

## विर्तामोड नगरपालिका नगर कार्यपालिकाको कार्यालय भूजिल ज्ञापा भूजिल ज्ञापा भूजिल ज्ञापा

पत्र सं. :- २०७८/०७९ च.नं. :-

क्याटलग प्रस्ताव विधी वाट मेडिकल औजार उपकरण तथा मेसिनरी सामानहरू खरिद

## सम्बन्धी प्रस्ताव आव्हानको सचना

## प्रथम पटक प्रकाशित मिति २०७९/०३/१३

यस कार्यालयको लागी चालु आ.व. २०७८/०७९ बार्षिक स्वीकृत कार्यक्रम अनुसार तपशिल बमोजिमको मेडिकल औजार उपकरण तथा मेसिनरी सामानहरू खरिद गर्नुपर्ने भएकाले सार्वजिनक खरिद ऐन २०६३ को दफा द को तथा सार्वजिनक खरिद नियमावली २०६४ को नियम ३९ख. उपनियम (२) बमोजिम त्यस्तो मेडिकल औजार उपकरण तथा मेसिनरी सामान उत्पादक कम्पनी वा सो को आधिकारीक विकेताहरू विच मात्र प्रतिश्पर्धा गराउने (क्याटलग सिपङ्ग) विधीवाट खरिद गराउनुपर्ने भएकोले इच्छुक इजाजत प्राप्त उत्पादक वा सो को आधिकारीक विकेता कम्पनी/फर्म दर्ता, मु.अ.कर दर्ता प्रमाणपत्र र आ.व.२०७७/०७८ को आयकर चुक्ता प्रमाणपत्रको प्रमाणित प्रतिलिपीहरू समावेश गरी मेडिकल औजार उपकरण तथा मेसिनरी सामानको आधिकारीक स्पेशिफिकेशन, गुणस्तर, मूल्य र सुविधा सहितको विवरण (क्याटलग वा ब्रोसर) तथा Letter of Authorization समेत संम्लग्न राखी यो सूचना प्रकाशित भएको मितिले ७ औ दिनको १२:०० वजेभित्र यस कार्यालयमा सिलवन्दी प्रस्ताव दर्ता गराउनुहुन जानकारी गराईन्छ । नियमानुसार समय भित्र पेश हुन आएका सिलवन्दी प्रस्ताव फारमहरू सोही दिनको २:०० वजे खोलिने छ । थप जानकारीको लागी यस कार्यालयको फोन नं. ०२३-५४०२४४ मा सम्पर्क राख सिकने छ ।

## विवरण

| सि.न. | विवरण                                   | सख्या | स्पेशिफिकेशन   | कैफियत   |                        |
|-------|---|-------|--|--|------------------------|
| ٩     | Colour Doupler Video<br>X-Ray 4D proof  | ٩     |  |  |                        |
| 2     | A. DR System Double<br>Tray             | ٩     |  |  |                        |
| . A.  | B. Air Disinfector 2 way                | q     | Technical Specification कार्यालयको<br>सूचना पाटी तथा Website : | Technical Specification कार्यालयको संक्षिप्त विवरणमा उल्ले सूचना पाटी तथा Website: | संधिप विकास            |
|       | A. X-Ray Machine<br>500MA               | ٩     |  |  | सूचना पाटी तथा Website |
| ny .  | B. Antipartium Monitor                  | ٩     | उपलब्ध छ ।   | Specification बमोजिम हुने छ।   |                        |
| •     | C. Electric- Hydrolic<br>Delivery Table | ٩     |  |  |                        |
|       | D. Air Condition (AC)<br>1.5 Ton        | २     |  |  |                        |
|       |   |       |  | विलीद कुमार स्थाप  |                        |

CS CamScanner

Techinical Specification for Flat noticel Determined

| S.N | Purchaser's Specifications(BTM municipality.   | Bidde  |                                    |            |  |
|-----|--|--------|------------------------------------|------------|--|
|     | Flat panel Detector (DR) with Workstation  | yes/no | Sheeet<br>Page<br>no. in<br>catlog | Remar<br>s |  |
|     | Manufacturer   |        | ue                                 |            |  |
|     | Brand  |        |                                    |            |  |
|     | Type / Model   |        |                                    |            |  |
| _   | Country of Origin  |        |                                    |            |  |
| ]   | Description of Function  |        |                                    |            |  |
|     | A digital detector with automatic exposure detection (AED) provides a fast and easy way for radiography facilities to benefit from high-quality digital imaging using any X-ray equipment. This technique uses x-ray sensitive plates to capture data during object examination, which is immediately transferred to a computer without the use of an intermediate cassette. |        |                                    |            |  |
| 2   | Operational Requirements   |        |                                    |            |  |
|     | An DR imaging plate to capture X-Ray exposure, transfer of image to PC in real-time, image processing workstation and an image film printer.   |        |                                    |            |  |
| 3   | System Configuration   |        |                                    |            |  |
|     | Flat Panel Detector System- Wireless, Workstation with image processing software & Dry Imager.   |        |                                    |            |  |
| 4   | Technical Specification:   |        |                                    |            |  |
| A   | Flat Panel Detector System   |        |                                    |            |  |
| a   | The Flat Panel should be a Retrofit Solution and capable to work with any of the X-Ray available in Department.  |        |                                    |            |  |
| b   | Shall be Amorphous Silicon (ASi) flat panel detector   |        |                                    |            |  |
| _   |  |        |                                    |            |  |

Techinical Specification for Flat Panel Detection System

विनोद क्रिक्ट स्टीपाने प्रमुख प्रशासकाय आधकृत

| S.N. | Purchaser's Specifications (BTM municipality.  | Bidde  | r's Com<br>Sheeet              | pliance |
|------|--|--------|--------------------------------|---------|
|      | Flat panel Detector (DR) with Workstation  | yes/no | Page<br>no. in<br>catlog<br>ue |         |
| d    | Shal have Lossless AED (automatic exposure detection)  |        |                                |         |
| e    | Portable wireless detector size: Approx. 14 X 17 inches. (Please indicate the effective area of the unit) and all standard accessories.                        |        |                                |         |
| f    | The detector should be light weight .(< 3Kg)   |        | ,                              |         |
| g    | Detector should have protected against spraying of water and should have IPX ratings   |        |                                |         |
| h    | Should have spatial resolution of Approx. 3.3 lines/mm or better   | 4      |                                | -       |
| i    | The resolution parameters or pixel spacing must be 125 micron or less.   |        |                                |         |
| k    | Should have image depth of Approx. 14 bit or better  |        |                                |         |
| 1    | The Detector should have Detachable Lithium Polymer Technology battery and should be provided with two extra battery along with battery charger.               | 4      |                                |         |
| m    | The Detector should have detector wired charge directly or via replaceable system (dock).  |        |                                |         |
| n    | The battery charger should have facility to charge atleast one batteries simultaneously, battery life should be minimum 5hrs or 300 images per charge or more. |        |                                |         |
| 0    | The Detector should be able to withstand surface load of 150kg or more   |        |                                |         |
| р    | Detector quantum efficiency(D.Q.E)should be >50%   |        |                                |         |

Techinical Specification for Flat Paneral conscion Systemes of the paneral conscion systems of the paneral conscion system

| S.N.  | Purchaser's Specifications (1987)  | Didde  | r's Com                        | pliance     |
|-------|--|--------|--------------------------------|-------------|
| 5.11. | Purchaser's Specifications(BTM municipality.   | Blace  | Sheeel                         |             |
|       | Flat panel Detector (DR) with Workstation  | yes/no | Page<br>no. in<br>catlog<br>ue | Remark<br>s |
| р     | racility.  |        |                                |             |
| · q   | Easy switch from sleep mode to acquisition mode for better battery performance.  |        |                                |             |
| r     | Software should have DICOM & PACS connectivity as a standard feature.  |        |                                |             |
| S     | DR System should be CE and USFDA approved  |        |                                |             |
| В     | Workstation:   |        |                                |             |
| a     | A Branded System with CPU – Latest Intel i5 or i7, RAM – 8GB, HDD – 1000GB, OS Genuine Window 7/10 and 19" (1080P) monitor. OR, Company Supplied Branded System. |        |                                |             |
| b     | A fully liscenced DR image processing software.  |        |                                |             |
| C     | Dry laser/Imager:  |        |                                |             |
| a     | The system must be a Dry laser/Imager 2 online film  |        |                                |             |
| b     | Printer must be able to print atleast 50 sheets or more per hour for film size 4"X17" film.  |        |                                |             |
|       | The system must be DICOM 3.0 Print Service Class Provider, allowing minimum of 10 associations at a time.  |        |                                |             |
| d     | The system must have a spatial resolution of 500 PPI / DPI (minimum) or more for all sizes printed.  |        |                                |             |
|       | The system must have contrast resolution of 14 bits / pixel or more  |        |                                |             |

Techinical Specification for Flat Panel Detector's

| S N | Purchaser's Specifications(BTM municipality.  | Bidde  | r's Com<br>Sheeet              | pliance     |
|-----|---|--------|--------------------------------|-------------|
|     | Flat panel Detector (DR) with Workstation   | yes/no | Page<br>no. in<br>catlog<br>ue | Remark<br>s |
| f   | The system must have at least two online film sizes, and should be capable to print on any of the 8" x 10", 10" x 12", 14" x 14", 14" x17" sizes. All two film input trays should be freely configurable at user level for all the mentioned film sizes.  |        |                                |             |
| g   | System should be CE and USFDA approved.   |        | ,                              |             |
| 5   | Accessories and spare parts and consumables   |        |                                |             |
| a   | All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above). |        |                                |             |
| 6   | Operating Environment:  |        |                                | -           |
| a   | The system offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.  |        |                                | ,           |
| b   | UPS of suitable rating for at least 30 min. backup shall be supplied  |        | -                              |             |
| 7   | User/Technician Training:   |        |                                |             |
|     | Must provide user training (including how to use and maintain the equipment).   |        |                                |             |
| 8   | Warranty:   | -      |                                |             |
| a   | Comprehensive warranty for 2 years after acceptance.  |        |                                |             |
| b   | maintenance whenever required.  | . %    |                                | 8           |
| 9   | Installation and Commissioning:   |        |                                |             |

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|-----------------|---------------|-----|------|-------|----------|
| Techinical      | Specification | for | Flat | Panel | December |

| S.N. | Purchaser's Specifications(BTM municipality.  | Bidde  | Sheeci                         | pliance     |
|------|---|--------|--------------------------------|-------------|
|      | Flat panel Detector (DR) with Workstation   | yes/no | Page<br>no. in<br>catlog<br>ue | Remark<br>s |
|      | The bidder must arrange for the equipment to be installed and commissioned by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail. |        |                                |             |
| 10   | Documentation:  |        |                                |             |
| a    | User (Operating) manual in English.   |        |                                |             |
| b    | Service (Technical/ Maintenance) manual in English.   |        |                                |             |
| с    | List of important spare parts and accessories with their parts.   |        |                                |             |

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|       | TECHINICAL SPECIFICA PION FOR X-   | L<br>Tanic<br>RAV 50 | कुमार त्ये<br>शासकीय अ<br>0 MA  | ति <b>पाने</b><br>धिकृत |
|-------|--|----------------------|---------------------------------|-------------------------|
| S. N. | Purchaser's Specifications(BTM   | Bidder               | 's Comp                         | liance                  |
|       | municipality. F/Y 78/79)   |                      | Sheeet                          |                         |
|       | X-ray,500ma  | Yes/No               | Page<br>No. in<br>Catalo<br>gue | Remar<br>ks             |
|       | Manufacturer   |                      |                                 |                         |
|       | Brand  |                      |                                 |                         |
|       | Type/Model   |                      |                                 |                         |
|       | Country of Origin  |                      |                                 |                         |
| 1     | Description of Functions   |                      |                                 |                         |
| 1.1   | A general purpose X-ray machine for routine X-ray examinations at healthcare facilities.                               |                      |                                 |                         |
| 2     | Operational Requirements   |                      |                                 |                         |
| 2.1   | It shall be suitable to be used for adult and paediatric patients in general Radiography examination.                  |                      |                                 |                         |
| 3     | System Configurations  | 1                    |                                 |                         |
| 3.1   | X-ruy Generator, Lunit   |                      |                                 |                         |
| 3.2   | X-Ray tube & tube support system, 1 unit   |                      | -                               |                         |
| 3.3   | Radiographic patient table, 1unit  |                      |                                 |                         |
| 3.4   | Floor mounted bucky stand, 1 unit  |                      |                                 |                         |
| 4     | Technical Specifications   |                      |                                 |                         |
|       | X-ray Generator:   |                      |                                 |                         |
| Ι     | Bidder shall indicate brand and model information here and provide technical data document for X-ray generator offered |                      |                                 |                         |
| 4.1   | Line frequency or high frequency generator, the generator shall have approx. 40kHz.                                    |                      |                                 |                         |
| 4.2   | Generator Output: approx. 40 kW (500mA at 125kV)   |                      |                                 |                         |
| 4.3   | Radiographic voltage: approx. 40 kV to 125kV, in 1kV step or better  | 31                   |                                 |                         |

|       | NX NX  | विनोद के<br>जन्म प्रा | मार त्यी                        | वाने<br>कृत<br>Jiance |
|-------|--|-----------------------|---------------------------------|-----------------------|
| S. N. | Purchaser's Specifications(BTM,  | Bidder                | 's Comp                         | mance                 |
|       | र्भिंग, नेपाल  | Yes/No                | Page<br>No. in<br>Catalo<br>gue | Remar<br>ks           |
| 4.4   | Radiographic current: 40 to 500mA or better  |                       |                                 |                       |
| 4.5   | Exposure time: 0.01sec (1msec) - 5sec or better  |                       |                                 |                       |
| 4.7   | Shall come with overload protection device.  |                       |                                 |                       |
| 4.8   | Power supply: 3 phase, 380-415V 50/60Hz or single phase  |                       | 1.                              |                       |
| II    | X-Ray Tube:(approx.)   |                       |                                 |                       |
| 4.1   | X-ray tube rotating: +/-120°.  |                       |                                 |                       |
| 4.11  | Large focus not more than 1.2 mm.  |                       |                                 |                       |
| 4.12  | Small focus not more than 0.6 mm.  |                       |                                 |                       |
| 4.14  | Filtration: min 2.5mm Al equivalent.   |                       |                                 |                       |
| 4.15  | Cooling method passive or forced air and/or oil cooling.   | . \                   |                                 |                       |
| 4.16  | Anode heat capacity shall be atleast 146 KHU.  |                       |                                 |                       |
| Ш     | Radiography Patient Table:(approx.)  |                       |                                 |                       |
| 4.18  | Radiography table shall be fixed height or height adjustable, 4-way floating top type with foot switch control or sensor control | 7                     |                                 |                       |
| 4.19  | Come with grid and cassette tray, with grid ratio: not less than 10:1. Grid line number: 40 line/cm. Focus distance: 115cm.      |                       |                                 |                       |
| 4.2   | Cassette size: accept all sizes from cassette 5"x7" cm to 14"x17" type.  |                       |                                 |                       |
| 4.21  | Radiography table shall be fixed height of about 60cm.   | ıt                    |                                 |                       |
| 4.22  |  |                       |                                 |                       |
| 4.23  | Table ton transverse movement : approx   |                       |                                 |                       |

|       | Purchaser's Specifications (BFM) Bidder's Compliance   |        |                                 |             |  |
|-------|--|--------|---------------------------------|-------------|--|
| S. N. | municipality. F/Y 78/79)   | Bidder | Sheeet                          |             |  |
|       | X-ray,500ma  | Yes/No | Page<br>No. in<br>Catalo<br>gue | Remar<br>ks |  |
| 4.24  | Table longitudinal movement : approx. ± 29cm.  |        |                                 |             |  |
| 4.25  | Table top dimension: approx. 2000 mm x 800 mm.   |        |                                 |             |  |
| 4.26  | Shall come with a three-field AEC or equivalent  |        |                                 |             |  |
| 4.27  | Table movement arrested by electromagnetic brakes or manual brakes.  | ,      | 1 2                             |             |  |
| IV    | Floor Mounted Bucky Stand:(approx.)  |        |                                 |             |  |
| 4.28  | Vertical travel: from 460-1700mm or in the range.  |        |                                 |             |  |
| 4.29  | Moving Grid with Grid ratio not less than 10:1. Grid line number: 40 lines/cm.                             |        | ,                               |             |  |
| 4.3   | Shall come with Automatic Exposure Control for vertical bucky exposures.                                   | V      |                                 |             |  |
| 4.31  | Cassette size: accept all sizes from 5"x7" to 14"x17".   |        |                                 |             |  |
| 4.32  | Movement arrested by electromagnetic brakes.   | ( )    |                                 |             |  |
| V     | Floor Mounted Tube Stand:(approx.)   |        |                                 | 1           |  |
| 4.33  | Longitudinal travel: approx. 1750mm.   |        |                                 |             |  |
| 4.34  | Vertical travel: from 630 -1850mm or in the range.   |        |                                 |             |  |
| 4.35  | Movement arrested by electromagnetic brakes o manual brakes.   | r      |                                 |             |  |
| 4.36  | Rotation of tube arm around vertical axis: $180^{\circ}$ ; lockable at $0^{\circ}$ to $\pm /-90^{\circ}$ . |        |                                 |             |  |
| VI    | Collimator:  |        |                                 |             |  |
| 4.37  | Manually adjustable.   |        |                                 |             |  |

| -     | 19. (C)  | न्य हों            | पाने                            |             |
|-------|--|--------------------|---------------------------------|-------------|
| S. N. | urchaser's Specifications (Bridger of the number of the nu | कुमार<br>शिह्यतिका | पाने<br>धक्त<br>Sheeet          | liance      |
|       | X-ray,500ma  | Yes/No             | Page<br>No. in<br>Catalo<br>gue | Remar<br>ks |
| 4.38  | Manually selectable filters adds advantage.  |                    |                                 |             |
| 4.39  | Light localizer with timer controlled light.   |                    |                                 |             |
| 4.4   | Built-in light switch should be provided.  |                    |                                 | -           |
| 4.41  | Turning angle should be min +/- 45 degree.   |                    |                                 |             |
| 4.42  | Halogen lamp.  |                    |                                 | -           |
| VII   | Control Console:   |                    |                                 | -           |
| 4.43  | Digital Display.   |                    | -                               |             |
| 4.44  | Minimum 3 Point Exposure Technique.  |                    |                                 | T           |
|       | Status display, error display.   |                    |                                 |             |
| 5     | Accessories, Spare Parts and Consumables   |                    |                                 |             |
| 5.1   | Accessories:  Lead apron, light weight with Lead equivalence 2mm-01 nos.   |                    |                                 |             |
| 5.2   | All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).  |                    |                                 |             |
| 6     | Operating Environment  |                    |                                 | ,           |
| 6.1   | The system offered shall be designed to be stored and to operate normally under the conditions of the purchaser's country. The conditions include Power Supply, Climate, Temperature, Humidity, etc.   |                    |                                 |             |
|       | Backsandani Oli  |                    |                                 |             |

| -   | D   | rchaser's Specification (Party 1977)  | कीय औधक | Comp                            | liance      |
|-----|-----|---|---------|---------------------------------|-------------|
| N.  | me  | rchaser's Specification of The man anicipality. F/Y 78/79)  | Bidder  | 's Comp                         |             |
|     |     | ray,500ma   | Yes/No  | Page<br>No. in<br>Catalo<br>gue | Remar<br>ks |
| 5.2 | wi  | ower supply: 380-415VAC 3 phase 50Hz fitted ith appropriate plug for X-ray generator fitted ith appropriate plug for other units. The powerable must be at least 3 metres in length.  |         |                                 |             |
| 7   | Si  | tandurds & Safety Requirements  |         |                                 |             |
| 7.1 | 1   | 1ust submit ISO 13485:2003/AC: 2007 AND   |         | 1                               |             |
| 7.2 | C   | CE (93/42 EEC Directives) or AERB OR USFDA approved product certificate.  |         |                                 |             |
| 8   | U   | Jser Training   |         |                                 |             |
| 8.1 | t e | The Supplier shall conduct user training for this equipment to enable operators to use the equipment properly. The training shall include the use of all operational functions of the equipment, as well as routine checks and maintenance expected by users. |         |                                 |             |
| 9   |     | Warranty  |         |                                 |             |
| 9.  | 1 1 | Comprehensive warranty for 2 years from acceptance.   |         |                                 |             |
| 10  |     | Maintenance Service During Warranty Period  |         |                                 |             |
| 10  | ).1 | During warranty period supplier must ensure preventive maintenance & corrective/breakdow maintenance whenever required.   | /n      |                                 |             |
| 1   | 1   | Installation and Commissioning  |         |                                 |             |
|     | -   | Sedengur . Selection Explication  | ,       |                                 |             |

|       | विनो प्रमुख  | द कुमार                       | न्योषाते<br>अधिकृत              |             |
|-------|--|-------------------------------|---------------------------------|-------------|
| S. N. | Purchaser's Specifications (B.F.M.)  | Bidder's Compliance<br>Sheeet |                                 |             |
|       | X-ray,500ma  | Yes/No                        | Page<br>No. in<br>Catalo<br>gue | Remar<br>ks |
| 11.1  | The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail. |                               |                                 |             |
| 12    | Documentation  |                               |                                 | -           |
| 12.1  | User (Operating) manual in English.  |                               |                                 |             |
| 12.2  | Service (Technical / Maintenance) manual in English.   |                               |                                 | 1           |
| 12.   | List or important spare parts and accessories with their part numbers and costing.   |                               |                                 |             |

Dasponder

Desponder

Bioniscical Engineer

Bioniscical Sesur

|       | AT WELL WAS   | नार त्यौपाते                  |
|-------|---|-------------------------------|
|       | Technical Specification for CTG Maching with The Table                        | मार न्यौपाने<br>हर्वाय अधिकृत |
| S.No. | Purchaser's Specification   | Yes/No/                       |
|       |   | Remarks If any                |
|       | Manufacturer:   |                               |
|       | Brand:  |                               |
|       | Type/Model:   |                               |
|       | Country of Origin:  |                               |
| 1     | Description of Functions:   |                               |
| 1.1   | FHR, TOCO, FM and activity curve of fetus can be monitored.                   |                               |
| 1.2   | Display of fetal movement count should be available.                          |                               |
| 2     | System and Operational Requirement  | , ', y4                       |
| 2.1   | FHR, TOCO, Fetal movement features should be available.                       | 7                             |
| 2.2   | 152nım inbuilt printer  | -1,                           |
| 2.3   | Inbuilt batter  |                               |
| 2.4   | 12.1 inch high resolution LCD display   |                               |
| 2.4   | Programmable alarm on probe off- position.                                    |                               |
| 3     | Technical Requirements:   |                               |
|       | FIIR features shall be as:  |                               |
| 3.1   | Ultrasound frequency: 1 Mhz +/- 10% impluse wave                              |                               |
| 3.2   | Ultrasound input intensity: <10 mW/cm²  |                               |
| 3.3   | Range: 50-240 bpm   |                               |
| 3.4   | Accuracy: +/- 1 bpm   |                               |
| 3.5   | Atarm: Max: 70-21- bpm, Tolerance: +/-5%<br>Min: 60-200 bpm, Tolerance: +/-5% |                               |
|       | TOCO  |                               |
| 3.6   | Measurement range: 0-100%   |                               |
| 3.7   | Resolution tolerance: 1%  |                               |
| 3.8   | Pressure tolerance: \$ +/-8%  |                               |
| 3.9   | Zero- mode: Manual  |                               |

|      |   | र स्टीधाने |
|------|---|------------|
|      | Fetal Movement  | म अधिकृत   |
| 3.10 | Count Mode: Manual, automatic (with a manual cetal movement waveform)   |            |
| 3.11 | Printer: Thermal  |            |
| 3.12 | Printing paper type: Z- type thermal paper  |            |
| 3.13 | paper width: 152mm  |            |
| 3.14 | Sweep speed: 1cm/min, cm/min, 3cm/min, 25mm/sec, quick recall printing  |            |
| 4    | User Training   |            |
| 4.1  | The Supplier shall conduct user training for this equipment to enable operators to use the equipment properly. The training shall include the use of all operational functions of the equipment, as well as routine checks and maintenance expected by users. |            |
| 5    | Power requirement:  |            |
| 5.1  | 100-240 VAC, 50/60 Hz   |            |
| 6    | Warranty  |            |
| 6.1  | Warranty for 1 years after acceptance.  |            |
| 7    | Maintenance Service During Warranty Period  |            |
| 7.1  | Preventive and corrective maintenance services during warranty period shall be included.  |            |
| 8    | Installation and Commissioning  |            |
| 8.1  | The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.  |            |
| 9    | Documentation   |            |
| 9.1  | The bidder should compulsorily fill the technical specification tender form and clearly mention the Manufacturer, Brand, Model and Country of Origin.   |            |
| 9.2  | User (Operating) Service (Technical / Maintenance) manual in English  |            |
| 9.3  | CE certified product  |            |



|       |   | बिनोद    | कुमार न्य<br>शासकीय औ | धकृत      |
|-------|---|----------|-----------------------|-----------|
|       | Technical Specification for Cart Based Ultrasound   | प्रमुख र |                       |           |
| S.No. | Purchaser's Specification   | Bidder   | 's Complia            | nce Sheet |
|       | Ultrasound Machine  | Yes/No   | Page no. in Catlogue  | Remarks   |
|       | Manufacturer:   |          | Charle                |           |
|       | Brand:  |          | -                     |           |
|       | Type/Model:   |          |                       |           |
|       | Country of Origin:  |          |                       |           |
| 1     | Description of Functions:   | -        |                       |           |
| 1.1   | It is Fully Digital Cart Based Color Doppler Ultrasound DICOM compatible with advance application for MSK, and General Ultrasound including Abdomen, Vascular |          |                       | ,<br>1    |
| 2     | System and Operational Requirement  |          |                       |           |
| 2.1   | Should have Windows Operating System or equivalent type   |          | 1                     |           |
| 2.2   | Monitor size should be Minimum 19 inch, Resolution: 1280x1024 pixel or better.  |          |                       | į.        |
| 2.3   | System should have high resolution touch panel which is minimum 10 inch.  |          | - ,                   |           |
| 2.4   | System should be user-friendly to operate and should be<br>Compact enough to transport  |          | ¢ .                   |           |
| 2.5   | System should be integrated one-box design with all spare parts of main unit in one box for easy & fast maintenance   |          | 6                     |           |
| 3     | Technism Requirements:  |          |                       |           |
| 3.1   | Imaging modes: B- Mode, M- Mode, Color M- Mode, Color Doppler imaging, Power Doppler Imaging and directional PDI  | -        |                       |           |
| 3.2   | Pulse Wave Doppler, CW Doppler, Harmonic Imaging,<br>Tissue Doppler imaging, Paranomic Imaging  |          | ŧ                     |           |
| 3.3   | System should have at least 4 active probe ports with capability of connecting any of probes in any port  |          |                       |           |



The System should support broadband and multi frequency probes spanning a frequency of approx 1.5-17 MHz

3.4



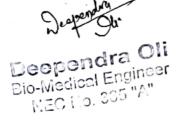
|     | A POTOTO TO THE PARTY OF THE PA | M  | ना       | द कुमा<br>ज्यामः | र त्योषा<br><sub>र्तिय</sub> अधिक |
|-----|--|----|----------|------------------|-----------------------------------|
| 3.5 | The Systems Shall be compatible with 4D functions  | V— | Title    | yen.             |                                   |
| 3.6 | The Systems Shall have following Features:   |    | $\dashv$ |                  |                                   |
| a   | Must have dual-screen function, the image can be shown both on the monitor and the touch panel and can use the touch panel to zoom in and out  |    |          |                  |                                   |
| b   | Trapezoid for B image mode   |    | _        |                  |                                   |
| e   | Steer scanning for Linear probes   |    | _        |                  |                                   |
| d   | Intelligent Doppler & Intelligent Focus  |    | _        |                  |                                   |
| e   | Extended Field of View Imaging   | 4  | _        |                  |                                   |
| f   | Speckle langing  |    |          |                  |                                   |
| g   | Reat-time Panoramic Imaging  |    | -        |                  |                                   |
| h   | One key Image Optimization   |    |          |                  |                                   |
| i   | Raw Data to adjust the parameters after freeze   |    |          |                  |                                   |
| j   | Zoom function with picture in picture indication on both frozen and live images  |    |          |                  |                                   |
| k . | Zoom for one key image enlarged to full screen   |    |          | -                |                                   |
| 1   | System should be capable of scanning depth up to 40 cm or more.  |    |          | 5                | ,,,                               |
| m   | Support HIPPA funtion for multi-users management   |    |          |                  |                                   |
| n   | Support tid? funtion with graph by three smart lines for orthopaedic   |    |          | £                |                                   |
| o   | Automatically measure: BPD, HC, AC, FL, NT   |    |          | 1                |                                   |
| p   | Automatic measure the velocity of blood flow in C Mode   |    | 4        |                  |                                   |
| q   | Quadplex mode ( (B mode, C mode, PW mode and Auto Measurement at the same time )   |    |          |                  |                                   |
| 3.6 | System should have dynamic range min. 255.   |    |          |                  |                                   |
| 3.7 | System should have Gray Scale of Minimum 256 or more.  |    |          |                  |                                   |
| 3.8 | System should show on the touch panel, comments and bodymarkers can be user define   |    |          | e e              |                                   |
| 3.9 | System should comes with Needle Visualization enhancement software, angle adjustable (approx30° to 30°)  |    | 8        | ,                |                                   |



|      | ACM. HELE  | V TEIN | ब प्रशासकी | य आयुर |
|------|--|--------|------------|--------|
| 3.11 | System should have Inbuilt Hard Disk with capacity of at least 500Gb.  |        |            |        |
| 3.12 | System should support Electronic Convex, Electronic Linear & Electronic volume 4d and phased array probe                     |        | ,          |        |
| 3.14 | Cine Memory: 256 frames or more .  |        |            |        |
| 3.15 | Must be able to adjust the size and position of measurement results  |        |            | ,      |
| 3.16 | System should have S-Video, VGA, USB and Audio output with provision for storage of Images and Transfer to External Devices. | ₹      |            | 9      |
| 3.17 | System should have feature of Transfer images and reports to PC directly though wired network                                |        |            |        |
| 4    | Following accessories should be available with Main Unit:  |        |            |        |
| a    | Convex Emisducer (approx 2 - 6 MHz)  |        | 16         |        |
| b    | Linear Transducer ( approx 4-15 MHz )  |        | A.C.       | -      |
| c    | 4D Volume Transducer for Adult (approx 2.0 - 6 MHz)  |        | . (        |        |
| d    | Should provide online UPS with atleast 30 min. battery backup.   |        |            |        |
| e    | Ultrasound gel-3 bottle  |        |            |        |
| ſ    | Digital video thermal printer-1 pc   | ,      | 8          |        |

Deependra Oli Bio-Medical Engineer NEC 110. 365 "A"

|      | भावा कार्या  | $X_{i}$ | वनाप<br>धमख | <b>,शा</b> सव | तिय अधिकृत |
|------|--|---------|-------------|---------------|------------|
|      | के अन्या   | 1       |             |               |            |
| f    | Thermal printing paper-10pc  | ·       |             |               |            |
|      | Must provide online UPS with atleast 30 min. battery backup.   |         |             |               |            |
| 6    | Certifeates requirments:   |         |             |               |            |
| 6.1  | Must submit ISO 13485:2003/AC: 2007 certificates.  |         |             |               |            |
| 6.2  | Must submit CE and USFDA approved product certificate.   |         |             |               |            |
| 7    | Operating Conditions   |         |             |               |            |
| 7.1  | Power supply: 220 – 240 VAC, 50Hz fitted with appropriate plug. The power cable must be at least 3 metres in length.   |         |             |               |            |
| 7.2  | ivius (provide online OFS with atteast 50 mm. battery  |         |             |               |            |
| 8    | Storage Conditions   |         |             |               |            |
| 8.1  | Temperature: -5°C-40°C, relative humidity: ≤ 80% and atmospheric pressure: 700hPa -1060 hPa  |         |             |               |            |
| 9    | User Training  |         |             |               |            |
| 9.1  | The Supplier shall conduct user training for this equipment to enable operators to use the equipment properly. The training shall include the use of all operational functions of the equipment, as well as routine checks and maintenance expected by users | 7       |             |               |            |
| 10   | Warranty   |         |             |               |            |
| 10.1 | Comprehensive warranty for 2 years after acceptance.   |         |             |               |            |
| 11   | Mainterance Service During Warranty Period   |         |             | 71            |            |
| 11.1 | Preventive and corrective maintenance services during warranty period shall be included.   |         |             |               |            |
| 12   | Installation and Commissioning The brader must arrange for the equipment to be installed by  |         |             |               |            |
| 12.1 | certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail   |         |             |               |            |
| 13   | Documentation  | -       |             |               |            |
| 13.1 | from the manufacturer for the specific tender.   |         |             |               |            |
| 13.2 | The bidder should compulsorily fill the technical specification tender form and clearly mention the Manufacturer, Brand, Model and Country of Origin.  |         |             | ı             |            |
| 13.3 | User (Operation) Service (Technical / Maintenance) manual  |         | , and T     |               |            |



echnical Specification Form

Bidder must completely fill the Technical Specification Form (TSF). Only Yes/no/all complies should not be written. Pagenumber in the catalogue of all the required parameters must be clearly mentioned and highlighted. Failure in doing so may lead to rejection of bid from technical committee.

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