ALL INDIA INSTITUTE OF MEDICAL SCIENCES
ANSARI NAGAR, NEW DELHI-29.
STORES SECTION (DO)

Ref. No. 10/Stores(DO)/Ortho/PAC/2018-19/FSC **Dated-24/07/2018**

Sub:- Purchase of "EOS Facility" for the Department of **Orthopedics** at AIIMS, New Delhi-110029, on proprietary basis **Inviting comments thereon.**

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The Institute is in the process to purchase **"EOS Facility"** for the department of **Orhtopedics** at AIIMS, New Delhi from **M/s. EOS Imaging through M/s. Jona Techsystems Pvt. Ltd.** The PAC Certifications by **M/s. EOS Imaging** as well as the user department are attached.

The above documents are being uploaded for open information to submit objections, comments, if any, from any manufacturer regarding proprietary nature of the equipment/item within 15 day from the date of issue/uploading of the notification giving reference No. **10/Stores(DO)/Ortho/PAC/2018-19/FSC.** The comments should be received in office of Stores Officer (FSC), Store Section (DO), Animal House Building, Near Biotechnology Building at AIIMS on or before **09/08/2018** upto **12.30 p.m.** failing which it will be presumed that any other vendor is having no comment to offer and case will be decided on merits.

Yours faithfully,

24/7/18

STORE OFFICER (FSC)

Encl: Related documents enclosed.

(4)

ALL INDIA INSTITUTE OF MEDICAL SCIENCES
ANSARI NAGAR, NEW DELHI - 110029

PROPRIETORY/SPECIFIC BRAND GOODS CERTIFICATE

1.	Item/Type/Model No. required alongwith specifications.	Ster EOS workstation
2.	Is the item a spare part attachment or accessory for existing equipment?	NO
3.	Name of the manufactures supplier of the item proposed by the indenter.	EOS imaging
4.	Are they sole manufactures/Sold distributors of the item?	Yes
5.	Is there any other item with similar/equivalent specifications available in the market to meet the job requirement envisaged? If the answer is yes, why the same can't be procured. Demanding Officer should bring out of comparative functional advantage/cost effectiveness of the recommended item from these offered by other.	No, (To the best of our knowledge)
6.	What were the efforts made to locate alternative source of supply of use other substitutes.	N/A
7.	Why open/limited tender can't be resorted to, for locating alternative source.	No other comparing makes exist
8.	Are the proprietary items certifying that the rates are reasonable or not	Yes
9.	Any other justification for procuring item from single source.	Sole manufacturers

Signature of Indentor

Counter Signed by Head of the Department

I certify that the item at Sr. No. 1 above is required to be procured on single tender basis as the source of supply is definitely known/the specified brand proposed was advantages in meeting our functional requirements and limited tender system could be dispensed with as they would serve no useful purpose in this particular case.

(Strike out whichever is not applicable.)

PROPRIETARY CERTIFICATE

I, the undersigned, Marie Meynadier, Chief Executive Officer of the EOS imaging company, whose registered office is located at 10 rue Mercoeur, 75011 Paris, certify that, to date, the EOS technology is exclusively implemented by the company EOS imaging.

These to certify that, all products of our company, EOS Imaging, are proprietary products. We are the sole manufacturers of this technology and there is no other manufacturer of EOS and SterEOS systems with the specifications listed in our products brochures. These products are fully designed and developed by our company. The installations of the systems are also performed by our distributor's trained and qualified engineers.

Thus, EOS is the only product based on this technology marketed in the world.

EOS was developed by EOS imaging and is based on patents and patent requests fully owned by, or exclusively licensed to the company and which are not licensed or sublicensed to third parties. The system is developed, produced and marketed by the company and has no equivalent or similar competitor.

This unique system benefits from a combination of four features:

1-The size of radiological images in an upright position (3D scanning Patent):

The system allows, in a single scan, the acquisition of images from head to toe. This feature is very important, in particular for medical conditions related to posture and interarticular compensation phenomena. It is especially necessary for all indications requiring full length acquisitions, such as:

- Deformative and degenerative spine conditions
- Knee and hip surgery
- Global Posture Assessment

2 - The low dose irradiation (Detector Patent) :

The ultra-low dose radiation of EOS helps to significantly reduce the radiation dose related to medical procedures received by part of the population subject to frequent examinations, and to which an increased risk of cancer is associated.

The proprietary EOS detection technology allows to provide spine radiographs with up to 85% less dose than Computed Radiography (CR) with equivalent or better image quality, and with 50% less dose than Digital Radiology (DR). Recent studies have shown that the "Micro Dose" protocol allows a pediatric AP/LAT spine examination at a dose equivalent to one week of natural radiation.

3 - The simultaneous acquisition of 2 orthogonal X-ray images (3D scanning Patent):

This is the only diagnostic system that allows simultaneous acquisition of 2 orthogonal X-ray images in an upright position. This feature is based upon the need to remove potential patient movement between the frontal and lateral acquisitions when they are not simultaneous in order to allow the 3D reconstruction and 3D measurements of the patient. The simultaneous frontal and lateral acquisition is also a time saver for pathologies requiring AP/LAT X-ray images (scoliosis, spinal pain, arthrosis ...)

4 - The 3D modelling ability (Semi-Automatic reconstruction Patent):

This is the only system allowing 3D modelling of the skeletal system (spine, pelvis, lower limb) in an upright position. This 3D reconstruction feature is of great importance to assess joint pathologies, in particular with respect to torsions and rotations within the joints or within the bones, where it can replace a CT scan.

This statement certifies that the Company EOS imaging is the exclusive distributor of the EOS system.

EOS imaging is also the sole owner of all licenses that allow it to perform the updates of the software installed on that equipment and

EOS imaging is the only company competent to install and maintain this equipment according to the recommendations of the manufacturer and to provide original spare parts, accessories and consumables.

To serve and to assert that right.

EOS imaging
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N° Intra communautaire FR 09 349 694 893
R.C.S. Paris B 349 694 893

Done in Paris
June 6th, 2018

Marie MEYNADIER
CEO

SPECIFICATION FOR EOS IMAGING SYSTEM

Clause	Specification
1.0	**General Requirement**
1.1	Tenderers shall supply and install ONE complete set of Biplane 3D Full Body Imaging System.
1.2	Images shall be acquired with simultaneous frontal and lateral x-ray images of patients in a standing or seated position.
2.0	**Gantry**
2.1	The gantry shall include a biplane acquisition system. Each plane shall include an X-ray source (high heat capacity X-ray tube + high frequency generator) and an X-ray detection system (detectors + very low noise digitalization electronics).
2.2	The gantry movement shall support vertical scanning motion which range from 10 to 175cm at an increment of 0.5 cm.
3.0	**X-ray Generator**
3.1	The system shall include TWO units of X-ray Generator.
3.2	3-phase, high frequency converter/inverter, multi-pulse and microprocessor control.
3.3	Voltage: 400/480 VAC – 50/60 Hz.
3.4	KV range: 40 to 140 kV, bipolar, no overshoot or tilt.
3.5	mA range: from 10 to 500 mA.
3.6	Nominal power output of 42 KW, 1 high voltage unit per plane.
3.7	Tube current output of 250mA or higher at 140KV.
3.8	Exposure time shall be adjustable according to the scan field size and range from 1 to 25s.
3.9	Exposure mode: bi-plane or mono-plane (simultaneous Frontal and Lateral together or Frontal/Lateral only respectively).
4.0	**X-ray Tube**
4.1	The system shall include TWO nos. of X-ray Tube.
4.2	The focal spot size shall be ≤ 0.6 mm x 1.3mm.
4.3	Maximum tube voltage: at least 140KV at 250mA.
4.4	Maximum tube power available: shall be at least 42 KW per plane.
4.5	The capacity for anode heat storage shall not be less than 2.5MHU.
4.6	The heat dissipation rate of anode shall be 4.1KW.
4.7	The heat cooling rate of X-ray tube shall be at least 3.2MHU.
4.8	The radiation leakage-proof standard of the tube housing shall comply with the current requirement of the ICRP and the Radiation Ordinance of India.
5.0	**Image Detector**
5.1	The system shall include TWO sets of Image Detector.
5.2	Using Linear, Adjustable Gain Detector (AGD) technology.
5.3	Calibration: automatic calibration.
5.4	Number of pixels/line: 1764/line; pixel size: 254µm.

Clause	Specification

5.5 Digitization depth: 16 Bits; usable dynamic range: 30,000 levels.

6.0 Laser Pole

6.1 The Laser Pole system shall be able to optimize the patient workflow by adjusting the length of acquisition field.

6.2 The upper laser pole shall be positioned by the operator at a point where the scan field startswhile the lower laser pole shall be positioned at a point where the scan field terminates. The Laser Pole Syetem then automatically transmits the start and end pointsof the scan to the Workstation, thereby minimizing the position processing time.

7.0 Dose Area Product Meter

7.1 The system on offer shall be able to provide Dose-Area-Product (DAP) parameters after each scan.

7.2 Corresponding radiation dosage record shall also be captured in the patient's image file.

8.0 Image Capture Device

8.1 The Image Capture Device shall include:

- One set of console workstation.
- Medical grade LCD Monitor.
- DICOM 3.0 software package.
- All necessary accessories for the integration and smooth operation of equipment on offer.

8.2 The system shall allow user to select different scanning field.

8.3 The system shall allow user to choose different acquisition mode: bi-plane or mono-plane (Frontal or Lateral).

8.4 The system shall allow user to select appropriate patient morph type.

8.5 The system shall allow user to apply different contrast enhancement strength for each plane (soft, standard, strong) and select specific image processing protocol when the patient has an implant in the body.

8.6 The system shall allow user to adjust the kV, mA and acquisition speed (auto/manual).

8.7 The system shall allow user to perform standard 2D measurement (including distance and angle etc.).

9.0 2D/3D Workstation with Software

9.1 The provision of ONEset of dedicated image workstation with Medical grade LCD Monitor.

9.2 Display of the "Epipolar line" allowing user to check the corresponding level in both the AP and lateral images.

9.3 Optimization of the reference plane positioning which allows accurate2D measurements on paired images.

9.4 The system shall support 3D representation of thefemoralstem and provide an automatic calculation onthe following clinical parameters:

- Implanted femur length.
- Femoral stem antetorsion.
- Femoral stem offset.
- Neck shaft angle.

9.5 The system shall support spine modeling that may be carried from T1 to L5 and allow:.

Clause	Specification

9.5.1 The identification of apical and junctional vertebrae of the scoliosis as well as the automatic calculation of the scoliosis parameters:

- Cobb angles (up to 3).
- Axial rotations of the apical vertebrae.

9.5.2 The automatic calculation of sagittal clinical parameters:

- Kyphosis T1 – T12 and T4 – T12.
- Lordosis L1 – L5 and L1 – S1.

9.5.3 All vertebrae orientations and inter-vertebral rotations (frontal, lateral, axial) of the spine 3D model.

9.6 The system shall support the generation of patient report in various formats for Spine, Pelvic and Lower Limb imaging.

10.0 DICOM 3.0 Standard and Connectivity

10.1 The Biplane 3D Full Body Imaging System on offer shall be DICOM 3.0 compatible.

10.2 Tenderers must confirm DICOM 3.0 compatibility of the system on offer with the provision of DICOM Conformance Statement.

10.3 The system on offer, including workstation, shall be able to archive and transmit images to other DICOM 3.0 compatibility destinations without degradation of image quality.

10.4 Able to support digital communication in a networked environment based on TCP/IP, Ethernet, fast Ethernet, ATM or Gigabit Ethernet through UTP Cat 6 and/or optical fiber media.

10.5 Successful tenderer shall integrate the Biplane 3D Full Body Imaging System on offer with the image archive network of AIIMS DIIR; and fulfill the following requirements:

10.5.1 DICOM Send:
Fully DICOM 3.0 compatible for image communication with DICOM network.

10.5.2 DICOM Print Management SOP Class (SCU):
Connection and send DICOM images to a DICOM compatible printer for hardcopy.

10.5.3 DICOM Worklist Management SOP Class (SCU):
To retrieve patient and examination data from RIS through the PACS Broker.

10.5.4 DICOM Query/Retrieve (SCU/SCP):
To send query and move/get request from other SCP for the retrieval of archived images. To receive query and be able to send archived images to other SCU.

10.5.5 DICOM Modality Performed Procedure Steps SOP Class (SCU).

10.5.6 DICOM Storage Commitment SOP Class (SCU):
To send storage commitment request to remote Storage Commitment Provider, conforms successful archiving from the image archive.

11.0 Dry Imager (for film printing)

a) The system must be a Dry imager
b) The system must be DICOM 3.0 ready.
c) The system must be able to process up to 75films/hour (minimum) depending on the size.
d) The system must deliver its first film within 80 seconds from requested.
e) The system should have 500 DPI and should print at least 3 sizes of films: 8x10, 14x17 ,10x12 or 11x14 inches. 200 films of each size to be supplied.
f) The system must have contrast resolution of 12bits/pixel or more.