

TECHNICAL SPECIFICATIONS

PICTURE ARCHIVING and COMMUNICATION SYSTEM with RADIOLOGY INFORMATION SYSTEM, LEASE TO OWN

Project

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<i>Item</i>	<i>Procuring Entity’s Specification</i>	<i>Bidder’s Specification as Technical Offer</i>	<i>Statement of Compliance</i>
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I. General Description and System Components	<p>The supplier shall supply, install and commission a DICOM 3.0 compliant Picture Archiving and Communication System (PACS) with unlimited modality connections and integrated Radiology Information System (RIS).</p> <p>The supplier shall supply and install one (1) table top computed radiography (CR system) to be stationed in the industrial clinic complete with CR workstation for Radiologic Technologist, reporting workstation for radiologist .and the corresponding application software.</p> <p>The supplier shall provide digital radiography system to be stationed in the x-ray satellite emergency room complex consist of two (2) digital detector or flat panel detector (wired and wireless capable), DR workstation for technologist, reporting workstation for radiologist and the corresponding application software.</p> <p>The supplier shall provide digital radiography system to be stationed in the x-ray-OPD consist of One (1) digital detector or flat panel detector (wired and wireless), vertical holder for detector, DR workstation for technologist, reporting workstation for radiologist and the corresponding application software.</p> <p>The PACS and RIS shall integrate with the existing Hospital Information System (HIS) and Electronic Medical Recording (EMR). The supplier must successfully demonstrate its full integration during post-qualification period within a span of 15 days.</p>		

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	<p>The PACS can be able to store/archive and distribute images and text data from the existing radiographic equipment using either Computed Radiography System (CR) or Digital Radiography System (DR), CT Scan, MRI and Ultrasound machines of the hospital. This should also be able to accommodate additional compatible imaging modalities in the future.</p> <p>The supplier shall migrate/transfer the patient data and images using the new PACS from the existing archiving system used by the hospital without interrupting the operation of the radiology department.</p> <p>The supplier shall provide all the technical support and training that will be required by the hospital to ensure the smooth and efficient operation of the PACS.</p> <p>The supplier shall provide the required license for the RIS/PACS software that will allow unlimited access information by the radiologists and referring physicians either for viewing inside the hospital or for remote access. It also include a 3D License for Radiologist be able to use this feature for reading outside the hospital. The Licenses must be unlimited.</p> <p>The system must allow viewing of images and reports by other clinical department of the hospital which is remote from the radiology department without additional fees charged by the supplier of PACS/RIS.</p> <p>System must be fully integrated to an automated CD/DVD publisher for</p>		

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	<p>burning patient studies. CD/DVD Publisher must be able to auto print label after burning the studies. Label must include the hospital designed artwork with patient name and study information.</p> <p>The PACS must be Tele-Radiology-Ready that can work from anywhere. Images can be viewed anywhere via the internet, compatible with multiple platforms (IOS, Android and Microsoft)</p> <p>The System must support for Oracle 64-bit platform to take advantage of Windows 64-bit architecture. There must be at least full 64-bit support for workstation and servers. Backward compatible to 32-bit systems.</p> <p>The system must support for any DICOM modality and supports any kind of integration to hospitals EMR, HIS.</p> <p>The PACS shall comprise of the following services:</p> <ul style="list-style-type: none"> - PACS Server Modules: - Web Server - Database Server - DICOM Server - HIS Server - Pre Cache Server - Smart Prefetch - Auto Routing - Acceleration Server 		

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II. The Storage System	<ul style="list-style-type: none"> - Bi-Directional HL7 Interface - HSM - DICOM Interface <p>The Data Archival / Storage Devices consists of</p> <p style="padding-left: 40px;">Storage device for long term storage (slower access)</p> <p style="padding-left: 40px;">Storage device for rapid access of data images (or on line storage)</p> <p style="padding-left: 40px;">Storage device for duplicate or disaster recovery. An automated offsite backup must be provided free of charge.</p> <p>The server shall allow on-line storage or rapid access of data and images. This storage device and system must have capacity to provide access to a minimum of five (5) years of image production. The database shall be backed up and verified by an automated procedure that does not take the database out of service or significantly impact database performance. In doing so, hard drives or magnetic disks used for storage must be configured as a redundant array of independent disk (RAID)</p> <p>The supplier must provide a storage system that have a capacity to store at least ten (10) years of exam information (patient data and images) based on the current patient workload plus 10% growth annually.</p> <p>The system shall not store any image in the storage system with non-reversible compression before the diagnosis of the exam of which the image is a part.</p>		

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	<p>The system shall make exams available for retrieval by workstations by not more 10 seconds of their receipt in the storage system within institution.</p> <p>The policy for automatic deletion of exams from the storage system shall be reconfigurable by the system administrator /IT managers.</p> <p>The storage system shall tolerate the failure of a disk drive without loss of data. The storage system shall remain operational in the event of the failure of a single disk.</p> <p>The storage system shall provide means for notifying administrator in the event of a failure in the storage system.</p> <p>The supplier shall provide One (1) Unit of Computed Radiography System (CR) to be stationed in the Industrial Clinic of the Hospital that consists of the following:</p> <ul style="list-style-type: none"> a) Table Top Image Reader System b) Two (2) pcs of 14 x 17 " Cassette with Imaging Plate c) CR workstation for radiologic technologist d) One reporting workstation for Radiologist e) PACS/RIS Interface 		

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III. The Computed Radiography System	<p>The Table Top Image Reader System shall have the following features:</p> <ul style="list-style-type: none"> - Single loader for cassette - IP processing rate should not be less than 60 plates/hr - Image preview time should not be less than 3 secs - Depth acquisition resolution of not less than 12 bits - It should have be able to process cassettes such as 8" x10", 10" x12", 11 x 14", 14" x 14" and 14" x 17" <p>The CR workstation for radiologic technologist should be consist of 21" antiglare flicker free TFT/LCD High Resolution Monitor. It's PC should have high speed processor of at least 64 bit, with Intel core i7 operating system, 4 GB DDR3 RAM and 500 GB or more hard disc memory.</p> <p>Capable for quick check of the image and exam data of at least the last 4 Imaging Plates scanned at the X-ray room.</p> <p>Spatial resolution of the digital image should be at least 2K x 2K x 12 bits.</p> <p>Should have various post processing functions such as window level adjustment, rotation, zooming, annotation, noise reduction , Image flipping cropping and edge enhancement.</p> <p>Capability of interfacing to HL7, Propriety and support DICOM worklist or user defined Windows based interface protocols to HIS/RIS.</p>		

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IV. The Digital Radiography System	<p>There is mechanism for retrieving demographics of at least last 10 patients identified on that terminal.</p> <p>The CR system should have modality worklist capability.</p> <p>The supplier shall provide the following components for Digital Radiography Systems:</p> <p>a) Two (2) digital detector to be stationed at X-ray Satellite in the Emergency Room Complex. The detector s must be both wired and wireless capable and compatible with the existing upright cassette holder and x-ray table cassette holder of the x-ray machine.</p> <p>b) One digital detector to be stationed at OPD X-ray Room with height adjustable detector holder in vertical stand appropriate for chest x-ray examination.</p> <p>c) Two (2) DR System Workstation for Radiologic technologist consist of 21" TFT/LCD High Resolution Monitor and PC with high speed processors of at least 64 bit, intel core i7 operating system, 4 GB RAM and 500 Gb or more hard drive.</p> <p>d) Two (2) workstation for radiologist.</p>		

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	<p>Features and Capability of the DR System are as follows:</p> <ul style="list-style-type: none"> - The detector should be a flat panel detector with Cesium Iodide scintillator. The size of the detector should be 14" x 17" or more. It should have a minimum spatial resolution of 2.5 lines pair/millimeter. The Detector Quantum Efficiency (D.Q.E) should be more than 55% @ Zero Line Pairs. The active matrix size should be 2 k x 2k or more with a minimum image depth of 14 bit. Compatible with in and out bucky. - Image preview time of not less than 3 secs. - Modality worklist capability - The system should have ready DICOM interface and networking capability with RIS/HIS/PACS <p>Stitching software shall be provided as standard</p> <ul style="list-style-type: none"> - Post processing function must be available such as window level adjustment, rotation, zooming, annotation, noise reduction , Image flipping cropping and edge enhancement. 		

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<i>V. The Reporting Workstation and Image Display</i>	<p>Each reporting workstation for radiologist shall be consist of 17" LCD Monitor and 21" (portrait) TFT/LCD Medical Grade, 3 Megapixel Monitor. It has PC with high speed processors of at least 64 bit with Intel Core i7 operating system, 8 Gb DDR3 RAM and at least 500 GB HDD.</p> <p>Note: There will be a total of Three (3) sets of reporting workstation for this project.</p> <p>The system must allow viewing of images that are not stored on the PACS archive, for example images stored on CD or DVD. The workstation software package must allow examinations to be opened from other storage device that may be connected to the workstation. It must support viewing and manipulating non-DICOM image file type such as BMP files and JPEG files.</p> <p>A number of tools shall be provided by the PACS workstation software for the manipulation of the displayed image.</p> <p>.</p> <p>The displayed image must be a copy of the original data stored on the archive and manipulating this image should not affect the original image information.</p>		

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VI. Features and Capabilities of the PACS	<p>The PACS must support the following functions;</p> <ul style="list-style-type: none">a) Image acquisitionb) Image storage and archivingc) Image processingd) Image distribution and communicatione) Image printingf) Centralized Architecture with Distributed Routingg) Unified Worklist Access from different clinical department of the hospitalh) Multi-modality solution, unified systems for radiology and referrers.i) Web-based deployable, delivered using DICOM or DICOM WADO as format for mass and wide distribution or any industry standard with varying levels of compression where necessary.j) The PACS should also contain the following features:<ul style="list-style-type: none">- Ad-Hoc delete- DICOM Header View export- Drag and drop of JPEG lossy images- Powerjacket- Dashboard- My History- Group Dictation- Advanced Filtering- Image Compression- Study Reservation- Folder List View- Study List View		

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	<ul style="list-style-type: none"> - Sticky Windows - Column Sorting - Full Screen Mode - Print Composer <p>The system shall provide an access control mechanism that enable assignment of unique privileges to individual users to access or alter system resources and data.</p> <p>It should have a centralized audit management system which records and tracks all auditable events such as:</p> <ul style="list-style-type: none"> - Import, export and printing of Protected Hospital Information - Creation, deletion, accession and modification of patient, procedure and study data. - Storage, usage and deletion of sop instances - Creation, deletion, accession and modification of study and report object events - Successful and failure of authentication of users - Modality worklist query and print transaction requests - Availability query and retrieval of images <p>The PACS can be able to store presets and context menus, in a centralized database that permits 'roaming' user profiles.</p> <p>Automatically download and locally cache studies for quick retrieval on slow internet access computers.</p>		

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VII. Worklist Queries and Reports / RIS Features	<p>The system shall have a study notes feature that allows the radiologist to write notes or instructions pertaining to the patient exams or procedure. Study notes can pop up when opening the study.</p> <p>It should have a voice cursor annotation to be used by radiologist to communicate with referring physician and allow to identify and describe their findings in the study. The referring doctors can see the findings from any workstation or viewing station or even through remote connection.</p> <p>There must be a feature that allows the hospital to give temporary access by referring physicians on a particular patient study. This will be intended for Doctors who are not regularly practicing or holding a clinic at the hospital or for referrals with the patient's doctor abroad.</p> <p>All exams shall be accessible from every workstation, and can be limited only by security mechanisms.</p> <p>The supplier must provide a worklist functions with simple method of opening examinations for reporting.</p> <p>The radiologist may filter the worklist by acquisition modality, examination type or referral type, patient type, and by priority set by the end user.</p>		

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	<p>The radiologist can choose the filtering method and open examinations for reporting in the order they appear on the list.</p> <p>Added the ability to reserve studies and use quick filters for navigating to the set of reserved studies. Ability to send images for review to the attending physician.</p> <p>The system can tracks notification to referring physicians and issues warnings for aging messages, ensuring follow-up and delivery confirmation.</p> <p>The system can captures patient medical and mammography radiology histories, mammography findings and pathology results with graphically enabled tools.</p> <p>The system shall allow dynamically updated worklist to be created by the system administrator for a specific user or class of users and for a specific workstation. Dynamically updated means that as exam change status, the change is reflected in such a way as to change the contents of a worklist, the worklist is automatically refreshed.</p> <p>Users can create a scheduled worklist of studies for a particular period of time for the purpose of reviewing them during clinical rounds or even for conferences or workshop. There should be tools to allow user to create any number of scheduled worklist based on a time period, add studies of</p>		

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	<p>relevant patients into the worklist, reorder the studies and patients and also save the study layout, i.e. format, window level / width of the displayed images. Users can save multiple study layouts for the same study.</p> <p>The system shall support worklists which display a list of exams based on queries of :</p> <ul style="list-style-type: none"> - patient name - patient I D - patient location - modality - exam status - date & time of examination <p>It shall be possible to request old exams from the storage and archive. Quick access to previously viewed images.</p> <p>A mechanism shall be provided to notify a one radiologist when it opens an unread exam which is already open by another radiologist.</p> <p>The user interface shall organize images of exams using the metaphor of a folder.</p> <p>Each patient's exams can organized into a set of modality specific and set of body part specific folders (e.g. CT folder, chest folder).</p>		

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	<p>A mechanism shall be provided to permit a user with proper privileges to select images or exams for inclusion into one or more manually created folders for teaching and research purposes.</p> <p>A clinical folder can created for each patient. The most recent 3 exams shall be included in this folder automatically.</p> <p>An authorized user shall be able to add or delete selected images to or from the clinical folder.</p> <p>Users have the ability to select jpeg lossless images for viewing or full blown DICOM images depending on bandwidth availability.</p> <p>The presence of the text area which allows patient, clinical and study information to be displayed as well as historical reports, study comments and relevant prior studies on an extended monitor without obscuring the image display area when interfaced with RIS.</p> <p>RIS must be able to generate Management reports such as</p> <ol style="list-style-type: none"> daily, weekly, monthly census per modality or per department or per procedure Workflow averages daily, weekly, monthly census per radiologist, per modality type or study type. 		

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	<ul style="list-style-type: none"> d. Radtechs' productivity e. Modalities productivity f. Summary of unread exams g. Summary of cancelled procedure and reasons for cancellations h. Summary of incomplete exams i. Summary of Referring Physicians productivity j. Other customise reports needed by SPMC must be done by the supplier at no extra charge <p>RIS features must include the following:</p> <ul style="list-style-type: none"> a. SCHEDULING where users can easily drag and drop patient info, easy to cancel or change schedule. b. Patient Workflow where users can easily track patient status or exam status. c. Must be able to input patients contraindications or allergies and system must alert Radiology staff with the contraindications when opening the patient file or study. d. Exam status e. Tracks patient information and procedures f. Tracks department revenue h. Report module for patient exams where standard templates of radiologists can be uploaded in the system. 		

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VIII. Image Manipulation and Display Function	<p>The displayed image should be a copy of the original data stored on the archive such that manipulating this image does not affect the original image information.</p> <p>Various tools must be provided by the PACS workstation software for the manipulation of the displayed image such as;</p> <ol style="list-style-type: none"> Window width/level which controls the range of image pixel values displayed on the screen. The size of this range is defined by the window width, and the center of the range is defined by the window level. Magnifying tool creates a small magnifying window on the image. The position of the magnifying window is determined by the mouse position and the size of the window and amount of magnification can normally be varied. Pan/Zooms into the selected image instead of creating a magnifying window. This zoomed image can then be moved around by using the pan tool. Toggle overlay alternately displays and hides patient and examination related information as an overlay on the image. Flip/Rotate allows the currently displayed image to be flipped horizontally or vertically, and rotated clockwise or anticlockwise. Toggle annotation displays and hides user annotations as an overlay on the image. Invert Grey scale swaps light grey shades in the image for dark grey shades, and vice versa. 		

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	<ul style="list-style-type: none"> g) Region of interest" or "Local window width/level" allows the display of the image pixel values in a user-selected region of the image to be optimized. h) Histogram which displays a graph showing the image pixel values along a line drawn on the image by the user. i) Pseudo color converts the grey scale values of each pixel to color, resulting in easier differentiation of structures with low contrast. j) Image filters can be applied to the displayed image to aid in diagnosis. Examples of image filters are smooth, sharpen and edge enhancement. k) "Image crop removes the area of the image located outside a user selected region. l) "Patient anonymization" is used to remove any patient identification information from an examination before exporting the examination for teaching or demonstration purposes. m) "Line tool" measures the distance between two points on the image. n) "Elliptical tool" measures the area of a drawn ellipse on the image. It can also display statistical information regarding the pixel values within the drawn ellipse. o) "Angle tool" measures the angle between two intersecting lines drawn on the image. p) "Pixel or Point tool" displays the x-y position and original grey scale or Hounsfield value of the pixel under the mouse pointer. 		

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	<p>q) Calibrate image" is a tool used to calculate the scale of a digitized image, therefore allowing accurate measurements to be made by the measurement tools.</p> <p>r) "Cobb angle" is used to evaluate the curvature of the spine in patients with scoliosis. The "Cobb angle" tool measures the angle between two lines drawn on the image, where the intersection between the two lines may occur beyond the edge of the image.</p> <p>s) "Rectangle" and "Polygon" tools measure the area of a drawn rectangle or polygon on the image. As with the "Elliptical" tool, some rectangle and polygon tools can display statistical information regarding the pixel values within the drawn shape.</p> <p>The "Note" tool allows user comments to be added to an examination. The note is displayed as an annotation and is saved when the examination is closed.</p> <p>There should be a number of tools that can be used to view multi-slice examinations such as:</p> <p>a) Series synchronization allows multiple series to be synchronized, so that as the user scrolls through the images in one series, the other series auto scrolls. All of the series therefore display images from similar levels in the body.</p> <p>b) Cine allows multi-slice examinations to be viewed as an animation, i.e. the images from a series are scrolled through without any interaction from the user.</p>		

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	<p>c) Identification and display of key images allows significant images in a series to be flagged for printing or quick future retrieval. This allows key images to be retrieved without having to navigate through all the images in a series.</p> <p>RADIOLOGY WORKSTATION TOOLS:</p> <p>A. IMAGE MANIPULATION</p> <ul style="list-style-type: none">- Window Level/ Width- Magnifying Tool- Zoom/Pan- Toggle Overlay- Toggle Annotations- Flip/Rotate- Invert Grey Scale- Regions of Interest- Histogram- Image filters- Digital Subtraction Angiography- Image Merge- Image Crop- Patient Anonimysation- Hanging/ Display Protocols- Screen Layout		

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	<ul style="list-style-type: none"> - Spine Labelling Intellink - Quadrant View <p>B. IMAGE MEASUREMENT</p> <ul style="list-style-type: none"> - Elliptical tool - Rectangle and Polygon - Pixel or Point Tool - Calibrate Image - Annotation - 2D Measurements/CTR/ Ruler - 3D/ Volume Measurements - Angle Measurements/ Cobb's Angle - Hounsfield <p>C. MULTI-SLICE TOOLS</p> <ul style="list-style-type: none"> - Series Synchronization - Cine - Key Images - Show Reference Lines - Display or Remove Scout View - MPR - MIP - 3D/ Volume Rendering 		

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IX. DICOM Support (Export and Import of Images)	<p>D. ADVANCED VSUALIZATION TOOLS</p> <ul style="list-style-type: none"> - Fusion - Computed Aided Detection of Diagnosis (CAD) - Vascular Analysis Software - Perfusion - Virtual Colonoscopy <p>When saving a DICOM image, a copy of the image data is saved using the current window width/level settings as the default settings when the image is next viewed.</p> <p>DICOM images can be "Sent" to any other workstation connected to the PACS network or burned onto CD for distribution. Non-DICOM "BMP" and "JPEG" images can be created from the DICOM image.</p> <p>"AVI" and "MPG" video files, as well as "GIF", "TIFF", "PNG" and "Raw" image files can be exported.</p> <p>The PACS workstation software should allow the creation of "HTML" documents and the printing of images onto paper. DICOM Print should be available that allows examinations to be printed by a DICOM film printer for conventional distribution.</p>		

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X. Security of the System	<p>There should be a mechanism restricting the exporting of images from the PACS to protect patient's right to confidentiality. In film based radiology departments the Similar restrictions should also apply to data held on the PACS.</p> <p>"AVI" video files can be imported and viewed using the Multislice cine tool.</p> <p>"GIF" and "TIFF" image data files can be imported and viewed as if they are DICOM image files.</p> <p>There should be a "Display key prior images" tool which automatically opens and displays key images from relevant previous examinations of the current patient. For example, when viewing a chest x-ray belonging to a particular patient, any previous chest examinations of the same patient can automatically be opened by a single mouse click.</p> <p>The supplier shall incorporate in its design and installation the software based security of the system. The software based security must covers important areas like user access to the data within the PACS. Accounts must be protected by passwords and if possible a fingerprint identification.</p>		

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<i>XI. Image Distribution through WEB</i>	<p>The supplier shall advise the authorized representative of the hospital and end user of the appropriate hardware security for the system. The hardware based security may include housing the main server and archiving devices in a secure room, physically fastening the workstation and monitors, and concealing network cables if possible.</p> <p>The system shall allow the personal computers (PC) in the different clinical department of the hospital to access to WEB pages.</p> <p>The supplier shall advise the hospital of the PC specification and configuration required for web workstations which provide functionality for the clinical department concerned.</p> <p>Images and examination reports shall be accessible in the different web workstation by just specifying the source location in the web browser.</p> <p>The system should facilitate data streaming rather than wait for the entire image/s to be loaded so that high clinician's productivity can be attain and prevent network clogging.</p> <p>The images displayed in the web workstation can be in DICOM JPEG lossless format. It can also capable to display DICOM images when necessary and requested by physicians from clinical department.</p>		

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XII. Other Terms and Conditions	<p>Include tools such as panning, zooming, magnification, rotate, ROI, measurement and cine loops with adjustable speed of image display.</p> <p>The supplier shall be the exclusive or authorized distributor of the PACS /RIS.</p> <p>The PACS shall be compliant with international standard or regulations such as :</p> <ul style="list-style-type: none"> a) US-FDA, CE, ISO or its equivalent. b) IHE compliant c) Must conform to ICD 9 or 10 codes for Integration <p>The PACS/RIS is fully tested and integrated with the existing Hospital Information System and EMR. All data from the existing PACS of the hospital must be migrated to the new PACS with duration period of 60 days from the start of contract.</p> <p>The supplier must coordinate with hospital IT Department for the integration of its PACS/RIS with the hospital's HIS. The system must allow viewing of images and reports by other clinical department of the hospital which is remote from the radiology department without additional fees charged by the supplier of PACS/RIS.</p> <p>.</p>		

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	<p>The supplier must have an assigned technical or maintenance personnel to be based in Davao City who is/are expert in trouble shooting of PACS software/hardware and image acquisition device. This person can provide corrective measures during system downtime</p> <p>The supplier must guarantee a 24 hours/day and 7 days/week service support by providing technical advice to authorized users in case of emergency service calls</p> <p>The supplier's technical personnel must be on site within 48 hours upon receipt of service calls from the hospital.</p> <p>Supplier's technical personnel shall train the designated users on site regarding operation of the PACS/RIS including its components and equipment.</p> <p>Upon delivery, the supplier shall submit the users operational manual and other standard manual incorporated in the PACS/RIS system.</p> <p>The Supplier shall deploy the necessary trained and systems analysts, programmers, Quality Assurance specialists and trainers to perform the required services. It shall perform the required services in accordance with industry standards and consistent with the agreed scope of work and work plan.</p>		

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	<p>The supplier shall provide and turnover the complete necessary documentation and manuals relating to the services provided to SPMC's IHOMP personnel.</p> <p>The supplier shall assist and lend technical expertise to SPMC's IHOMP personnel on issues or concerns relating to services provided, including the training of such personnel in the use and management of the PACS/RIS;</p> <p>The supplier shall submit reports to SPMC concerning services rendered during the warranty period and the same shall be the basis for the evaluation.</p> <p>The PACS/RIS, workstations, and image acquisition device shall be leased by SPMC three (3) years and shall be owned by SPMC after such period (Lease to Own).</p> <p>The PACS/RIS, workstations, and image acquisition device shall be under warranty during the lease period and shall be extended for another one (1) year.</p> <p>Must provide detailed amount for every service specified in the offer. Winning bidder must provide full access to IHOMP Technical staff to all PACS and RIS servers including access to database. All systems development must conform to the National Health Data Dictionary for code standardization and inter-operability with DOH Systems.</p>		

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	<p>DELIVERABLES</p> <p>In addition to the submission of a working/running module/feature/functionality of the main deliverables enumerated in the Contract Agreement, the Service Provider shall also submit the following typical work products or documentation, if required or necessary by the nature of the maintenance and support service rendered, namely:</p> <ul style="list-style-type: none"> ➤ Summary of Work performed during the relevant billing period ➤ Updated user manual ➤ Updated training manual <p>Qualifications of the Service Provider The following qualifications, shall be required in evaluating the Service Provider:</p> <p>Experience Provider Qualification and Expertise – Preferably PACS and RIS provider and integrator, at least 3 years experience in PACS-RIS Implementation with proven track record of PACS-RIS on certain hospital/s (public or private). Deep knowledge and expertise in HL7 and Virtualization.</p>		

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	<p>Reporting and Approvals Reporting obligations, notices, and approval process, including minimum or essential report contents shall be agreed upon by the parties. The Provider shall report directly to the Project Manager who shall be responsible in approving notices and acceptance of deliverables, activities and other related tasks, including the approval of change orders.</p> <p>Roles and Responsibilities The Service Providers shall: Deploy such number of trained and certified systems analysts, programmers, Quality Assurance specialists and trainers to perform the services, and submit to SPMC a list of personnel deployed;</p> <p>Perform the foregoing services in accordance with industry standards and consistent with the scope of work and work plan agreed upon by the parties;</p> <p>Attend such meetings and submit such reports in accordance with the agreed work plan;</p> <p>Provide and turnover the complete necessary documentation and manuals relating to the services provided to SPMC's IHOMP personnel;</p>		

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	<p>Project duration will be three (3) years (lease-to-own).</p> <p>The supplier must provide detailed amount for every service specified in the offer. Winning bidder must provide full access to IHOMP Technical staff to all PACS and RIS servers including access to database All systems development must conform to the National Health Data Dictionary for code standardization and inter-operability with DOH Systems.</p> <p>If the bidder is the existing provider of RIS/PACS in the hospital, it should fully integrate the existing RIS/PACS to the HIS and EMR. It must successfully complete its full integration during post-qualification period within a span of 15 days and must be accepted by the end users and IHOMP staff.</p>		

The Bidder may submit offer which provides for superior specifications and/or better terms and conditions to the government at no extra cost. However, these shall not be given any bonus, credit or premium in the bid evaluation.

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