity = 100)	1		
2.	Outpatient & Specialties/Consultant Management System Total price should include the items mentioned in section 1 (quantity = 200)	1		
3.	In-Patient & Emergency/Casualty Management System	1		
4.	Operations Theater Management System	1		
5.	Intensive Care Unit Management System	1		



6.	Diagnostic Information Management System	1		
7.	Clinical Laboratory Modules	1		
Non-Clinical Modules				
8.	Patient Billing & Income Management System	1		
9.	Medical Record Management System	1		
10.	Asset Management System	1		
11.	Medical Stores & Pharmacy Management System	1		
12.	Web Portal	1		
13.	Dietary Management System	1		
14.	Center Sterilizing Services management System	1		
15.	Complaint Management System	1		
16.	Payroll Management System	1		
17.	Financial Assets Management System	1		
18.	Estate & Nursing Hostel Management System	1		
19.	Library Management System	1		
20.	Application Based Interface for Doctors and Patients	1		
21.	Cafeteria Management System	1		
22.	Help Desk / Public Relation Center	1		
23.	Blood Banak Management System	1		
24.	Transport Management System	1		
25.	Hospital Waste Control and Management System	1		
Sub-total of a.				
b : Enterprise Resource Planning Applications				
30.	Human Resource Management System.	1		
31.	Procurement Management System	1		



32.	Inventory Management System	1		
33.	Finance Planning & Budgeting	1		
Sub-total of b				
c: Import of data				
34.	Employee payroll	1		
35.	Library	1		
Sub-total of c				
d: Training				
36.	End User Training	1		
37.	Admin Training	1		
38.	Management (PMU) Training	1		
Sub-total of d				
e: Support				
39.	Total Support Services and maintenance for all Products Provided by Vendor for Next Five years:	1		
Sub-total of e				
f: Cost for SRS/Gap Analysis.				
40.	Cost for SRS/Gap Analysis			
Sub-total of f				
Grand Total				

27.1.2 Optional Items

g: Other				
<u>1</u>	Any Other Necessary Associated Services/Products to be Charged to fulfill Above Mentioned Requirements	1		
Total				

- a) These prices must include all incidental costs associated with the provision of the service, such as travel, subsistence, office support, communications, printing of materials, etc., and all taxes, levies, duties and fees imposed on the Bidder, its subcontractors, or employees on account of such services in the Purchaser's country or in any other country.



- b) Shared components/modules must not be charged separately for each system. (Although for complete modules minor implementation/customization charges can be accommodated)
- c) Responding organization must provide separate price/cost for each line item or may state that it is either “included” within the cost of some other line item or nil. Bid will stand non-compliant in case any line item is missed out or left blank.

27.2 Appendix B: Technical Team Structuring for Development / Customization of Software Applications

- a) **Project Manager (One (1) in number):** Overall eight (8) years of experience out of which five (5) years of project management experience and having at least Masters in Computer Science or a four-year BCS.
- b) **Architect (One (1) in number):** Overall five (5) years of experience out of which two years as an architect of web-based solutions/applications and having at least Masters in any field of IT/Computer Science.
- c) **Development Team Lead (One (1) in number):** Overall five (5) years of experience out of which two (2) years of technical leadership experience of MIS/ Work Flow systems and having at least Masters in Computer Science or a four-year BCS.
- d) **Testing Team Lead (One (1) in number):** Overall five (5) years of experience out of which two (2) years of quality assurance / testing team leadership experience of same volume systems, practical knowledge of ISO/CMM quality standards and having at least Masters (Computer Science/Electrical Engineering/Business Administration) or a four-year BCS.
- e) **Requirements Management Analyst (two (2) in number):** Overall five (5) years of experience out of which three (3) years of system analysis experience and having at least Masters in Computer Science or a four-year BCS.
- f) **Database Administrator (One (1) in number):** Overall five (5) years of experience out of which three (3) years of database experience, analysis and design of the database part of the system and having at least Masters in Computer Science or a four-year BCS.
- g) **Software Engineers (Five (5) in number):** Overall five (3) years of experience out of which software development experience, and having at least Masters in Computer Science or a four-year BCS.

27.3 Appendix C: Technical Evaluation Parameters

Business Evaluation	
Initial Screening	Financial Stability - Annual Report, bank statements
Initial Screening	Company/firm having legal presence in Pakistan
Initial Screening	RO or Lead bidder at least twenty full time relevant technical resources for last one year
Initial Screening	RO must have successfully completed at least three HMIS projects, worth Rs.7 Million or more in total.



Initial Screening	RO or Lead bidder should be ISO or CMM or Tick IT or HL.7 level quality assurance certification or following the processes and are working towards achieving these certifications (documentary proof will need to be provided)
Initial Screening	Compliance of project management methodology with PMI
Initial Screening	National Income Tax and Sales Tax Number
Initial Screening	Name of the participating organization or participating organizations (if more than one) in the responding consortium, including their scope of involvement
Initial Screening	Number of years of incorporation of the participating organization or participating organizations (if more than one)
B1	Date of Registration of RO for proof of business in Pakistan.
B2	Evidence of Financial Turnover documents
B3	Successful Completion Certificates of HMIS projects in public / private hospitals.
B4	Technical staff salary slips or any other evidence for last one year attachment with RO
Functional Evaluation	
F1	Experience of Development and implementation of required modules of HMIS software application
F2	Integration with state-of-the-art medical equipment
F3	Proof of development of responsive web-based applications.
F4	Covering all processes of Hospital(s) in SRS/GAP Analysis document
F5	Development of Web Portal fulfilling all necessary requirement of clientele organization.
F6	Provision of Enterprise Applications Integration internal & external) with the legacy systems as well as external systems (NADRA, PSP, PKI).
F7	Search Records according to predefined/dynamic criteria
F8	Generate Reports for higher management
F9	Support automatic notifications and trigger events according to business rules e.g. an item reaching the threshold limit and needs to be procured
F10	Use of Version control for the software application
Technology Evaluation	
T1	Use of proven standards for the software and middleware
T2	Portability of the Solution across multiple hardware/software platforms
T3.	Demonstrated transactions scalability to an enterprise level from 0.2m to 2m
T4	Implementation of security standards e.g. digital signatures, SSL etc.
T5	Implementation of standards e.g. web services,



T6	Conformity with Other Requirements of RFP for specific solution
Risk Evaluation	
R1	Development time
R2	No of years of experience of Project Manager
R3	Backup support of Project Manager throughout the project timeline
R8	Technology Know-How
Reference Evaluation	
RE1	GOP: How good are their references regarding their experience with GOP with their specific solution
RE2	Government: How good are their references regarding their experience in the public sector with their specific solution
RE3	Solution: How good are their references regarding their experience with the solution
RE4	Expertise: How good are their references regarding recognition as experts for the solution, e.g., articles, books, etc.
RE5	Company: How well can one rate their company regarding size ability to support, etc.
RE6	Clientele Satisfaction: Clientele satisfaction of the already implemented software/solution

27.4 Appendix D: Sample Bid Letter

Date: _____

To:

Project Manager,
National Information Technology Board,
24-B, H-9/1, Islamabad.

Gentlemen:

Having examined the RFP including attached documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to produce, deliver, install, support and maintain {Application Software Solution} in full conformity with the said RFP including attached documents.

We undertake, if invited by you to do so, to attend a Clarification Meeting at our own expense and at a place of your choosing. We undertake, if our bid is accepted, to install the systems in accordance with the schedule specified in our bid.

If our bid is accepted, we will provide an Advance Payment Security and a Performance Security in the form and in the amounts, as agreed in pursuance of this contract.

We agree to abide by this Bid for a period of {number of days} from the date fixed for Bid submission, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.



Until a formal contract is prepared and executed, this Bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this _____ day of _____ 2021.

{Signature} {In the capacity of}

Duly authorized to bid and sign for and on behalf of _____

28. SCHEDULE – A

28.1 Scope of Services

The following items are an extract from the Request for Proposal (RFP) issued to < *Name of Vendor* > on < *date* >. More details on each section can be found in the relevant section of the RFP.

28.1.1 Technical Requirements

The sections below provide detailed listings of the various technical requirements.

28.1.2 Functional Requirements

Listed below are the functional requirements for the < *enter service users here* >. This is not meant to depict the sequence of the workflow but is meant to ensure that all the requirements are met by the Vendor.

The system proposed shall provide for:

< *Enter the main process streams or categories here* >

Quality control:

< *Enter QC processes here* >

Administrative controls:

- a) All personnel authorized to use the system shall be logged in to an administrative database.
- b) All system functions shall be specifically assigned to authorize personnel only.
- c) Only the persons designated as system administrators shall add or delete personnel from the administrative database.
- d) Only the persons designated for this purpose shall change the permissions to access system functions.
- e) All system sign-on by authorized personnel for < *process* > shall ensure the identity of the person signing on. Passwords alone are not sufficient.



- f) Each system log on, all system actions performed and system log off shall be recorded in a system log showing time, date, and identity of the person performing the actions.

< Enter any project specific items here >

Verification functions:

< Enter any project specific items here >

ABC Integration:

- a) Interoperability with the existing ABC system
- b) All hardware / software including connectivity to be used at the Client's end for this integration will be provided by the Vendor.

Administrative reports:

- a) Regular reporting capabilities for total passports issued by day, week, month and year for the system as a whole and each separate issuing location.
- b) Ad hoc reporting capabilities for total application records processed by an authorized user by day, week, month, and year.

28.1.3 Global Requirements

There are some requirements of the new system that are of a global nature; that is, they apply to the system as a whole. The Vendor's proposed system shall conform to the following requirements:

- i. At the time of implementation of the proposed system, the existing client databases shall be loaded into the new system database. The capability shall also be provided to update and maintain this data in the new system until manual passports are no longer issued.
- ii. A work flow management capability shall be provided.

28.1.4 Transfer of Technology

The Vendor shall propose their concept of Transfer of Technology which will enable the Client to develop capability and capacity to install the application software (data capture, personalization and issuance software) at any additional site that it desires to set up in the future.

28.1.5 Acceptance and Testing Requirements

In an attempt to uncover risks early, the Vendor shall be monitored during implementation to ensure that a comprehensive solution and fully functional system is delivered. Primarily, the correctness of the delivered products against system and software requirements will be verified. An in-depth technical visibility into the quality and progress of each installation will be carried out by the Client. Client users will be provided with an incremental preview of the systems performance with a chance to make adjustments as the implementation is carried out. Overall, the Client will verify that the system delivered is the same as the system requested and proposed.

Specifically, the Client will monitor, verify, and validate the Vendor's system. To accomplish this, the Vendor shall describe how these acceptances and testing requirements will be met:



- a) Test Planning (Component, Integration, System, and Acceptance);
- b) Test Execution (design, case generation, procedures, execution);
- c) Master Scheduling;
- d) Baseline and Change Controls;
- e) Traceability (analysis and verification);
- f) Software Interfaces (analysis and testing);
- g) Installation Configuration Audit;
- h) Operation and Maintenance (anomaly evaluation, change assessment);
- i) Reporting.

28.2 Summary of Scope of Services

The following is summary of key requirements that should be given special consideration by the Vendor:

28.2.1 Establishment of Control Centre

- a) Establishment of newly created Database managed, maintained, controlled and operated by *<enter name here >*, whereas rights of insertion, deletion, updating and query of any data in the database would remain only with the *<enter name here >*
- b) Implementation of industry standard security measures at the Control Center to protect *<name of the beneficiary organization >* Network from any security threats.
- c) Establishment of a System level Training of Technical Staff

28.2.2 Quality Assurance Plan

The purpose of this document is to understand how the vendor intends to instil quality in the overall software development and implementation. The document should have the following artifacts:

- a) Listing of all Testable Requirements
- b) Requirement Review Plan
- c) High Level Design and Mapping with respective requirements
- d) Design Review Plan
- e) Integration Testing and System Integration Testing

28.2.3 Contingency Plan and Procedure

The purpose of this document is to understand how the Vendor proposes to cater for contingencies that may arise during the course of normal operation of the system. This plan should address issues such as:

- a) Total failure of a particular site
- b) Breakdown of communication links between sites
- c) Failure of data capturing equipment at the intake section
- d) Or any other likely contingency anticipated by the vendor



29. Performance Guarantee (Form)

To: [Project Manager, National Information Technology Board, and Islamabad]

Whereas [Name of Supplier] (hereinafter called “the Supplier”) has undertaken, in pursuance of Contract No.[number] dated [date] to supply [description of goods] (hereinafter called “the Contract”). And whereas it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a scheduled bank for the sum of 10% of the total Contract amount as a Security for compliance with the Supplier’s performance obligations in accordance with the Contract.

And whereas we have agreed to give the Supplier a Guarantee:

Therefore, we here by affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of [Amount of the Guarantee in Words and Figures] and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limits of [Amount of Guarantee]as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the day of _____, 20

Signature and Seal of the Guarantors/ Bank

Address: _____

Date: _____