**Section II: Schedule of Requirements**

**eSourcing reference:** [ ITB/2024/52116 ]

1. **Summary of Requirements**

UNOPS requirements are comprised of the following Items:

* Item 1: C-arm X-ray Unit
* Item 2: Mobile Digital X-ray unit
* Item 3: Dermatome Air powered
* Item 4: Universal Operating Table
* Item 5: Orthopedic Operating Table
* Item 6: General Ultrasound Machine

1. **Technical specifications for Goods and Comparative Data Table**

| **Item #1** | | | | |
| --- | --- | --- | --- | --- |
| **C-arm X-ray Unit** | | **Qty:** | **Manufacturer:** |  |
| **Country of origin:** |  |
| **3** | **Model Number:** |  |
|  | **UNOPS Minimum Technical Requirements** |  | **Is quotation compliant? Bidder to complete** | **Details of Goods Offered**  **Bidder to complete** |
| **1** | **General** |  |  |  |
| 1.1 | A brand new C-arm to be used in a hospital (Operating room) comprising of: C-arm unit, X-ray generator & tube with collimator, image intensifier, CCD camera, and a monitor cart |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **2** | **General Specifications** |  |  |  |
| 2.1 | Heavy duty and high quality C-arm machine, for at least the following applications: orthopedic, urology, general surgery, gastrointestinal etc. |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.2 | Electrical requirements: 220-240V, 50Hz single-phase, compliant with IEC 60601 or equivalent |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.3 | Specify dimensions & weight |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.4 | The c-arm unit should be lightweight, compact and easy to move |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.5 | Wheels must be heavy dury, freely movable for easy positioning of the c-arm , with steering rear wheels |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.6 | Specify operating conditions (temperature, humidity, etc.) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.7 | Specify power consumption |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.8 | Specify site pre-installation requirements- if any |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **3** | **Equipment specifications** |  |  |  |
| 3.1 | X-ray Tube & High Frequency Generator |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | Tube Type: Rotating anode |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Power rating: 5 KW |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Anode Heat capacity: 100 KHU or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Focal Spot size: Small focus: 0.6 mm or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | Specify cooling , HU/min: Higher cooling rates are preferred |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | Collimator with electric drive : opening/closing |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | Compensating filter |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.2 | X-ray Modes |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.2.1 | Continuous Fluoroscopy Mode |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | Kvp range: 40- 110 or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | mA range: 0.2 - 8mA or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.2.2 | Pulsed Fluoroscopy Mode included |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | Max Pulse rate: 8 pps or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.2.3 | Radiogrpahic mode |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | Kvp range: 40- 110 or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | mA range: 0.2 - 20mA or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.3 | Image Intensifier & imaging system |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | Image intensifier of 9 inch or 23 cm approx |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | High resolution CCD camera included with a minimum of 1K x 1 K |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Anti-scatter grid |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.4 | C-arm Cart |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | C-arm should be able to easily maneouvre under the surgical table and perform all rotations needed to cover all of the patient's body positions |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | It should have a full motorized C-arm rotation and adjustments |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | C-arm free space: 76 cm or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | C-arm swiveling: approx. ±12° or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | C-arm Orbital movement: 120° or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | Specify C-arm rotation range (in degree) (±180° or better) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | Specify C-arm Horizontal Travel (in cm) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| h | Specify C-arm Vertical Travel (in cm) ≥ 40 cm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| i | Specify SID (in cm) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j | Locking of C-arm movement should be available |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.5 | Workstation unit & Image Processing , Storage and Patient Data |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | The workstation contains handles for positioning and movement |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Exposure switch |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Control for X-ray settings |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Brake pedal |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | Ability to insert patient name and keep a patient database on the C-arm machine |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | Easy to clean membrane keyboad, to enter patient data and perform image processing functions |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | Quick system startup |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| h | Pre-set configuration imaging profile |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| i | All applications software needed for the aforementioned applications should be available |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j | Real time Image processing & post-processing functions (at least): |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j.1 | Last Image Hold (LIH) with image rotation |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j.2 | Brightness & contrast control |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j.3 | Annotation on images |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j.4 | Distance & angle measurement |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j.5 | Flip image & mirror |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j.6 | Real-time edge enhancement, contrast and brightness |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j.7 | Multiple image display |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j.8 | Zoom control & pan |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j.9 | Noise reduction |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| k | DICOM Connectivity, with capability to connect to the hospital PACS (through LAN)- Storage, Send/Receive, modality worklist, Print, Media Storage |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| l | Storage on HDD of approx. 100,000 images or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| m | DVD Writer is included (Dicom) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| n | Network connectivity- RJ45 ethernet port |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.6 | Monitors |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | Dual monitor type Cart |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Easy connection and disconnection of the C-arm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | 2 x 19 inch Medical grade B& W Monitors, for live and reference image display, with high resolution and anti-reflected front screen or larger |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Monitor Resolution: 1280 x 1024 pixels (or better) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.7 | Dose & Safety |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | Safety timer audible alarm after every 5 minutes of uninterrupted or cumulative load of fluoroscopy |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Low patient dose option |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Automatic Brightness Control |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Automatic adjustment of brightness and contrast level for better image quality even when a metal is introduced |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.8 | Additionals |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | Detector laser light localizer |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Cassette Holder (24 x 30 cm) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Foot switch |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Hand Switch/Control |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | Video paper printer (Sony brand) (with 2 paper rolls) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | C-arm cover Qty 10 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | Application & operation training should be provided and by a qualified certified personnel (provide certification) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **4** | **Safety and standards** |  |  |  |
| 4.1 | FDA approved or CE marked for medical use (kindly include certificate) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 4.2 | Indicate if there was any safety advisory notice, or urgent field safety notice, or recall (FDA/CE or from the manufacturer) for any of the proposed equipment model in the past 5 years, attach it with the explanation of the rectifying action that was taken. |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 4.3 | Certificate of calibration & inspection from factory should be included |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
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|  |  |  |  |  |
|  |  |  |  |  |
| **Item #2** | | | | |
| **Mobile Digital X-ray unit** | | **Qty:** | **Manufacturer:** |  |
| **Country of origin:** |  |
| **1** | **Model Number:** |  |
|  | **UNOPS Minimum Technical Requirements** |  | **Is quotation compliant? Bidder to complete** | **Details of Goods Offered**  **Bidder to complete** |
| **1** | **General** |  |  |  |
| 1.1 | A brand new Mobile digital X-ray unit to be used in a hospital (unit should be manufacturer designed to be digital provided with manufacturer Flat panel detector- FPD) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **2** | **General Specifications** |  |  |  |
| 2.1 | A compact heavy duty and high quality Mobile digital x-ray unit, with battery operation, can be used without the detector for manual or CR films |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.2 | Electrical requirements: 220-240V, 50Hz single-phase, compliant with IEC 60601 or equivalent |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.3 | The system should be compact design- Specify dimensions & weight |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.4 | Wheels must be heavy duty, freely movable for easy positioning of the x-ray unit, it should have 4 rotating casters to allow easy positioning and travelling in any direction with foot latches to lock it |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.5 | The whole unit should be easy to clean |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.6 | Specify operating conditions (temperature, humidity, etc.) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.7 | Specify power consumption |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.8 | Specify site pre-installation requirements- if any |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **3** | **Equipment specifications** |  |  |  |
| 3.1 | X-ray Tube & Generator |  |  |  |
| a | Power rating: 30 KW or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Anode heat capacity: 150KHU or better- higher is preferred |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Kv range 40 -125 approx. or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | mA range: 50-300 mA or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | Focal Spot size: 0.8/1.3 mm or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | Specify cooling , HU/min: Higher cooling rates are preferred |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | Collimator with patient centering light, filters and collimator control |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| h | Grid or virtual grid system |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.2 | Tube movement |  |  |  |
| a | The unit should provide considerable freedom of movement of the X-ray tube, and ample rotation axes to allow the user to freely position the unit next to the patient's bed and center it on the anatomical part of interest with greater ease and coverage |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Safety lock of tube position |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | The following movement of the column tube assembly should be included: |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c.1 | Arm reach (cm)- specify range |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c.2 | Vertical tube movement (cm)- specify range |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c.3 | Imaging Column rotation range should be approx. +-90 ˚ |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c.4 | X-ray tube rotation angle range should be approx +- 180 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c.5 | X-ray tube axial rotation range- specify range |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Fine adjustment control on tube is preferable |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.3 | Detector (FPD) |  |  |  |
| a | The digital detector should be lightweight of robust design |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | It should be of high sensitivity and high resolution |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Size approx. 35 x 43 cm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Specify type |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | Wireless |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | A backup wired function is preferable |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | It should withstand 120 kg of distributed load or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| h | Built in detector container for storage & charging |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| i | Time for image to appear on screen after exposure should not be more than 6 sec. |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.4 | Battery |  |  |  |
| a | Litium ion battery should be included allowing the unit to operate for at least 4 hours |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.5 | Console |  |  |  |
| a | The console should provide immediate image preview at the bedside |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Quick system startup with stand-by mode to allow fast resuming of imaging exams |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | It should provide easy user interface for settings of parameters, KV& mAs and x-ray settings & display, patient data management, image processing etc. |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | It should have an integrated high resolution medical grade monitor of not less than 15 inch |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.5 | Software, Image Processing , Storage and Patient Data |  |  |  |
| a | All applications software needed for the bedside applications should be available |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Patient data management: Ability to insert patient data and keep a patient database on the x-ray console |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Preset parameters & programs / anatomical program |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Pediatric applications |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | Real time Image processing & post-processing functions (at least): |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e.1 | Brightness, contrast control & gray scale adjustment |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e.2 | Annotation on images |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e.3 | Measurement |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e.4 | Image rotation, invert, zoom & pan |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e.5 | Edge enhancement |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | DICOM Connectivity, with capability to connect to the hospital PACS- Storage, Send/Receive, modality worklist, Print, Media Storage |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | Storage on HDD of approx. 30,000 images or more |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| h | DVD Writer is included (Dicom) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| i | Network connectivity- RJ45 ethernet port |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.6 | Dose & Safety |  |  |  |
| a | Low patient dose option |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Noise reduction |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.7 | Additionals |  |  |  |
| a | Hand switch with long cable |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Handles for positioning and movement |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Brake pedal |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Measuring tape for SID |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | Application & operation training should be provided and by a qualified certified personnel (provide certification) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **4** | **Safety and standards** |  |  |  |
| 4.1 | FDA approved or CE marked for medical use (kindly include certificate) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 4.2 | Indicate if there was any safety advisory notice, or urgent field safety notice, or recall (FDA/CE or from the manufacturer) for any of the proposed equipment model in the past 5 years, attach it with the explanation of the rectifying action that was taken. |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 4.3 | Certificate of calibration & inspection from factory should be included |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
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| **Item #3** | | | | |
| **Dermatome Air powered** | | **Qty:** | **Manufacturer:** |  |
| **Country of origin:** |  |
| **2** | **Model Number:** |  |
|  | **UNOPS Minimum Technical Requirements** |  | **Is quotation compliant? Bidder to complete** | **Details of Goods Offered**  **Bidder to complete** |
| **1** | **General** |  |  |  |
| 1.1 | A brand new dermatome air-powered to be used in a hospital operating room for producing thin slices of skin from a donor area, used for skin grafting |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **2** | **General Specifications** |  |  |  |
| 2.1 | An easy to handle, air powered dermatome made from medical grade stainless steel or medical grade material (kindly specify) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.2 | It should be of slim and ergonomic design- Specify dimensions & weight |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **3** | **Equipment specifications** |  |  |  |
| 3.1 | It should be autoclaveable (by steam sterilizer) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.2 | It should have a safety system for handling (safety latch or other specify) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.3 | It should provide accurate & precise cutting thickness with smooth finish |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.4 | It should be air driven (by 4 or 7 bar compressed air pressure) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.5 | Cutting range of approx. 0.10 mm - 0.70 mm or better with 0.1 mm increment |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.6 | Reduction width plate should be easy, safe and quick to assemble (if a tool is needed to secure it, it should be included) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.7 | The following width sizes of reduction plates should be included at least: |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | approx. 2.5 cm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | approx. 5 cm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | approx. 7.5 cm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | approx. 10 cm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.8 | Other |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | Container with lid for autoclave and storage |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Blades stainless steel medical grade from manufacturer Qty 100 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Pneumatic Hose of at least 3 m long |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **4** | **Safety and standards** |  |  |  |
| 4.1 | FDA approved or CE marked for medical use (kindly include certificate for each equipment) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 4.2 | Indicate if there was any safety advisory notice, or urgent field safety notice, or recall (FDA/CE or from the manufacturer) for any of the proposed equipment model in the past 5 years, attach it with the explanation of the rectifying action that was taken. |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
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| **Item #4** | | | | |
| **Universal Operating Table** | | **Qty:** | **Manufacturer:** |  |
| **Country of origin:** |  |
| **1** | **Model Number:** |  |
|  | **UNOPS Minimum Technical Requirements** |  | **Is quotation compliant? Bidder to complete** | **Details of Goods Offered**  **Bidder to complete** |
| **1** | **General** |  |  |  |
| 1.1 | A brand new universal operating table of good quality and high durability to be used in a hospital's operating room |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 1.2 | Electrical requirements: A 220-240V, 50Hz single-phase, compliant with IEC 60601 or equivalent |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 1.3 | Specify dimensions (H x L x W) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **2** | **Specifications** |  |  |  |
| 2.1 | Movements: Electro-hydraulic |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.2 | Frame material & table base material: stainless steel 316/316L or 304 or other higher medical grade stainless steel with greater corrosion resistance |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.3 | It should be robust and stable for all types of surgeries |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.4 | Tolerable Patient weight should be at least: 250 kg (Note: the patient weight load not less than 250 kg, not the full load) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.5 | At least 4 articulated sections |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.6 | Independently removable section |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.7 | Wheels, with stable brake system for the base |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.8 | A corded remote control is to be provided, to position the table in all available movement, and to activate/deactivate the brake system |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.9 | An override panel for control of movements |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.10 | An internal rechargeable battery should be provided that allows at least 30 mins of continuous work |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.11 | Electro-hydraulic Movements (at least the following): Movements should be controlled via the remote control (-unless stated otherwise) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | Height adjustment, approx.: ≤700- ≥1050 mm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Trendelenburg, reverse-Trendelenburg ≥30 deg |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Lateral tilt ≥20 deg |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Back section adjustment, +80/-30 deg, or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | Head section adjustment and detachable - Head rest to be included (manual control is allowed) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | Leg section adjustment in height and spread and detachable +30/-90 deg or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | Table longitudinal sliding |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.12 | Stainless steel lateral rails for accessories connection by clamp |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.13 | Removable mattress covering/pads made of antistatic, impermeable, washable, material. |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.14 | Table should be compatible & adequate for C-arm usage with full movement space for C-arm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **3** | **Accessories** |  |  |  |
| 3.1 | It should be supplied with at least the following accessories: |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| (Provide reference and catalogue number, of each of the below accessory in the technical brochure that will be provided) |
| a. | Arm board - Qty: 2 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b. | Leg plate - Qty: 2 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c. | Leg support - Qty: 2 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d. | Shoulder support- Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e. | Body support (for lateral position) - Qty 2 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f. | Anesthesia screen with attachment clamp - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g. | Stainless steel drain Tray/Pan - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| h. | Body strap- Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| i. | All attachment clamps needed to the requested accessories |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.2 | All accessories should be supplied with all components that would make it functional |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **4** | **Safety and standards** |  |  |  |
| 4.1 | FDA approved or CE marked for medical use (kindly include certificate) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 4.2 | Indicate if there was any safety advisory notice, or urgent field safety notice, or recall (FDA/CE or from the manufacturer) for any of the proposed equipment model in the past 5 years, attach it with the explanation of the rectifying action that was taken. |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
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| **Item #5** | | | | |
| **Orthopedic Operating Table** | | **Qty:** | **Manufacturer:** |  |
| **Country of origin:** |  |
| **1** | **Model Number:** |  |
|  | **UNOPS Minimum Technical Requirements** |  | **Is quotation compliant? Bidder to complete** | **Details of Goods Offered**  **Bidder to complete** |
| **1** | **General** |  |  |  |
| 1.1 | A brand new orthopedic operating table of good quality and high durability to be used in a hospital's Operating room |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 1.2 | Electrical requirements: A 220-240V, 50Hz single-phase, compliant with IEC 60601 or equivalent |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 1.3 | Specify dimensions (H x L x W) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **2** | **Specifications** |  |  |  |
| 2.1 | Movements: Electro-hydraulic |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.2 | Frame & able base material: stainless steel 316/316L or 304 or other higher medical grade stainless steel with greater corrosion resistance |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.3 | It should be robust and stable for all types of surgeries |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.4 | Tolerable Patient weight should be at least: 250 kg (Note: patient weigth load not less than 250 kg, not the full load ) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.5 | At least 4 articulated sections |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
|  | Independently removable section |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.6 | Wheels, with stable brake system for the base |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.7 | A corded remote control is to be provided, to position the table in all available movement, and to activate/deactivate the brake system |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.8 | An override panel for control of movements |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.9 | An internal rechargeable battery should be provided that allows at least 30 mins of continuous work |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.10 | Electro-hydraulic Movements (at least the following): Movements should be controlled via the remote control (-unless stated otherwise) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a. | Height adjustment, approx.: ≤700- ≥1050 mm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b. | Trendelenburg, reverse-Trendelenburg ≥30 deg |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c. | Lateral tilt ≥20 deg |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d. | Upper Back section adjustment, +80/-30 deg, or better- preferably detachable |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e. | Lower back section articulated up ≥ 80° for sitting position, down ≥40° or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f. | Head section adjustment and detachable (manual control is allowed)- Head rest to be included |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g. | Leg section adjustment in height and spread and detachable- 2 parts left & right -  Leg section articulated +30/-90 deg or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| h. | Table longitudinal sliding |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.11 | Stainless steel lateral rails for accessories connection by clamp |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.12 | Removable mattress covering/pads made of antistatic, impermeable, washable, material. -  Should be ≥ 50 mm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.13 | An additional remote control to be provided- Preferably cordless Infra-Red |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.14 | Table should be full length compatible & adequate for C-arm usage with full movement space for C-arm |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.15 | Full Length Radio Transparency (X-Ray) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **3** | **Accessories** |  |  |  |
| **3.1** | **It should be supplied with at least the following accessories:** |  |  |  |
| **(Provide reference and catalogue number, of each of the below accessory in the technical brochure that will be provided)** |
| a. | Arm board - Qty: 2 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b. | Leg plate - Qty: 2 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c. | Leg support - Qty: 2 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d. | Shoulder support- Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e. | Body support (for lateral position) - Qty 2 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f. | Anesthesia screen with attachment clamp - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g. | Stainless steel drain Tray/Pan - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| h. | Body strap- Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| i. | Lower limbs traction device - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j. | Femoral nailing device - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| k. | Knee arthroscopy device - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| l. | Meniscus positioning device - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| m. | Hip prosthesis device - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| n. | Humorous positioning device - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| o. | Shoulder arthroscopy device - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| p. | Spine cord positioning device - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| q. | Hand surgery table - Qty: 1 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| r | Thigh Holder: Swivelling, adjustable via ball & socket joint, lengthwise and laterally adjustable. Complete with pads, fixing straps and clamps - Qty: 2 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| s | All attachment clamps needed to the requested accessories |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.2 | All accessories should be supplied with all components that would make it functional |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **4** | **Safety and standards** |  |  |  |
| 4.1 | FDA approved or CE marked for medical use (kindly include certificate) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 4.2 | Indicate if there was any safety advisory notice, or urgent field safety notice, or recall (FDA/CE or from the manufacturer) for any of the proposed equipment model in the past 5 years, attach it with the explanation of the rectifying action that was taken. |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
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| **Item #6** | | | | |
| **General Ultrasound Machine** | | **Qty:** | **Manufacturer:** |  |
| **Country of origin:** |  |
| **1** | **Model Number:** |  |
|  | **UNOPS Minimum Technical Requirements** |  | **Is quotation compliant? Bidder to complete** | **Details of Goods Offered**  **Bidder to complete** |
| **1** | **General** |  |  |  |
| 1.1 | A brand new heavy-duty general ultrasound machine with color doppler, with probes of good quality and high durability to be used in a hospital's radiology department |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 1.2 | Electrical requirements: A 220-240V, 50Hz single-phase, compliant with IEC 60601 or equivalent |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 1.3 | Specify dimensions (H x L x W) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **2** | **Specifications** |  |  |  |
| 2.1 | This ultrasound machine should be of latest in design and technology with full digital technology to be used on pediatric and adult patients |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.2 | It should be mounted/integrated on its original cart with 4 heavy duty swivel wheels with central lock |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.3 | Clinical Applications |  |  |  |
|  | The ultrasound will be used for at least the following applications (application software should be included) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| a | Abdomen |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Obstetrics /Gynaecology |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Vascular (Peripheral and neurovascular) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Musculoskeletal |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | Small parts imaging |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | Endocavitary (transvaginal / transrectal) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | Cardiology |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.4 | Scan modes |  |  |  |
|  | Should include at least the following: |  |  |  |
| a | B-mode |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Tissue harmonic imaging |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | M-mode, color M-mode, anatomical |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Color Doppler imaging |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | Power Doppler imaging |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | Continuous wave doppler |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | Pulsed wave doppler |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| h | Duplex |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| i | Needle enhancement capability |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j | Elastography |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| k | Dual mode |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| l | Tissue doppler imaging |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| m | 3D/4D imaging (for volume transducer) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| n | Kindly state all other available modes |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.5 | Probe Types, MHz range |  |  |  |
| a | All software needed for the right functioning of these probes should be included: |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Broad band convex array transducer with frequency range of 1- 6 MHz suitable for general purpose abdominal, obstetrical and gynaecological applications |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Broad band Linear array transducer frequency range of 5 to 17MHZ approximately (<=5 MHz- >= 17 MHz) (NOT Hockeystick type)- suitable for vascular superficial, musculoskeletal, superficial small parts and elastography applications |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Phased array sector / micro-convex transducer I to 5 mHz or better for cardiac application |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | 3D/4D Endocavitary probe - 5-9 MHz or better with biopsy accessory and a reusable needle guide |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.6 | Image Processing, Display & Software |  |  |  |
| a | Number of transmit focal zone: at least 8 |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | System dynamic range: 250 DB or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Grayscale levels 256 (8 bits) (or better) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Automatic image optimization capability |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | Image magnification (zoom) in real-time and in static mode |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | Pre-processing & Post-processing of images |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | Ability to create & display annotations |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| h | The measurement and calculation items can be displayed for each application measurement (Data editing is possible) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| i | Application software and interface connection Included |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j | Measurements for the above mentioned applications in point 2.3 should be included ( Obstetrics & gynaecology, Cardiac, Vascular, Elastography, MSK, etc.)-  List the measurements in details |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| k | Cine loop playback & review |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| l | Speckle noise and acoustic shadows reduction |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| m | Abilities to create reports on the system and adjusting the report template |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| n | Quick preset of transducers and settings |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| o | DICOM Connectivity, with capability to connect to the hospital's current or future PACS (through LAN): Storage, Send/Receive, modality worklist, Print, Media Storage |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 2.7 | System monitor and Console parameters: |  |  |  |
| a | Should have at least 21.5” or above flicker free LCD color display monitor or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| b | Monitor Resolution, at least: 1920×1080 or better |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| c | Tilt and swivel monitor |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| d | Operation panel: user friendly with all needed control and keyboard |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| e | One-button automatic image optimization |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| f | Command touch screen on the control panel |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| g | Operation panel adjustable in height |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| h | Multiple transducer port. Supports electronic switching of up to four imaging transducers |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| i | Integrated cable management |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| j | Gel warmer- preferable |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3 | Others |  |  |  |
| 3.1 | Digital B&W Thermal Printer |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.2 | DVD Writer (Dicom) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 3.3 | Network connectivity- RJ45 ethernet port |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| **4** | **Safety and standards** |  |  |  |
| 4.1 | FDA approved or CE marked for medical use (kindly include certificate) |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 4.2 | Indicate if there was any safety advisory notice, or urgent field safety notice, or recall (FDA/CE or from the manufacturer) for any of the proposed equipment model in the past 5 years, attach it with the explanation of the rectifying action that was taken. |  | ☐ Yes ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |

| **UNOPS General Requirements for ALL ITEMS** | **Is quotation compliant?** Bidder to complete | **Details of Goods Offered**  Bidder to complete |
| --- | --- | --- |
| **General** | | |
| 1. All equipment shall be 100% new and from current manufacturer production lines. It must NOT be discontinued at the time of signing the Contract. | ☐ Yes   ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 1. The equipment shall have a life span designed for a minimum of 5 years, guaranteed by a letter from the Manufacturer (not only from the Bidder or the authorized distributor). This guarantee ensures that the equipment and spare parts will not be discontinued during the 5 years after procurement. | ☐ Yes   ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 1. The Bidder shall indicate explicitly in its proposal the following aspects to match infrastructure capabilities within the health facility:  * Floor works, piping and wiring installation in view of the proper installation of the equipment; * Fire safety, Exhaust, Ventilation requirements; * Schematics of the equipment with dimensions; * Weight and Dimensions of the equipment L x W x H; * Clearance requirements from all sides for ease of access and maintenance; * Isolation from flammable materials (e.g. oil, grease and petroleum-based or other flammable products) * Electrical Requirements (acceptable mains capacity, Power consumption of the equipment in KVA and the MCCB needed for protection inside the Hospital’s pertinent Distribution Board- DB); * Compatibility with back-up power supply (e.g. generator); * Appropriate connections/adaptors for piping and interconnection with existing systems. | ☐ Yes   ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 4.  4. If there was any safety advisory notice, or urgent field safety notice, or recall (FDA/CE or from the manufacturer) for any of the proposed equipment model in the past 5 years, attach it with the explanation of the rectifying action that was taken. | ☐ Yes   ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 5.   5. Bidders should provide technical and commercial brochures/data sheets for each offered equipment | ☐ Yes   ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 6. All offered items must be approved for sale in the same country of origin. An original and officially endorsed free-sale certificate from an authorised body must be included in the offer (e.g. FDA and/or CE certificate given for the specific medical devices proposed.) | ☐ Yes   ☐ No | Insert details of goods offered, including specifications and brand/model offered if applicable  Vendor must submit document(s) which prove given answer, and must provide a reference to those document(s) in this column |
| 1. **Full functionality** | | |
| 1. Where applicable, the offered equipment shall include a full set of compatible parts, components, accessories, software, hardware, hardware/software interfaces, start-up consumables and howsoever required to put the Equipment into fully operational condition. | ☐ Yes   ☐ No |  |
| 1. Any parts, components, adapters, software, hardware etc, that are not mentioned in the detailed technical offer or purchase order, but required to put the equipment into fully operational condition shall be deemed part of the awarded equipment and must be provided by The Supplier. | ☐ Yes   ☐ No |  |
| 1. All equipment shall contain the latest software version at the time of shipment, wherever applicable. | ☐ Yes   ☐ No |  |
| 1. All equipment, or its components, that will be permanently built-in or mounted on floor, wall or ceiling shall include all needed fixtures, supports, arms, mounting parts/interfaces, anti-vibration pads, finishing seals, and howsoever required to mount the unit and complete the installation, as per the manufacturer recommendation, and to the satisfaction of UNOPS. | ☐ Yes   ☐ No |  |
| 1. All ceiling suspended equipment must include the design, supply and installation of the interface steel structure between the false-ceiling and concrete ceiling, as well as false-ceiling covers and seals, based on latest drawings and site conditions. For locally fabricated/customized steel structures, a Structural engineer of record, on behalf of The Supplier, shall certify the design and installation of the complete interface steel structure. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall be responsible to coordinate and liaise with UNOPS, and the Beneficiary, to provide complete, integrated and fully functional and coordinated solutions wherever applicable. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall provide new fully functional batteries for all equipment with internal batteries to the end-user at the time of taking over, if such components are required in the specifications or if it is required for the proper operation of the system. | ☐ Yes   ☐ No |  |
| 1. For electrically operated equipment, The Supplier must provide original medical grade power connection (Secure Electric connection with Emergency Stop). Such connection shall be weatherproof and prevent the ingress of dust, insects, animals into the equipment, as might be requested by UNOPS/Beneficiary. It shall be appropriately sized and designed for the given application. | ☐ Yes   ☐ No |  |
| 1. Wherever applicable, the Supplier must provide all appropriate parts such as hoses, probes, fittings and regulators that are required for fully operational equipment. The outlet fittings should follow the existing installations, as might be requested by UNOPS/Beneficiary. | ☐ Yes   ☐ No |  |
| 1. For equipment that require water for its operation, The Supplier must stipulate the minimum and recommended acceptable water quality requirements. Hoses, adapters, filters etc shall be provided (wherever applicable). | ☐ Yes   ☐ No |  |
| 1. The Supplier is responsible to provide equipment that are fully compatible and integrate-able with each other, wherever applicable, and to the satisfaction of UNOPS/ Beneficiary. | ☐ Yes   ☐ No |  |
| 1. All electrically operated equipment must be designed to run on the Lebanese standard AC power (voltages and frequencies). | ☐ Yes   ☐ No |  |
| 1. Equipment operated at voltage level of 110V and 60Hz frequency (with and without transformers) **shall NOT be acceptable**. | ☐ Yes   ☐ No |  |
| 1. All Electrically operated equipment should comply with the latest version of IEC 60601-1, UL/ANSI/CSA or equivalent | ☐ Yes   ☐ No |  |
| 1. **Pre-installation requirements** | | |
| 1. The Supplier shall visit the site to ascertain accessibility, site conditions and nature of the site, local conditions, onsite measurements, and other matters affecting the execution of their works. | ☐ Yes   ☐ No |  |
| 1. For Architectural Significant Equipment (ASE), i.e. equipment that are permanently attached to the building, with Architectural/Structural requirements and/or equipment that requires permanent connection to electromechanical services (such as: single or 3-Phase electric power, medical gases, IT/data points, steam, HVAC, vents/exhausts, water, drain, etc), then The Supplier is responsible for providing the following drawings (hereinafter referred to as “the Drawings”):  * Detailed shop drawings; * Elevation drawings; * Reflected Ceiling Plans (if the item is ceiling suspended); * Floor fixing and ducting plans (if the item is fixed to the floor, or require floor ducting for services, cables, pipes etc); and * Health, Safety, Security and Environmental measures to be considered in the operation and maintenance activities. | ☐ Yes   ☐ No |  |
| 1. The Drawings shall be submitted to UNOPS -in PDF and AutoCAD formats- within 14 days of signing the contract. | ☐ Yes   ☐ No |  |
| 1. The Drawings shall be provided for all typical areas pertaining to the equipment supplied by The Supplier. | ☐ Yes   ☐ No |  |
| 1. The Drawings shall be based on the latest plans, drawings, and onsite measurements, and in liaison with UNOPS, and the Beneficiary. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall liaise with UNOPS, and the Beneficiary to produce coordinated drawings, wherever applicable. | ☐ Yes   ☐ No |  |
| 1. The Drawings shall clearly specify the Beneficiary’s obligations as well as The Supplier’s obligations for site preparation, in line with the manufacturer recommendations and the requirements mentioned herein. This shall include, but not limited to electrical, IT, networking, mechanical, steam, vents/exhausts, HVAC, environmental, plumbing, structural, cut-outs, back-supports, ceiling/wall/floor loading, space requirements, shielding (if applicable), special utilities, access requirements, and howsoever required to complete the installation of the equipment, as per the manufacturer recommendation, and to the satisfaction of UNOPS/ Beneficiary. | ☐ Yes   ☐ No |  |
| 1. If the Supplier fails to provide correct, accurate, timely based, and clear information/drawings regarding pre-installation requirements, The Supplier shall be held responsible for the remedial works, materials and costs needed for abortive works to complete the installation, to the satisfaction of UNOPS/ Beneficiary. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall provide user manuals, service manuals, installation manuals, technical data sheets and site-planning guides that will assist in preparing the site for the Equipment. However, providing such documents does NOT relieve The Supplier from submitting the hereinabove mentioned site-specific Drawings. | ☐ Yes   ☐ No |  |
| 1. **Packaging, Shipping, Storage and Delivery** | | |
| 1. The equipment package shall be well labeled, with instructions for handling, lifting, etc. | ☐ Yes   ☐ No |  |
| 1. The equipment itself and its packaging shall be provided with durable nameplates to carry the name and contact details of the Supplier, the Local Agent the Manufacturer, model number, year of manufacture, name and quality label of the manufacturer and the standards in force, Electrical power input requirements (voltage, frequency, etc.); Rating of the Equipment, Information for storage conditions (temperature, pressure, light, humidity). | ☐ Yes   ☐ No |  |
| 1. The equipment shall be packaged in a way to withstand handling, loading, unloading, temperature, humidity and other extremes likely to be encountered during shipping and transport. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall be responsible for shipping and delivery of the equipment within the time frame stipulated in the Invitation to Bid. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall be responsible to provide appropriate storage for the equipment until the site is ready for immediate installation. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall monitor the storage space before, during and after shipment to ensure appropriate environmental conditions that match the published manufacturers’ instructions, including temperature and humidity control. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall ensure that the Equipment will not be delivered to the site before such time that the Beneficiary’s facility is ready and confirmed by the UNOPS for immediate installation. | ☐ Yes   ☐ No |  |
| 1. All equipment shall be preserved and packaged in accordance with the manufacturer's standard practices, and to avoid damage to the equipment while in transport and shipment to its final destination. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall be responsible for taking all appropriate actions to ensure that the equipment can be brought safely into the Beneficiary’s facility and to the allocated locations.  It shall be the responsibility of The Supplier to deliver the equipment in good condition. Any equipment damaged in shipping, transportation, or rigging shall be promptly replaced regardless of the status of any claims filed against the carrier. | ☐ Yes   ☐ No |  |
| 1. **Factory Acceptance Test, Installation, Testing & Commissioning, and Inspection (ITCI) On Site** | | |
| 1. **General** |  |  |
| The following inspections and tests shall be performed: |  |  |
| 1. Only experienced and authorized engineers from the manufacturer shall conduct the Installation, Testing & Commissioning. Competency and Training certificates for the installers, issued and letter headed by the manufacturer, shall be submitted during the inspection, whenever requested by UNOPS/ Beneficiary. | ☐ Yes   ☐ No |  |
| 1. Installation, Testing & Commissioning Inspection shall demonstrate proper and safe installation and operation of the Equipment as per the published manufacturer’s specifications and protocols, applicable standards, and to the satisfaction of UNOPS/ Beneficiary. | ☐ Yes   ☐ No |  |
| 1. Installation, Testing & Commissioning Inspection forms/checklists shall be filled by The Supplier, and submitted to UNOPS and to the Beneficiary. | ☐ Yes   ☐ No |  |
| 1. **Quality Assurance Tests- QAT (Factory Acceptance Test- FAT)** |  |  |
| 1. Quality Assurance Tests- QAT (Factory Acceptance Test- FAT) shall be performed at the manufacturer site, prior to shipment. It shall ensure high quality, proper and reliable functionality, and applicable standards conformity.   UNOPS reserves the right to have the attendance by any of its representatives (Own staff or third party). | ☐ Yes   ☐ No |  |
| 1. All the components of the Equipment shall pass the QAT successfully, and the test certificates shall be duly stamped by the manufacturer. QAT certificates shall be submitted to UNOPS/ Beneficiary, whenever requested. | ☐ Yes   ☐ No |  |
| 1. QAT certificates shall indicate the serial number of the equipment tested, date of the test, types of tests, and acceptance criteria. | ☐ Yes   ☐ No |  |
| 1. Once the equipment is delivered to site (i.e. to the location mentioned in the ITB), the equipment shall be inspected in the presence of UNOPS representatives and MoPH/Beneficiary representatives. The Supplier shall demonstrate that the right equipment/component has been delivered, in terms of manufacturer, model number, components part numbers, and quantities. | ☐ Yes   ☐ No |  |
| 1. **Inspection** |  |  |
| 1. UNOPS shall be notified within a reasonable time in advance to attend the inspection. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall demonstrate to UNOPS that the delivery note (or packing list) and the labels on delivered crates match the approved offer (Purchase Order) in terms of: manufacturer, model, components’ part numbers and quantities. | ☐ Yes   ☐ No |  |
| 1. Prior to delivery inspection, The Supplier shall submit to UNOPS a justification letter -with supporting document from the manufacturer- for any deviations from the approved offer (if any), such as for changing part numbers, updated models, part numbers that include sub-components etc. Such deviations shall be subjected to UNOPS approval. At the time of delivery inspection, The Supplier shall provide a copy of UNOPS approval to such deviations. | ☐ Yes   ☐ No |  |
| 1. Upon completion of inspection, any equipment failing this inspection shall be replaced/rectified before proceeding with equipment installation. | ☐ Yes   ☐ No |  |
| 1. Appropriate checklists and forms shall be filled by The MoPH representative. | ☐ Yes   ☐ No |  |
| 1. Whenever deemed necessary, The Supplier shall repeat the inspection, fully or partially, at the time of handing over the Equipment to the BeneficiaryMoPH. | ☐ Yes   ☐ No |  |
| 1. During the delivery inspection, the crates/packages shall be inspected externally to demonstrate that the delivered equipment and/or packaging are intact, undamaged and free from defects. Crates/boxes shall not be opened during the delivery inspection, nor their contents be checked. This is to maintain security and to ensure that no damage or loss takes place between delivery and installation. This inspection, therefore, is for checking the total number of crates/boxes, their labels and their condition, but not verifying the correctness or condition of the contents against the delivery note nor to verify the proper functionality of the equipment. Correctness and condition of equipment etc shall be checked at a subsequent stage, i.e. during the Installation, Testing and Commissioning inspection. | ☐ Yes   ☐ No |  |
| 1. Whenever deemed necessary and appropriate (by UNOPS), The Supplier shall unpack and inspect the equipment in the presence of UNOPS and MoPH/Beneficiary representatives. The Supplier shall be responsible to re-pack and secure the equipment after the inspection. | ☐ Yes   ☐ No |  |
| 1. **Installation** |  |  |
| 1. The Supplier shall assemble, mount, install, configure, calibrate, test and commission the equipment as per the published manufacturer’s instructions, applicable international & local standards, and to the satisfaction of UNOPS/ Beneficiary. | ☐ Yes   ☐ No |  |
| 1. Any materials or work found to be defective, not in conformity to the requirements herein, or damaged shall be removed immediately, and new materials or work substituted without delay. | ☐ Yes   ☐ No |  |
| 1. The Supplier’s work-in-progress activities (delivery, storage, rigging, installation, inspection, etc) shall be subjected to verification, at any time by UNOPS. UNOPS will notify The Supplier of any observed deficiencies or non-conformity, which could cause suspension of acceptance of the proposed system until corrective action has been demonstrated. | ☐ Yes   ☐ No |  |
| 1. After installation and prior to conducting the ‘Testing & Commissioning Inspection (TCI)’, The Supplier shall undertake its own pre-checks to verify that the Equipment, its installation and its performance conform to the published manufacturer’s specifications. **All required parts, testing equipment/accessories, accessories and start-up consumables shall be included**. | ☐ Yes   ☐ No |  |
| 1. **Testing & Commissioning, and Inspection (ITCI)** |  |  |
| 1. Whenever deemed necessary by UNOPS, The Supplier shall provide testing equipment, tools, accessories,  instruments, analysers, etc to verify proper function/performance of the equipment as per the published manufacturer’s specifications. All testing equipment, tools, instruments, analysers, etc used for testing of equipment and systems shall be calibrated as per its manufacturer recommendation. Certificate of valid calibration shall be provided upon request. | ☐ Yes   ☐ No |  |
| 1. Below are the minimum requirements for commissioning:  | i. | Note and report any signs of external or internal damage upon device delivery | | --- | --- | | ii. | Verify that all the specifications, features and functioning modes of the equipment meet the specifications indicated in the Tender Documents. | | ☐ Yes   ☐ No |  |
| 1. After successfully running the operations of the equipment by the manufacturer/supplier and all the related functions, to the satisfaction of UNOPS and the Beneficiary,  it will be handed over to the Beneficiary. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall submit a printed (as well as soft copy) list of Serial Numbers, Model Numbers, Manufacturer’s name of all equipment installed inside the Equipment. | ☐ Yes   ☐ No |  |
| 1. **Training** | | |
| 1. Following a successful Installation, Testing & Commissioning inspection, The Bidder shall conduct training sessions for the staff onsite.   The Supplier/ Manufacturer or his qualified agent (with training certification) shall train the Beneficiary's Engineers and Technicians and perform on-site training for installation, use, and maintenance for a minimum number of five trainees and for a minimum period of four days, unless otherwise instructed by UNOPS or the Beneficiary.  Training shall include, but not be limited to, training for Engineers and Technicians.  Following the completion of training, The Supplier shall, if requested, certify that trained personnel have completed the training program.  The training shall include operation and maintenance routines, including but not limited to:     1. Operation of the equipment 2. Cleaning routines of the equipment considering the electrical safety precautions 3. Cleaning routines for the filters, if applicable (i.e. reusable) 4. Testing of alarms 5. Testing of operating parameters 6. Frequency of the recommended maintenance routines 7. Safety precautions on operation and maintenance 8. Advanced maintenance tasks required that shall be carried out by a third-party trained technician authorized by the manufacturer (e.g the supplier's technician)   **NOTE- Training, testing and commissioning of the equipment shall be done at the designated locations.  If the security situation prevents access to a designated location, then an alternative location in Lebanon will be coordinated with the UNOPS team for the purpose of conducting the training, testing and commissioning.** | ☐ Yes   ☐ No |  |
| 1. The Bidder shall submit a detailed description of the scheduled training for the personnel for the equipment and all of its components. This should include, but not limited to, detailed description of the training, location, scheduled time, duration, content, qualifications of instructor, and a list of the qualifications of who should attend the training. | ☐ Yes   ☐ No |  |
| 1. The Bidder shall provide a training certificate of their engineers who will be responsible for installing the equipment and provide the after-sale service/maintenance. | ☐ Yes   ☐ No |  |
| 1. **Manuals/ Documentation (Hard and soft copies, in English as requirement)** | | |
| 1. The Supplier shall provide (per equipment): 2. at least 1 original user manuals; 3. at least 1 original technical service manuals for the equipment; and 4. at least 1 original Handovers of the training manual. | ☐ Yes   ☐ No |  |
| 1. Soft copy of the manuals (on CD/USB) shall be also provided. | ☐ Yes   ☐ No |  |
| 1. Technical service manuals shall include spare parts lists, electronic circuits schematic diagrams, Single Line Diagram, P&I drawings, and detailed troubleshooting guides (where applicable), specific protocols for operation, procedures required for troubleshooting, calibration, and routine maintenance. | ☐ Yes   ☐ No |  |
| 1. All level Password to configuration, user and service mode shall be provided to the Beneficiary. | ☐ Yes   ☐ No |  |
| 1. Cleaning, disinfecting and/or sterilization of all equipment must comply with the latest international standards. | ☐ Yes   ☐ No |  |
| 1. The Supplier must provide the published manufacturer’s method statement for cleaning/disinfection for all the equipment and its components. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall specify appropriate cleaning methods, procedures, and agents. | ☐ Yes   ☐ No |  |
| 1. **Warranty Period and Maintenance Obligations** | | |
| 1. Warranty offered (minimum 24 months after successful installation and satisfactory inspection)- Warranty shall cover all labor works and spare parts needed during that period. | ☐ Yes   ☐ No |  |
| 1. All maintenance and services must be provided by qualified and trained employees, they shall be duly certified by the Manufacturer. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall provide durable stickers/labels on the Equipment, stating the dates for scheduled preventive maintenance during the warranty period, as well as the expiration date of the warranty period (as approved by UNOPS) | ☐ Yes   ☐ No |  |
| 1. The Supplier shall conduct scheduled Preventive Maintenance (PM) according to the Original Equipment Manufacturer (OEM) recommendations, applicable standards, and accrediting agencies. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall provide on-site and remote support for use, troubleshooting, repair and maintenance of the System. | ☐ Yes   ☐ No |  |
| 1. Documented PM reports shall be submitted, and signed by the engineers/technicians onsite. | ☐ Yes   ☐ No |  |
| 1. Response to service calls by factory-trained service engineers shall be within 5 hours. If the Supplier fails to adhere to this requirement, then the free warranty period for the equipment shall be extended 1 week per each incident. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall fix malfunctioning equipment/parts within a very short period guaranteeing that the Maximum downtime allowed is 1 working day per month. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall replace or repair all defective equipment/parts and software, and shall correct any defects -without charges for parts or labor- both during and after regular working hours, during the warranty period. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall provide -without charges for parts or labor- replacement of any defective equipment/parts that cannot be repaired or corrected to the satisfaction of UNOPS/MOPH/Beneficiary during the warranty period. | ☐ Yes   ☐ No |  |
| 1. The following effectiveness level provisions shall apply to the equipment during the warranty and subsequent support periods.  Uptime is defined as the state when the system is working and/or available for use, to UNOPS/Beneficiary satisfaction.  Downtime is defined as the state when the system is NOT operable due to breakdown, performance of repairs, or failure to perform according to specifications.  The period of downtime shall be from notification of the manufacturer's service representative until the equipment is returned/presented to the designated UNOPS/ Beneficiary representative properly functioning and ready for use. | ☐ Yes   ☐ No |  |
| 1. Scheduled routine preventive maintenance, scheduled upgrades of equipment or software, and external failures (i.e., due to power loss etc) shall not be considered downtime. | ☐ Yes   ☐ No |  |
| 1. The Supplier must guarantee an uptime of 95% calculated yearly during warranty, unless otherwise requested by UNOPS/ Beneficiary to follow current protocols applied by Beneficiary. | ☐ Yes   ☐ No |  |
| 1. Preventive maintenance work, software upgrades and other non-urgent services shall be performed at predetermined times convenient to UNOPS/ Beneficiary. These times may include off-hours. | ☐ Yes   ☐ No |  |
| 1. During the warranty and/or service period, all documentation shall be updated by The Supplier to reflect any revisions, within 14 days of their release by the manufacturer. | ☐ Yes   ☐ No |  |
| 1. All software upgrades/updates to the equipment shall be provided by The Supplier during the life span of the equipment, within 14 days of their release by the manufacturer. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall provide a replacement of any defective equipment or components that cannot be repaired or corrected to the satisfaction of UNOPS/Beneficiary during the warranty or service contract period. The replacement/substituted equipment shall be new and technically equivalent and with similar quality of the defective equipment. | ☐ Yes   ☐ No |  |
| 1. All warranties and rights shall be transferable from UNOPS to the Beneficiary upon transfer of ownership, the date of which shall be agreed between UNOPS and the Beneficiary. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall attach with the offer a price list of spare parts, consumables, and PM kits (with description of frequency of replacement) for each, valid for 5 years. | ☐ Yes   ☐ No |  |
| 1. The Supplier shall attach with the offer the price of Yearly Maintenance (Corrective and Preventive) Services including labor, valid for 5 years after the expiration of the warranty period. | ☐ Yes   ☐ No |  |
| 1. After the expiration of the warranty period, under a new spare parts supply contract, the Supplier shall be responsible to deliver any requested PM kits, Spare Parts, and consumables within 40 days, from the date of award of the spare parts supply contract. | ☐ Yes   ☐ No |  |

**Environmental Impact and Sustainability Dimension**

The Supplier shall attend sustainable procurement workshop(s) organized by UNOPS. These workshops aim to educate vendors on UNOPS sustainable practices and procurement guidelines in line with UNOPS sustainability commitments and goals.

The Supplier must ensure that the goods to be supplied address all aspects of the UNOPS sustainable procurement framework, wherein UNOPS has committed to deliver projects in a manner that respects the principle of social and environmental responsibility, including preventing or mitigating adverse impacts on the environment and identifying opportunities for improved environmental performance. As such, in supplying the goods shall consider suitable sustainability aspects that demonstrate the UNOPS commitment to social and environmental responsibility through procurement, while ensuring the utilization of cutting-edge concepts and technologies. This would include, but is not limited to, the following:

i) Maximize the use of locally available (manufactured) goods and materials and supporting local businesses,

ii) Utilization of eco-friendly materials,

iii) Utilization of energy-efficient solutions,

iv) Consideration of waste reduction strategies, lifecycle cost and impact, and

v) Considerations of social aspects, such as promoting diversity, equity and inclusion, gender equality and empowerment, and ensuring fair labor practices.

1. **Delivery requirements and Comparative Data Table**

| **UNOPS Requirements** | | **Is bid compliant?** Bidder to complete | **Details**  Bidder to complete |
| --- | --- | --- | --- |
| **Delivery time** | Bidder shall deliver the goods within three (3) months after Contract signature. | ☐ Yes ☐ No | Insert details |
| **Delivery place and Incoterms rules** | 1. Nabatieh Public Hospital, South, Lebanon; **Items 1, 2 & 3** 2. Jezzine Public Hospital, South, Lebanon; **Item 1** 3. Zahle Public Hospital, Bekaa Lebanon; **Items 4 & 5** 4. Sibline Public Hospital, Mount Lebanon, Lebanon; **Item 1** 5. Baabda Public Hospital, Mount Lebanon, Lebanon; **Item 6**   If security situation prevents access to designated location (s), then an alternative location (s) in Lebanon will be coordinated with UNOPS team- Lebanon DAP; **bidder is responsible for clearance coordination, delivery to designated sites, offloading, and placing of equipment in assigned locations.** | ☐ Yes ☐ No | Insert details |
| **Consignee details** | The Lebanese Ministry of Public Health, Beirut, Lebanon | ☐ Yes ☐ No | Insert details |
| **UNOPS Right to vary requirements** | At the time the Contract is awarded, UNOPS reserves the right to vary the quantity of the goods and associated services specified above, provided this does not exceed +/- 20%, without any change in the unit prices or other terms and conditions of the ITB. | ☐ Yes ☐ No | Insert details |