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2nd Floor Malong Building, Capitol Compound

Lingayen, Pangasinan

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**INVITATION TO BID**

**for**

**Supply and Delivery of Hospital Equipment at Provincial Governor’s Office, Lingayen, Pangasinan (for use of various hospitals – Pangasinan Provincial Hospital, Bayambang District Hospital & Western Pangasinan District Hospital)**

Project Identification No.: PANG-2024-01-0003-G

1. The **Provincial Government of Pangasinan**, through the **LBP Loan (PR#2024-01-0002)** intends to apply the sum of **One Hundred Twenty Million Pesos (P120,000,000.00)** being the Approved Budget for the Contract (ABC) to payments under the contract for **Supply and Delivery of Hospital Equipment at Provincial Governor’s Office, Lingayen, Pangasinan (for use of various hospitals – Pangasinan Provincial Hospital, Bayambang District Hospital & Western Pangasinan District Hospital).**

**1 unit CT-Scan (128 Slice)**

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| **1. MAJOR SYSTEM COMPONENTS** |
| **1.1 Gantry** |
| Aperture: at least 70cm |
| Tilt Range (degrees): ± 30 (Digital) |
| Rotation Speed: 0.35 seconds or faster |
| Spatial Resolution of 0.28mm or lower |
| Effective Temporal Resolution 29ms or lower |
| Distance focus to detectors not more than 95cm |
| Distance focus to scan plane 55cm or less |
| **1.2 PATIENT COUCH** |
| Horizontal Range: 1740mm or higher |
| Horizontal Scannable Range (Helical) : 1580mm or higher |
| Horizontal Speed: 175mm/sec or faster |
| Helical Pitch: At least 1.5 or higher |
| Vertical Movement Range (out of gantry): ≤430 to ≥990mm |
| Couch Load Capacity: ≥500lb (227kg) |
| Cradle Travel Accuracy/Reproducibility (mm): At least +/-0.25 |
| **1.3 DETECTOR and DATA ACQUISITION SYSTEM** |
| Number of Slices: 128 or higher |
| Number of Detector Rows in Z Direction: At least 64 or higher |
| Detector Configuration/ Effective Length of Detector Elements in Z-axis (at isocentre) [mm]: Capable of 64 x 0.625mm |
| High Contrast Spatial Resolution of at least 18.0 lp/cm at 0% MTF of higher |
| Detector width (Z-axis) (mm)/Total Effective Length of Detector Array at Isocentre (mm): at least 40mm Coverage |
| Total Number of Elements: 54200 or more |
| **1.4 GENERATOR** |
| Generator Type: High Frequency with Computer Control |
| Power (kW): at least 70kW |
| KV Selection: at least 4 Modes |
| Minimum Tube Voltage: Minimum 80kV or LowerMaximum Tube Voltage: at least 140kV or Higher

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| mA Selection Available: 10 to 600mA |
| mA Increment: at least 5mA |
| Max mA: 600mA or higher |
| **1.5 TUBE** |
| Anode Heat Storage (MHU): 7MHU or Higher |
| Equivalent Anode Heat Capacity: 39MHU or Higher |
| Max Anode Heat Dissipation: 1060kHU/min or Higher |
| Tube Cooling Type: Oil/Air (without chiller) |
| Must be Dual Focal Spot |
| Anode Rotation Speed; 8400 rpm or higher |
| **1.6 MAIN CONSOLE and COMPUTER CONSOLE** |
| Console Type: All-in-One Capable of Scan, Acquisition and Post Processing |
| Display Monitor: Dual with least 19inch at 1280 x 1024 Resolution |
| **CONSOLE COMPUTER:** |
| Hz/ Word Size: at least 6core, 2GHz or Manufacturer's Latest Technology |
| Compatible Operating System |
| RAM: At least 64GB or Manufacturer's Latest Technology |
| Graphics Card: NVIDIA Quadro P620 or Manufacturer's Latest Configuration |
| **DATA MANAGEMENT:** |
| Total Internal Disk Storage of at least 2TB (2,000GB) Storage for System /Application, Image and Raw/Scan Disk Data or Manufacturer's Latest Storage Capability |
| Additional Storage: CD/DVD |
| HIS/RIS Interface Worklist/Dicom mpps: Must be Available |
| DICOM Viewer: Support for External DICOM USB Media and Preference Management Tool to Exchange Preferences Across Users |
| **1.7 INDEPENDENT POST PROCESSING WORKSTATION (Radiologist)** |
| Hardware Type/Processor: at least 6 Core, Minimum 3.0 GHz or Manufacturer's Latest Specification |
| RAM: 32GB or Higher |
| Graphics Card: at least 1GB |
| OS and Applications: at least one (1) 256 GB SSD |
| Image Storage: at least two (2) 512 GB SSD in RAID Configuration for Image Protection and Redundancy |
| Archival Storage: Internal DVD Writer Drive for read/Write of DICOM CD/DVD Media, Read/Write of data Export CD/DVD Data and service Use (DVD Install) |
| Display Monitor: Dual or Single Configuration, Minimum 19" LCD |
| **2. SCAN MODES AND SETTINGS** |
| **2.1 Must Have Work Flow and Operational Efficiency Enhancements Through Automatic Patient Positioning with the Use of Camera and AI** |
| **2.2 Image Reconstruction** |
| Scan Field of View: 50cm or Higher |
| Minimum DFOV: 5.0cm |
| Slice Thickness: 0.625m or Thinner |
| Reconstruction Matrix: Must Have 512 x 512 and 1024 x 1024  |
| Display Matrix: At least 1024 x 1024 |
| Reconstruction Time: 55fps or Faster |
| Must Have Iterative reconstractionor Equivalent Technology |
| **2.3 Dose Management** |
| Must Adhere to ALARA Principle |
| Dose Reporting: Must be Available |
| Dose Modulation Technique: Must be Available |
| ECG Dose Modulation: Must Be Available |
| Pediatric-Specific Dose Control: Must Be Available |
| Filters: Must be Available |
| **3.0 CLINICAL FACILITIES AND APPLICATIONS** |
| **3.1 Advanced Reconstruction Techniques** |
| Helical Image Reconstruction Algorithm and Approach: Must Be Available |
| Axial/Sequential Image Reconstruction Algorithm and Approach: Must be Available |
| **3.2 Software Applications and Capabilities on Console** |
| Metal Artifact Reduction Software |
| Vessel Analysis Software |
| Bone Removal/Subtraction Software |
| CT neuro Perfusion |
| Advance Cardiac, Coronary and Vascular Acquisition Software |
| Adaptive Scanning for Moderate/High Heart Rates and Irregular Rhythm or Equivalent |
| Coronary Motion Correction Algorithm |
| Prospective ECG Gated Scan |
| Retrospective Helical ECG Gated Reconstruction |
| **3.3 Advanced Software Applications on WorkStation** |
| Vessel Analysis Software |
| Bone Removal/Subtraction Software |
| CT CerebroVascular Auto Segmentation, CT Subtraction |
| CT Perfusion Analysis, CT Volume Perfusion |
| Thoracic Analysis Software, Lung Disease Assessment |
| Lung Nodule Analysis Software |
| CT Pulmonary Analysis |
| Calcium Scoring |
| Cardiac Plaque Assessment |
| Advance Coronary CT/Cardiac Capabilities |
| TAVI/TAVR Planning Software |
| Myocardial Defect Assessment |
| Comprehensive Cardiac Function Analysis |
| Advance oncology Software/ CT Lesion Analysis |
| Hepatic Liver Analysis Software/CT Liver Analysis |
| CT Colon Analysis/Virtual Colonoscopy |
| Stroke Management/Application Software for Hemorrhagic and ischemic |
| Image Fusion Doftware with Other Modalities |
| Dental Software |
| **4.0 OTHERS** |
| Set of Patients Restraints |
| Patient Positioning Tools |
| Water Phantom for Calibration and testing |
| TVSS (Transient Voltage Surge Supressor) |
| Contrast Injector-Dual Barrel |
| UPS for Console and Workstation |
| Transformer Sufficient for CT Machine |
| Dry Film Printer |
| Network Port |
| Power Distribution Panel |
| Console Table and Chair |
| Lead Glass |
| Radiation Accessorie- 2 Sets (Lead Gown, Gonadal Shield, Thyroid Shield, Hand Gloves, Eye Goggle) |
| Brand Must be in the Local Market |
| Must Have Principal Local Presence for After Sales and Support |
| CT Scan Must be US-FDA Approved |

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**2 units CT Scan (32 Slice)**

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| **1. GANTRY** |
| Aperture: 65cm or Better |
| Rotation Speed Capable of at least 0/6s Partial Scan or 1.0 sec Routine Scan |
| At Least 32 Slice |
| With Slip Ring Technology |
| Scan Field of View of 40cm or Higher |
| Minimum Focal Spot to Detector Distance <95cm or Shorter |
| Capable of ± 30 degrees, Digital or Mechanical tilt |
| Gantry and X-Ray Tube Cooling Method: Oil and Air Cooled |
| Three Laser Light Markers (Axial, Sagittal, Coronal) |
| Minimum Gantry Weight of Minimum 900kg or Lighter |
| **2. DETECTOR** |
| CT Detector with Integrated Detector Design or Equivalent Latest Technology |
| Physical Detector: 16Rows or Higher |
| Active Physical Elements 0f 670 or Higher |
| High Contrast Spatial Resolution of at least 18lp/cm x/y at 0% or Higher |
| Capable of 0.625mm Slice or Thinner |
| Detector Coverage 20mm or higher |
| **3. X-RAY GENERATOR AND TUBE DOSE MANAGEMENT** |
| 24kW Generator or Higher |
| Equivalent generator Power of at least 40kW with Latest Technology |
| Minimum 4kV Modes or Selection |
| Minimum Tube Voltage: 80kV or Lower

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| Maximum Tube Voltage: 140kV or Higher |
| Tube Current Capacity of 200mA or Equivalent of 300mA or Higher |
| **4. X-RAY TUBE** |
| Dual or Nominal Focal Spot not more than 0.8mm x 0.7mm |
| Anode Heat Storage Capacity of at least 2 mhu |
| Anode Heat Dissipation Minimum of at least 6200W or 500 khu/min or Higher |
| **5. DOSE MANAGEMENT** |
| Must Adhere to ALARA Principle |
| With Automatic Current Selection or Similar Technology |
| With Dose Modulation or Similar Technology |
| With Z-Axis Dose Modulation or Similar technology |
| With Dose Display and Computation (CTDlvol and DLP) |
| With Dedicated Pediatric protocols |
| **6. PATIENT TABLE** |
| Horizontal Range of 1500mm or Higher |
| Table Height Range at ≤450mm to ≥890mm |
| Vertical Scannable Range of ≤720mm to ≥890mm |
| Able to Support Patient Weight of at least 180kg (400lb) or Heavier |
| Positioning Accuracy of ± 0.25mm |
| Table Speed of 0.5mm/sec to 100mm/sec |
| Table Weight ≤350kg or Lighter |
| **7. RECONSTRUCTION** |
| Reconstruction Speed, Reconstruction Frame Rate of at least 22 or Higher |
| Capable of Pre-Programmed Reconstructions of at least 10 sets |
| With Minimum of 2 Dose Reduction and Image Enhance Software, Iterative Reconstruction or Model Based Reconstruction |
| **8. SCANNER CONSOLE** |
| Computer CPU at least Quad Core with 3.5GHz 4 core Processor or Latest Manufacturer's Standard |
| Memory or RAM not Less than 16GB |
| Hard Disk Capacity not less than 1TB' |
| Monitor of at least 21" Color LCD |
| Easy Retrieval of Patient Information from HIS/RIS |
| **9. SCANNER USER ENVIRONMENT** |
| Combined Acquisition and Image processing on Console |
| Capable of Automatic Monitoring of IV Contrast Enhancement |
| Capable of Auto Start when HU Reaches Threshold |
| Helical Pitch of 1.70 of Higher |
| Capable of Real Time Topography |
| **10. IMAGE PROCESSING REVIEW** |
| Must Include MPR, MPVR MIP, 3D, Endo Viewing |
| Must Include Elliptical, Rectangular, Curved or Freehand, ROI |
| User-Defined Preset Windows can be Set |
| With Mouse Driven Fine Adjustments of the window Center and Width |
| 3D Volume Analysis |
| Quantitative CTA |
| Axial, Orthogonal MPR, Oblique, curved viewing |
| 3D Display, Volume Rendering, Endo Viewing |
| ROI, Volume Calculation, CT Number Display |
| Text and Image Annotation |
| Zoom, Panning, Cine, Auto-Filming |
| Display of Multiple Images, Image Scrolling |
| **11. IMAGE MANAGEMENT AND ARCHIVING** |
| DICOM Storage Service Class |
| Service Class User (SCU) for Image Send |
| Service Class provider (SCP) for Image Receive |
| DICOM Query/retrieve Service Class |
| DICOM Storage Commitment Class Push |
| DICOM Modality Worklist |
| DICOM Print |
| DICOM Gray Scale Presentation State for Image Presentation |
| DICOM Structured Dose Report |
| **12. APPLICATIONS** |
| 3D Reconstruction |
| Multi-Planar Reconstruction |
| Dose Checking and Reduction Software |
| Small Anatomical Structure Imaging Software |
| Iterative Reconstruction Technique and Model Based Dose Reduction Software |
| Dedicated Pediatric Protocols |
| Reconstruction Enhance, Fast Software for Reconstruction |
| Fast Pitch Scanning |
| CT Angiography |
| Emergency Patient Mode/Trauma |
| Bolus Tracking Software |
| Automatic Bone Removal Software |
| Vessel Analysis Software |
| Organ Perfusion (Neuro and Body) |
| Virtual Colonoscopy |
| Dental Panoramic Scan |
| Virtual Endoscopy |
| Lung Nodule Analysis Software |
| Thoracic Analysis Software |
| **13. ADVANCED WORKSTATION:**  |
| Must Have the Same Interface as the Operator's Console |
| Capable of Multi-Tasking |
| DICOM Standard, Transfer and Capability |
| Automatic Bone Removal Software |
| Vessel Analysis Software |
| Thoracic And Lung Analysis Software |
| Customizable Display |
| 2D and 3D Viewer |
| Fast and Easy Navigation Capable with Two Exams or Series Loaded |
| Automatic Batch Filming with Ease of Use |
| Work Flow Management: Support for Media to Serve as DICOM Storage |
| WorkStation CPU, Latest Manufacturer's Standard |
| Memory RAM, Minimum 32 GB Upgradeable to 64GB or Manufacturer's Latest Standard |
| 1 x 256GB Drive for OS and Applications or Higher |
| 2 X 512GB Drive in RAID-0 for Image Cache or Higher |
| Dual Monitor (2) 19" Color Flat Panel LCD Monitors |
| **14. OTHERS** |
| Set of Restraints |
| Patient Positioning Tools |
| QA Phantom for Calibration and testing |
| TVSS (Transient Voltage Surge Suppressor) |
| Contrast Injector-Single Barrel |
| UPS for CT and Console |
| Transformer Sufficient for CT Machine |
| Dry Film printer |
| Network Port |
| Power Distribution Panel |
| Console Table |
| WorkStation Table |
| Lead Glass (1m x 1.2m) |
| Radiation Accessories (Lead Gown, Gonadal Shield, Thyroid Shield, Hand Gloves, Eye Goggle) |

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Bids received in excess of the ABC shall be automatically rejected at bid opening.

1. The **Provincial Government of Pangasinan** now invites bids for **Supply and Delivery of Hospital Equipment.** Delivery of the Goods is required Seven (7) Calendar Days. Bidders should have completed from the date of submission and receipt of bids, a contract similar to the project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instruction to Bidders.
2. Bidding will be conducted through open competitive bidding procedures using a non-discretionary “pass/fail” criterion as specified in the 2016 Revised Implementing Rules and Regulation (IRR) of Republic Act (RA) 9184), otherwise known as the “Government Procurement Reform Act”

Bidding is restricted to Filipino citizen/sole proprietorships, partnerships, or organizations with at least sixty percent (60% interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA 5183.

1. Interested bidders may obtain further information from **Provincial Government of Pangasinan** and inspect the Bidding Documents at the address given below during Bidders **January 9, 2024 – January 26, 2024; 8:00 am to 5:00pm and January 29, 2024; 8:00 am to 10:00am**.
2. A complete set of Bidding Documents may be acquired by interested Bidders during **January 9, 2024 – January 26, 2024; 8:00 am to 5:00pm and January 29, 2024; 8:00 am to 10:00am at the BAC Office, 2nd Floor Malong Building, Lingayen, Pangasinan** and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **Fifty Thousand Pesos (P50,000.00)**.

It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.

1. The **Provincial Government of Pangasinan** will hold a **Pre-Bid Conference** on **January 17, 2024; 10:00 am** at **Conference Room, 2nd Floor Malong Building, Capitol Compound, Lingayen, Pangasinan**, which shall be open to prospective bidders.
2. Bids must be duly received by the BAC Secretariat at the address below on or before **January 29, 2024; 10:00am**. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in ITB Clause 18

Bid opening shall be on **January 29, 2024; 10:00am** at **Conference Room, 2nd Floor, Malong Building, capitol Compound, Lingayen, Pangasinan**. Bids will be opened in the presence of the bidders’ representatives who choose to attend at the address below. Late bids shall not be accepted.

1. The **Provincial Government of Pangasinan** reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Section 41 of RA 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.
2. For further information, please refer to:

**MELICIO F. PATAGUE II**

Provincial Administrator

BAC Chairman

Provincial Administrator

Capitol Building, Capitol Compound

Lingayen, Pangasinan

**MARLON C. OPERAÑA**

Provincial Accountant

BAC Technical Working Group

Provincial Accountant

Finance Building, Capitol Compound

Lingayen, Pangasinan

**ROWENA V. IGNACIO**

OIC – Provincial Planning & Dev’t Office

BAC Secretariat

BAC Office

2nd Floor Malong Building, Capitol Compound

Lingayen, Pangasinan

075 6327840

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**MELICIO F. PATAGUE II**

Provincial Administrator

BAC Chairman