



National Kidney and Transplant Institute
Special Bids and Awards Committee
East Avenue, Quezon City 1100
981-0300 / 981-0400 local 1157
<http://www.nkti.gov.ph/>

SUPPLEMENTAL BID BULLETIN NO. 21-125 - 1

Supply, Delivery, Installation, Integration, Commissioning, and Maintenance of Online Covid-19 Case Investigation Form (CIF) Patient Portal, Web Molecular Information System, Automated Encryption of Laboratory Results Emailing System and Short Messaging System (SMS) Gateway

Bid Reference IB No. 21-125

This Supplemental Bid Bulletin No. 21-125 - 1 is being issued to clarify, modify and amend items/specifications in the Bidding Documents and to address key issues raised during the Pre-Bid Conference for the aforementioned project, to wit:

Particulars	Changes
Project Title	Revised Project Title
Supply, Delivery, Installation, Integration, Commissioning, And Maintenance of Online Covid-19 Case Investigation Form (CIF) Patient Portal, Web Molecular Information System, and Short Messaging System (SMS) Gateway	Supply, Delivery, Installation, Integration, Commissioning, and Maintenance of Online Covid-19 Case Investigation Form (CIF) Patient Portal, Web Molecular Information System, Automated Encryption of Laboratory Results Emailing System and Short Messaging System (SMS) Gateway
Schedule of Requirements Thirty (30) calendar days	Revised Schedule of Requirements Within Sixty (60) calendar days <i>Please see attached Revised Schedule of Requirements</i>
Terms of Reference	<i>Please see attached Revised Terms of Reference</i>
Bid Proposal Form	<i>Please see attached Revised Bid Proposal Form</i>

This Supplemental Bid Bulletin including Annexes, if any, shall form part of the Bid Documents. Any provisions in the Bid Documents inconsistent herewith is hereby amended, modified and superseded accordingly.

For guidance and information of all concerned.

Issued this 24th day of September 2021 in Quezon City.

GERARDO M. SILVA, MD
SBAC Chairman

REVISED BID PROPOSAL FORM

IB No. 21-125: Supply, Delivery, Installation, Integration, Commissioning, and Maintenance of Online Covid-19 Case Investigation Form (CIF) Patient Portal, Web Molecular Information System, **Automated Encryption of Laboratory Results Emailing System** and Short Messaging System (SMS) Gateway

Opening of Bids: _____

BAC Conference Room, G/F NKTl Main Building

Item No.	Particulars	QTY/ UOM	Approved Budget Cost		Supplier	BID PROPOSAL		Remarks
			Unit Cost	Total Amount		Unit Cost	Total Amount	
1	Supply, Delivery, Installation, Integration, Commissioning, and Maintenance of Online Covid-19 Case Investigation Form (CIF) Patient Portal, Web Molecular Information System, Automated Encryption of Laboratory Results Emailing System and Short Messaging System (SMS) Gateway	1 lot	1,800,000.00	1,800,000.00				
GRAND TOTAL				1,800,000.00				

This Bid Proposal shall be accompanied by cost breakdown of accessories

Printed Name of Company

Date

Signature

Address

Telephone Number

Printed Name and Designation



Section VI.

Revised Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Qty./ UOM	Total	Delivered, Weeks/Months	Place of Delivery
1	Supply, Delivery, Installation, Integration, Commissioning, and Maintenance of Online Covid-19 Case Investigation Form (CIF) Patient Portal, Web Molecular Information System, Automated Encryption of Laboratory Results Emailing System and Short Messaging System (SMS) Gateway	1 lot		Within Sixty (60) calendar days	NKTI SMD

Standard Payment Terms: Payments shall be made promptly by NKTi, within sixty (60) calendar days from submission of complete documents *i.e.* invoice or claim by the Supplier.

Conforme:

Name: _____

Legal Capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____



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Section VII.

Revised Terms of Reference

SUPPLY, DELIVERY, INSTALLATION, INTEGRATION, COMMISSIONING, AND MAINTENANCE OF ONLINE COVID-19 CASE INVESTIGATION FORM (CIF) PATIENT PORTAL, WEB MOLECULAR INFORMATION SYSTEM, **AUTOMATED ENCRYPTION OF LABORATORY RESULTS EMAILING SYSTEM AND SHORT MESSAGING SYSTEM (SMS) GATEWAY**

I. RATIONALE

The National Kidney and Transplant Institute (NKTI) is a tertiary medical specialty center formerly known as the National Kidney Foundation of the Philippines. It was created with a three-fold mission of Service, Training and Research primarily for the benefit of the Filipino people in pursuance of the policy of the State to secure the well-being of the people by providing them with the specialized health and medical services.

Aligned to NKTI's commitment to healthcare excellence is its continuing expansion and growth, infrastructure- and patient service-wise. As it expands, NKTI has been successful in increasing the level of trust and confidence from both the local and international patients as well as partners in the healthcare industry.

Republic Act No. 8792, known as the "Electronic Commerce Act of 2000" provides that information in the form of electronic documents or electronic data message "shall have the legal effect, validity or enforceability as any other document or legal writing" for as long as "said electronic document maintains its integrity and reliability and can be authenticated so as to be usable for subsequent reference".

Providing essential public services and managing critical Information Technology is particularly important in this time of COVID-19 pandemic. In response to the crisis, the Department of Pathology and Laboratory Medicine together with the Management Information Systems Division (MISD) take extraordinary steps to ensure the safety of NKTI patients and frontline employees. Thus, it is essential to procure the following systems: Online Covid-19 Case Investigation Form (CIF) Patient Portal, Web Molecular Information System, and Short Messaging System (SMS) Gateway

The proposed System are not an income generating system. However, it will serve as a tool in the encoding of patient's data, sending of results to patients and sending messages to stakeholders, and consequently improving the delivery of quality healthcare.

II. SCOPE OF THE PROJECT

II.1 SOFTWARE REQUIREMENTS

II.1.1 Online CIF Patient Portal and Swabbing Front desk

- a. Website accessible to public anytime anywhere
- b. Responsive web design to automatically adjust and adapt to any size of device windows and screen sizes.
- c. Patient CIF online submission
 1. Ensure all required information by DOH are filled up alerting the patient to complete the data before successful submission
 2. Support CIF version 9 and future versions required by DOH
 3. Entry of additional information outside CIF required by the hospital
 4. Use province, cities/municipalities and barangays database provided by DOH
 5. Auto-compute of age based on birthdate
 6. Assigning of QR code with patient info where they can show on laboratory visit for swabbing
 7. Download and printing of CIF and QR code
- d. Front desk to validate initial patient's submitted CIF and fill up additional data while interviewing the patient
 1. QR code scanning using webcam for patient's data retrieval
 2. Searching of patient's record by name
 3. Auto-assign of Disease Reporting Unit (DRU) and interview date/time based on logged-in user
 4. Support pre-assignment of specimen ID and barcode printing
- e. Front desk to create Line list
 1. Selection of patients being verified and swabbed to be included on the line list
 2. Printing of barcode label with patient's assigned specimen ID
 3. Printing of CIF
 4. Editing of patient's CIF
 5. Assigning of batch name and unique ID for the line list
 6. Printing of line list with line list ID in 2D barcode for scanning at Molecular Lab.
 7. Line list and patient status monitoring
 8. Point of entry of Line list
- f. Access to website for Disease Reporting Unit (DRU) or other referring facilities for their patient's CIF online submission and front desk.
 1. Logo of the DRU on the website
 2. DRU patient's CIF is not accessible to other DRUs
 3. Swab test pre-registration for DRU

4. Front desk access for DRU for CIF validation and entry of additional information
 5. Realtime status specimen tracking
 6. Printing of CIF
 7. Reports generation
 - 7.1 Segregation of positive and negative results
 - 7.2 Automatic generation of result line list per agency
 - 7.3 Automatic generation of COVID-19 Document Repository System (CDRS) spreadsheet
 - 7.4 Daily, Weekly and Monthly census
 8. Claiming and printing of results
 9. Receiving of results referred by DRU via email
- g. Admin access for system configuration
1. System user definition
 2. Website contents and color for the homepage
 3. Enabling/disabling of system feature
 4. Generation of reports
 5. User's transaction audit trail
 6. DRU/Referring facilities definition including access to the system
 7. Admin access for system configuration

II.1.2 Laboratory Molecular Information System

- a. System for molecular lab is accessible only within laboratory
- b. Dashboard showing patients and their testing status
- c. Different role to control the user access like front desk, MedTech and pathologists
- d. Line list barcode scanning to retrieve data from Online CIF
- e. Document checking to record submitted document by the patient
- f. Specimen receiving or rejection
- g. Printing of barcode label
- h. Creation of master list for specimen extraction
- i. Template mapping with selection of patient from master list
- j. Export of Template Mapping to be upload on RT-PCR (plate-base) analyzer
- k. Processing of results from RT-PCR (plate-base and cartridge-base) analyzer to the system
- l. Display of results and graphs from RT-PCR analyzer for analysis and validation of MedTech and final release of pathologist.
- m. Adjust result form based on preferred format of the hospital
- n. Result form with QR code that can be scanned for result validation
- o. Auto-email of results in password-protected PDF file to patient, DOH, LGU and DRU
- p. Support current and future DOH reports requirements like CDRS
- q. Generation of reports like transaction logs and census

II.1.2.1 Web hosting (One (1) year)

- a. Quad core processor, 8GB RAM, 60GB Storage, 3TB Bandwidth Data/month

- b. Linux Ubuntu operating system
- c. Secured with SSL certificate for https
- d. URL should be under the domain name of the hospital

II.1.2.2 Email Encryption

- a. Capture PDF files from hospital information system
- b. Capture patient info like patient name, birthdate, and email address from hospital information system
- c. Encrypt PDF files with 256-bit AES encryption. National Privacy Commission (NPC) requires as per Section 8 of NPC Circular 16-01 that encryption of personal data at rest and in transit must be AES-256 bits. Personal data that are processed digitally, at rest and in transit, must be encrypted using Advanced Encryption Standard with a key size of 256 bits as minimum standard
- d. Protect PDF files through automatically generated password
- e. Add unique QR code with URL value on Covid test result PDF files
- f. Automatically email the patient with PDF attachment
- g. Tool for email resending and printing of PDF files
- h. Generate transaction logs report

II.1.3 SMS Gateway

SMS System is a text messaging service system that should be integrated within the Hospital Information Management System. The system should use standardized communication protocols to enable mobile devices to exchange short text messages to mobile phones that uses Global System for Mobile (GSM). The messages can typically be up to 160 characters in length, though some services use 5-bit mode, which supports 224 characters.

- Provide access to a local telecom using SMS gateway solution for unlimited text service to all networks. The cost of sending/receiving SMS shall be shouldered by NKTI.
- The system should have the following Application User Interface:
 - Doctors and End-Users Directory
 - Basic Information (Name, Department, Specialty)
 - Contact Information
 - Push Message
 - Message Classification (Keyword for filtering)
 - INFO: Routing Standard Information
 - URGENT: Urgent notice / need
 - EMERGENCY: code blue/ stat requirement
 - Push Message: Keyword Filter + Remarks
 - Auto Text features for patients' schedules and appointments reminders
 - Receive Message (Relay Keyword/Classification)
 - ACKNOWLEDGED – Receiver received message, no urgent action needed
 - DECLINE – Receiver cannot make the request due to more urgent issues

- MOVE – Receiver accepts request but can tend to at a later time
- Multiple SMS Group Sending
- Multiplatform SMS Client Software
 - MS Window Based 32 and 64 bit (XP, Windows 7 and Windows 8 and newer version of MS Windows)
 - Web Based (Compatible in all kinds of Internet browser)
- Admin Monitoring
 - User Management
 - LOGIN – who pushed / received message
 - Message History – filterable by the keyword
 - Log Reports
 - Add / Edit / Delete user

The solution must also include the following:

- a. 2 units of SMS Modem for Globe and Smart SIMS
- b. Same network sending (sender and recipient) to maximize unlimited SMS packages of mobile providers
- c. User interface for sending SMS
- d. Accept connection from other applications for SMS sending.

II.2 HARDWARE REQUIREMENTS

II.2.1 Barcode Printer (interoperable with existing unit)

- a. Quantity: 2 Units
- b. Thermal transfer printing of barcodes
- c. Resolution: 203 dpi (8dots/mm)
- d. Memory: 128MB SDRAM
- e. Print Width: 4"
- f. Print Speed: At least 4" per second
- g. Interface: USB

II.2.2 Barcode Scanner (interoperable with existing unit)

- a. Quantity: 2 Units
- b. Scanner Type: Bi-directional
- c. Light Source (Laser): 650nm laser diode
- d. Scan Rate: 100 scans per second
- e. Interface: USB

II.3 OTHER REQUIREMENTS

- a. Automate the Covid-19 test based on DOH
- b. System enhancement is local in the Philippines
- c. Operating system of main server is Linux Ubuntu
- d. Must be web based with unlimited concurrent user access
- e. System implementation is Thirty (30) calendar days

- f. The LIS must be vendor neutral which means it will not favor any particular equipment nor any laboratory supply company.

III. IMPLEMENTATION ARRANGEMENT

1. Contact Person

- a. NKTI Laboratory Department Arnold Joseph M. Fernandez, MD
Chairman, Pathology Laboratory
Department
- b. NKTI Admin Services Joseph Michael A. Jaro, MD
Acting Deputy Director
Administrative Services
- c. NKTI Exec. Office Rose Marie R. Liquete, M.D.
Executive Director

2. Contract Administration Arrangement

The contract of the Proponent will be under the administration of the NKTI-Pathology and Laboratory Medicine Department. The NKTI-Pathology and Laboratory Medicine Department shall closely coordinate with the Proponent.

3. Reporting Protocol

- 3.1 The Proponent shall forward all communications, deliverables, and request for payment, etc. to the NKTI - Pathology and Laboratory Medicine Department.
- 3.2 All the above documents will be acted upon within fifteen (15) calendar days except for cases deemed urgent by the Proponent.

IV. ROLES AND RESPONSIBILITIES

1. a. NKTI – Pathology and Laboratory Medicine Department
- b. Ensure the accuracy of all information/data to be encoded to the systems.
- c. Designate qualified staff for assessment of work and for prompt review and evaluation of outputs and deliverables.
- d. Ensure that personnel authorized to handle the system and to encode data shall be adequately trained
- e. Assume the acceptance of outputs and deliverables in the timeliest manner.
- f. Organize and conduct technical coordination and management meetings and appropriate logistical arrangement for the purpose.
- g. Review request for payments and endorse to the NKTI Finance Service upon presentation of the required documents and materials for payment of the amount due to the Provider.

- h. NKTl shall be the sole and exclusive owner of the data collected and/or generated from the Systems. NKTl shall have full access and shall have full control to the data collected and generated by Systems.
2. Systems Provider
- a. Shall provide the following mandatory services to NKTl
 - i. Online Covid-19 Case Investigation Form (CIF) Patient Portal
 - ii. Web Molecular Information System
 - iii. Automated encryption emailing system
 - iv. Short Messaging System (SMS) Gateway
 - v. After sales service (helpdesk)
 - vi. Capability building for NKTl personnel assigned to the system
 - b. Shall be responsible for ensuring security of the applicable connectivity technology
 - c. Shall ensure that only authorized personnel should handle the Systems
 - d. Required to develop and maintain policies and procedures protecting the personal health information (PHI) of patient-member/dependent stored electronically in accordance with the Data Privacy Law which include those for backup, archive and live electronic data management
 - e. Comply with all laws, rules and regulations in the Philippines that affect the performance of the Contract. The Provider shall indemnify the NKTl from and against any and all liabilities, damages, claims, fines, penalties, and expenses of whatever nature arising or resulting from the violation of such laws by the Proponent including its sub-contractors.

V. BID PARAMETER

The Approved Budget for the Contract is One Million and Eight Hundred Thousand Pesos (PHP1,800,000.00). Winning bidder will be determined after the financial evaluation based on the lowest bid for the project.

<p>Conforme:</p> <p>Name: _____</p> <p>Legal Capacity: _____</p> <p>Signature: _____</p> <p>Duly authorized to sign the Bid for and behalf of: _____</p>
