"जडिबुटी आय आर्जन पर्यटन क्षेत्र विकासको पूर्वाधार, सशक्त नागरिक षडानन्द नगरपालिकाको मुख्य आधार"

षडानन्द नगरपालिका
SHADANANDA MUNICIPALITY

नगर कार्यपालिकाको कार्यालय
OFFICE OF THE MUNICIPAL EXECUTIVE

दिङ्ला, भोजपुर, प्रदेश नं. १, नेपाल
Dingla, Bhojpur, Province No. 1, Nepal

फोन: ०२९-४२११२४
४२११२५

प.सं.: २०७८/०७९
च.नं :

क्याटलग सपिङ्ग विधिबाट एक्सरे मेसिन र सि.आर. सिस्टम खरिद गर्ने सम्बन्धी सूचना ।

प्रथम पटक प्रकाशित मितिः२०७९/१०/०५ गते

यस नगरपालिकाको लागि चालु आ.व. २०७९/०८० मा तपसिलमा उल्लेख भएको एक्सरे मेसिन र सि.आर. सिस्टम खरिद गर्नुपर्ने भएकोले सार्वजनिक खरिद ऐन, २०६३ को दफा ८ को उपदफा १(क) तथा सार्वजनिक खरिद नियमावली, २०६४ को नियम ३१ख(१) बमोजिम एक्सरे मेसिन र सि.आर. सिस्टम उत्पादक कम्पनी वा सो को आधिकारिक विक्रेताद्वारा निर्धारित दरमा क्याटलग सपिङ्ग विधिबाट प्रतिस्पर्धा गराई खरिद गर्नुपर्ने भएकोले ईच्छूक ईजाजत प्राप्त स्पेसिफिकेसनमा भएको त्यस्तो समानस्तरको मालसामान उत्पादक वा वितरक कम्पनी वा त्यसको आधिकारिक विक्रेताहरुको आ-आफ्नो फर्म दर्ताको प्रमाणपत्र, भ्याट दर्ताको प्रमाणपत्र, एजेन्सी दर्ताको प्रमाण पत्रको प्रतिलिपि, Authorization Letter/ Manufacturing Authorization, कर चुक्ता प्रमाणपत्रको प्रतिलिपि (आ.व.०७८/०७९ सम्मको) समावेश गरी सार्वजनिक खरिद नियमावली, २०६४ को नियम ३१(ख) बमोजिम देहायको एक्सरे मेसिन र सि.आर. सिस्टमको गुणस्तर विवरण (क्याटलग वा ब्रोसर) संलग्न राखी यो सूचना प्रकाशन भएको मितिले १६ औं दनिको १२:०० बजे भित्र यस नगरपालिकाको कार्यालयमा सिलबन्दी गरी प्रस्ताव दर्ता गर्नहुन सम्बन्धित उत्पादक वा आधिकारिक विक्रेताहरुको जानकारीको लागि यो सूचना प्रकाशित गरिएको छ।

तपसिलः

क्र.सं.	ठेक्का नं.	सामानको नाम	संक्षिप्त विवरण	प्रस्ताव दस्तुर	एकाई	परिमाण	प्रस्ताव खोल्ने मिति, स्थान र समय
१	SM/G/CS/02/2079/080	एक्सरे मेसिन र सि.आर. सिस्टम (X-ray Machine with CR System)	As per Technical Specification	१०००	सेट	१	मिति २०७९/१०/२० दिउँसोको १४: ०० बजे षडानन्द नगरपालिकाको कार्यालय, दिङ्गला, भोजपुर

नोटः- Technical Specification नगरपालिकाको वेभसाईट www.shadanandamun.gov.np बाट डाउनलोड गरी प्राप्त गर्न सकिने छ ।

विनोद कुमार भण्डारी
प्रमुख प्रशासकीय अधिकृत

विनोद कुमार भण्डारी
प्रमुख प्रशासकीय अधिकृत

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TECHINICAL SPECIFICATION FOR X-RAY 500 MA

S. N.	Purchaser's Specifications(Sadananda Mun FY:79/80)	Bidder's Compliance Sheeet		
	X-ray,500ma	Yes/No	Page No. in Catalogue	Remarks
	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**			
3.1	X-ray Generator,1 unit			
3.2	X-Ray tube & tube support system, 1 unit			
3.3	Radiographic patient table, 1unit			
3.4	Chest stand, 1 unit			
4	**Technical Specifications**			
I	**X-ray Generator:** 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 at least 40kHz.			
4.2	Generator Output: not less than 30 kW (500mA at 100kV)			
4.3	Radiographic voltage: 40 kV to 120kV, in 1kV step or better			
4.4	Radiographic current: 10 to 500mA or better			
4.5	Exposure time: 0.01sec (1msec) - 6sec or better			
4.6	Anatomical Programmable Radiographic modeadds advantage.			
4.7	Shall come with overload protection device.			
4.8	Power supply: 3-phase.415V or single phase/			
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.			
4.13	Maximum tube output shall match with the generator output of not less than 30 KW.			
4.14	Filtration: min 2.5mm Al equivalent.			
4.15	Cooling method passive or forced air and/or oil cooling.			
4.16	Anode rotating speed: More than 3000 rpm.			
4.17	Anode heat capacity shall not be less than 150 KHU.			
III	**Radiography Patient Table:(approx.)**			
4.18	Radiography table shall be fixed height or height adjustable, Fixed or 4-way floating top type .			
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 to 14"x17" type.			
4.21	Radiography table shall be fixed height of about 60cm.			
4.22	Table top to film distance: approx. 6cm.			
IV	**Chest Stand:(approx.)**			
4.28	Vertical travel: from 460-1700mm or in the range.			
4.31	Cassette size: accept all sizes from 5"x7" to 14"x17".			
V	**Floor Mounted Tube Stand:(approx.)**			
4.33	Longitudinal travel: approx. 1750mm.			
4.34	Vertical travel: from 630 -1850mm or in the range.			
4.35	Rotation of tube arm around vertical axis: 180^0; lockable at 0^0 to +/- 90^0.			
VI	**Collimator:**			
4.37	Manually adjustable.			
4.38	Manually selectable filters.			
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	Display of mA,Kv,mAs			
4.44	Minimum 3 Point Exposure Technique.			

Biomedical Engineer

Binod Kumar Bhandari
Administrative Officer

S. N.	Purchaser's Specifications(Sadananda Mun FY:79/80)	Bidder's Compliance Sheeet		
	X-ray,500ma	**Yes/No**	**Page No. in Catalogue**	**Remarks**
4.45	Status display, error display.			
5	**Accessories, Spare Parts and Consumables**			
5.1	**Accessories:** • Lead apron, light weight with Lead equivalence 2mm-01 nos.Lead glass 1x1 foot			
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.			
6.2	Power supply: 220V 1-phase 50Hz fitted with appropriate plug for X-ray generator fitted with appropriate plug for other units. The power cable must be at least 3 metres in length.			
7	**Standards & Safety Requirements**			
7.1	Must submit ISO 13485:2003/AC: 2007 **AND**			
7.2	CE (93/42 EEC Directives) or AERB OR USFDA approved product certificate.			
7.3	Shall meet: • IEC 60601-1-3 - Part 1: General Requirements for safety - Collateral Standard: General Requirements for Radiation Protection in Diagnostic X-Ray Equipment. • IEC 60601-2-7 - Part 2-7: Particular Requirements for the Safety of High-Voltage Generators of Diagnostic X-Ray Generators.			
8	**User Training**			
8.1	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.			
9	**Warranty**			
9.1	Comprehensive warranty for 2 years from acceptance.			
10	**Maintenance Service During Warranty Period**			
10.1	During warranty period supplier must ensure preventive maintenance & corrective/breakdown maintenance whenever required.			
11	**Installation and Commissioning**			
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.			
12.3	List of important spare parts and accessories with their part numbers and costing.			
12.4	Certificate of calibration and inspection from factory.			

Bidder must completely fill the Technical Specification Form (TSF). Only Yes/no/all complies should not be written. Page number 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.

Er.Kushal Dahal
PHLMC-I
Biomedical Engineer

Binod Kumar Bhandari
Chief Administrative Officer

Technical specification of Computed Radiography (CR) System

S.N.	Purchaser's Specifications(Sadananda Mun FY:79/80)	Bidder's Compliance Sheeet		
	Computed Radiography (CR) System	**Yes/No**	**Page No. in Catalogue**	**Remarks**
	Manufacturer			
	Brand			
	Type / Model			
	Country of Origin			
1	**Description of Function**			
a.	Radiography system to replace conventional Film/Screen based X-Ray processing techniques with Photostimulable Phosphor Plate technology to obtain digital X-ray images.			
2	**Operational Requirements**			
a.	The system shall be able to record X-Ray images on Imaging Plates (IP)			
b.	Convert these images from the IP into digital values and transfer these values to an image evaluation computer with predefined Image Processing Parameters.			
c.	Operationally and functionally equivalent to and,better than the present film based system.			
3	**System Configuration**			
a.	Image Reader system: 01			
b.	CR Workstation: 01			
c.	RIS Interface: 01			
d.	Remote ID and Preview station: 01			
e.	Archiving System: 01			
f.	Dry imaging printer(film based), and double tray type :01			
4	**Technical Specifications**			
4.1	**Image Reader**			
a.	IP processing rate minimum 70 films/hr or more for 14 x 17 inches cassette.			
b.	Scanning mechanism to read, erase and process the images from the imaging plate. (IP)			
c.	Panel for indicating online status of the CR Reader in case of machine malfunction			
d.	Emergency Mode for accepting exposed cassettes without patient demographics for casualty trauma workflow requirements			
e.	Verification of the connectivity status of configured image destination			
f.	Spatial resolution of digital image approx.6-10 pixels/mm.			
g.	CR System should have data acquisition of 14 bits or more			
h.	X-Ray Generator compatibility with reputed manufacturers.			
i.	CR system should have the capability of processing the cassettes both in standard and high speed mode.			
j.	Image matrix at standard resolution (14 x 17) - approx. 3000 x 4000 Row x Column			
4.2	**CR Workstation:**			
a.	Capable of Archiving and printing selected images to a standard DICOM destination in DICOM 3.0 format			
b.	Storing images in the local disk for predefined period.			
c.	Sorting of patient image based on name, date, exam etc.			
d.	Using predefined parameters or user defined and stored image parameters			
e.	Correcting typographical in patient demographic module, in case RIS connection was down and manual data entry was done.			
f.	Capability of changing R/L, Flipping, Rotating, Zooming, Collimating, annotating the incoming image.			
g.	Multi-image and slide formats			
h.	Capability of storing in CD/DVD.			
i.	Software for Advance Image processing, applications, display and quality monitoring.			
j.	Connectivity and compatibility to communicate to RIS/HIS and DICOM Compatible devices such as MR/CT/DSA Work station,			
k.	Must provide for HL-7 compatible or equivalent interface			
l.	Scanning gray scale resolution- 14bits/pixel or more.			
4.3	**Console:**			
a.	Software should have graphic selection to allow quick and easy picking of body parts and views			
b.	Software should have minimum 4 web enablement license for viewing of images to enhance productivity or equivalent system.			

Biomedical Engineer
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...inod Kumar Bhandari
...strative Officer

Technical specification of Computed Radiography (CR) System

S.N.	Purchaser's Specifications(Sadananda Mun FY:79/80)	Bidder's Compliance Sheeet		
	Computed Radiography (CR) System	**Yes/No**	**Page No. in Catalogue**	**Remarks**
c.	Multifunctional console having all image optimization and post processing software like zooming, annotation, flipping, windowing and centering.			
d.	Additional computer with necessary software should be provided at the reception to feed the patient information to help ease the workflow.			
e.	Approx.19" LCD Monitor with CPU.			
4.4	**Dry imaging printer(film based) 1unit:**			
a.	Print images from CR workstation, in DICOM 3 format.			
b.	Printer should provide image depth of 14 bits or more			
c.	Mechanism to print images to 14x17 and 8x10 film sizes simultaneously.			
d.	Docked in processor.			
e.	Resolution> 500 DPI.			
f.	Processing capacity should be more than 80 films/hour or more for 14x17 inch film size			
g.	Shall be able to switch between Receiver Mode and Processor mode.			
h.	Printer should have dry Laser imager Technology			
4.5	**IP/Cassettes size:**			
a.	CR system should be provided with the following cassettes and imaging plates.			
b.	14 x 17 in: 1 Pcs.			
c.	10 x 12 in: 1 Pcs.			
d.	8 x 10 in: 1 Pcs.			
5	**Accessories, spares and consumables**			
5.1	**Accessories:**			
a.	**Computer and Printer**			
b.	At least Latest model Computer having Intel i3 processor and 4 GB RAM , 500GB storage and approx. 19"LCD Monitor- 1 set			
c.	Must provide online UPS for at Least 2 hour battery backup.			
d.	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.			
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.	Power supply: 220 - 240 VAC, 50Hz fitted with appropriate plug.			
7	**Standards and Safety Requirements**			
a.	Must submit ISO13485:2003/AC:2007 for Medical Devices **AND**			
b.	CE (93/42 EEC Directives) or USFDA approved product certificate			
c.	Electrical safety conforms to standards for electrical safety IEC 60601-1 General requirement for Electrical safety of Medical Equipment.			
8	**User Training**			
a.	Must provide user training (including how to use and maintain the equipment).			
9	**Warranty**			
a.	Comprehensive warranty for 2 years after acceptance.			
10	**Maintenance Service During Warranty Period**			
a.	During warranty period supplier must ensure preventive maintenance & corrective/breakdown maintenance whenever required			
11	**Installation and Commissioning**			
a.	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**			
a.	User (Operating) manual in English			
b.	Service (Technical / Maintenance) manual in English.			
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