



**SPECIFICATIONS FOR  
TENDER # 0571-1707  
SUPPLY OF MOBILE C-ARM RADIOGRAPHY/FLUOROCOPY SYSTEM  
FOR  
WESTERN HEALTH**

**CLOSING DATE:** April 21, 2017

**CLOSING TIME:** 2:00 PM (Newfoundland Time)



## **Invitation to Tender for : MOBILE C-ARM RADIOGRAPHY/FLUOROCOPY SYSTEM**

### **1.0 General Provisions**

#### **1.1 Intent**

This invitation to Tender is intended to obtain a **MOBILE C-ARM RADIOGRAPHY/FLUOROCOPY SYSTEM** for the Western Regional Health Authority (Western Health) for use at the Sir Thomas Roddick Hospital.

This Tender is concerned with the acquisition and with consideration of the following:

- Ongoing service and maintenance support.
- All manuals, documents and initial supplies.
- The right to reproduce any printed materials supplied with the product for the purpose of using the product.
- Training and training manuals.
- Future enhancement availability.

1.1.1 Western Health reserves the right to order additional units at the same price for a period up to and including 31 December 2017. Other Newfoundland Health Authorities will have the right to avail of this tender with written notice to the awarded vendor.

#### **1.2 Client Background**

Western Health was established in 2005 and is responsible for the delivery of Health and Community Services in the Western Region.

### 1.3 Vendor Response

- 1.3.1 Vendor's tender must contain an Executive Summary which shall contain:
  - a. A brief description of the product being quoted.
  - b. The name, title and address of the Vendor's representative responsible for the preparation of the Tender.
- 1.3.2 All prices quoted for goods and services must be specified in Canadian dollars, FOB Western Health Site. All Tenders will be held to be valid for ninety (90) days following the Tender closing date.
- 1.3.3 Tenders must be received in full on or before the exact closing time and date indicated. **TENDERS RECEIVED AFTER THAT TIME WILL NOT BE CONSIDERED.**
- 1.3.4 All costs relating to the work and materials supplied by the Vendor in responding to this Invitation to Tender must be borne by the Vendor.

### 1.4 Release of Information

#### 1.4.1 While Tender is Open:

Potential vendors can request information on the technical requirements or the bidding process. The names of individuals or companies who have picked up the tender documents will **not** be released.

#### 1.4.2 At Tender Opening:

Only the names of the bidders will be read out.

#### 1.4.3 After Tender Opening:

- 1. No further information will be released until after the contract is awarded.
- 2. After award, only the name and bid price of the successful bidder will be made available.
- 3. Information will be made available for a 90 day period only.
- 4. Successful Awards will be posted on Web Site.

**1.4.4 FYI, Statements that are included as part of our Tender calls:**

While bidders are welcome to attend the public opening, please be advised that it is not our policy to release bid information. Only the names of the bidders will be released.

**1.5 Communication During Tendering:**

- 1.5.1 All communications with Western Health with respect to this invitation to Tender must be directed in writing to the attention of:

Mr. Paul Wight  
Regional Director, Materiel's Management  
Western Health  
1 Brookfield Ave.  
Corner Brook, Newfoundland  
A2H 6J7  
Tel: (709) 637-5511  
Fax: (709) 634-2649  
Email: paulwight@westernhealth.nl.ca

- 1.5.2 Western Health may, during the assessment period, request meetings with the Vendors to clarify points in the Tender. No changes by the Vendor will be permitted after the Tender closing date.
- 1.5.3 Faxed Tender responses will be accepted with the condition that the original Tender documents are received at Western Health's Materiel's Management Department no later than **Five** working days following the Tender closing date.
- 1.5.4 All bids must be sent in a sealed envelope clearly marked with Tender Name and Number to: Materiel's Management Department, Western Health, Western Memorial Regional Hospital, 1 Brookfield Ave., Corner Brook, NL A2H 6J7.
- 1.5.5 Bids submitted by electronic transmission (e-mail) will not be accepted.

- 1.5.6 Companies submitting fax Tenders are doing so at their own risk and the fax Tender must be at the public opening as specified in the Tender information. This Authority will not be responsible for in-house courier services if companies submit quotations by fax machine. The time stated on the fax Tender will become null and void since it is the responsibility of the company placing the Tender to have their Tender at the public opening, therefore, this Authority will not be responsible for any damages or liabilities.
- 1.5.7 In order to contribute to waste reduction and promote environmental protection, the Western Health will endeavour to acquire goods and services that support these principles, therefore, product(s) quoted should include:
- maximum level of post-consumer waste and/or recyclable content
  - minimal packaging
  - minimal environmental hazards
  - maximum energy efficiency
  - potential for recycling
  - disposal costs
  - must not reduce the quality of the product required or affect the intended use of the product
  - must not significantly impact the acquisition cost

## **1.6 Tender Acceptance**

- 1.6.1 Any acquisitions resultant from this invitation to Tender shall be subject to the Public Tendering Act.
- 1.6.2 The Tenders shall be opened in the Private Dining Room at The Western Memorial Regional Hospital on the scheduled date and time.
- 1.6.3 Any Tender may be accepted in whole or in part. The lowest Tender may not necessarily be accepted and Western Health reserves the right to cancel the Tender call. Western Health shall not be held responsible or liable for the payment of any costs that are incurred by the bidder in preparing a Tender in response to this invitation to Tender.

## **1.7 Warranty**

The Vendor shall warrant that the product supplied to Western Health shall equal the published specifications.

The Vendor shall provide no less than a 1-year warranty on the system.  
The Vendor agrees to provide free of charge all parts and labour necessary to repair the system during the first year of operation.

## **2.0 Product Specifications**

**The product must meet the specifications as listed schedule A .**

## **3.0 Presentation / Training / Service**

### **3.1 Presentation**

A presentation of the Tender and / or a demonstration of the product / system shall be provided, if requested, at the Vendor's expense.

### **3.2 Training**

The Vendor shall provide on-site training to staff in the use of the **Phototherapy Cabinet**. All costs associated with this training shall be included in the total Tender price. The length of such training shall be what is reasonably required to train the users of the equipment and shall be documented.

### **3.3 Service**

3.3.1 The Vendor shall confirm in writing that Parts and Labour will be available for the quoted system for not less than nine (9) years after the warranty period.

3.3.2 The Vendor shall provide as an option, pricing for a one-year Service Contract including all parts and labour.

3.3.3 The Vendor shall provide all Service and Parts manuals required to service the equipment.

## **4.0 Product History and Vendor Reputation**

4.1 The Vendor shall provide a list of three (3) organizations where a similar Unit has been installed. Include a contact person for each organization.

## **5.0 Financial Considerations**

5.1 All applicable taxes shall be indicated in the Tender.

5.2 The cost for installation, initial set-up and programming shall be included in the Tender price.

5.3 All costs for training shall be included in the Tender. This includes any travel, meals and accommodation.

5.4 **Terms of Payment**

The Authority agrees to pay the full invoiced amount within 30 days following acceptance of the installed system by Western Health. Acceptance testing will be completed within 30 days following the complete installation of the system.

6.0 **Vendor Confirmation** (please sign)

I confirm that our Tender meets or exceeds the specifications detailed in this invitation to Tender. I also confirm that all specifications are included in the quoted price. Any items that are optional are noted accordingly.

Signed \_\_\_\_\_

Title \_\_\_\_\_

Company Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Phone \_\_\_\_\_

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**Specifications:**

Western Health invites interested vendors to provide Bids on a mobile C-Arm Radiography/Fluoroscopy System for use at the Sir Thomas Roddick Hospital

If Central Health, Eastern Health or Labrador Grenfell Health would like to participate in this contract will you protect your pricing and allow any of the other three Newfoundland and Labrador Health Authorities to opt into this contract with thirty

(30) days written notice with all pricing and Terms and Conditions remaining unchanged as per this bid response?

☐ Yes ☒ No

## **Mobile Analog C-Arm Radiography/Fluoroscopy**

### **SPECIFICATIONS:**

The Mobile Analog C-Arm Radiography/Fluoroscopy System **must:**

Be ergonomically designed and enable mobile fluoroscopy and radiography of the complete skeletal, chest and abdominal organs.

Yes ☐ No ☐

The system must have sufficient capability to provide high quality imaging on large and small clients, with no, or minimal deterioration in image quality.

Yes ☐ No ☐

The system must provide full output from standard wall outlet.

Yes ☐ No ☐

The system must have a minimum of 30" free space between the x-ray tube and the image receptor.

☒ Yes ☒ No

The C-arm must provide a minimum of 115 degree C-arm orbital rotation, 90 degree under - and 40 degree over scan capabilities.

☐ Yes ☐

No

The system must allow user to reverse the x-ray tube and I.I positions and maintain C-arm under-scan and over-scan capabilities.

☐ Yes ☐

No

The C-arm must be able to rotate 180 degrees to facilitate angled projections.

Yes ☐ No ☐



The system must have a minimum of 16" of vertical C-arm travel for height adjustment.

Yes ☐ No ☐

The C-arm must provide side-to-side movement and horizontal travel to allow for "panning" during imaging.

Yes ☐ No ☐

The C-arms must counter balance in all positions.

Yes ☐ No ☐

Please specify:

Distance between tube and I.I. \_\_\_\_\_

Dept of Arc \_\_\_\_\_

Orbital Rotation \_\_\_\_\_

### GENERATOR REQUIREMENTS:

The generator must be a 40 KHz or higher high frequency inverter type.

Yes ☐ No ☐

The output power rating of the generator must be 10 kW or greater.

Yes ☐ No ☐

The system must operate at full capacity on 120Volts AC, 15 amps.

Yes ☐ No ☐

The generator must be capable of providing a high dose fluoroscopic exposure at a minimum of 10mA

Yes ☐ No ☐

The generator must be capable of providing pulse fluoroscopy. The minimum pulse rate must not be less than four pulses per second.

Yes ☐ No ☐

The generator must be capable of pulsing 30 pulses per second to reduce imaging lag caused by patient motion or C-arm movement.

Yes ☐ No ☐

The generator must meet the following minimum power requirements:

Radiographic ☐p range: 40 – 110 kVp

Yes ☐ No ☐

Radiographic mA range: 30 mA or higher

Yes ☐ No ☐

Fluoroscopic mA range 1-5 mA

Yes ☐ No ☐

Fluoroscopic kVp range 40 – 110 kVp

Yes ☐ No ☐

The vendor must complete the following;

Trade name of quoted generator: \_\_\_\_\_

▪ kW: \_\_\_\_\_

KHz high frequency: \_\_\_\_\_

kVp range: \_\_\_\_\_

Fluoroscopy mA range: \_\_\_\_\_

Pulsed fluoroscopy in pulses per second: \_\_\_\_\_

Digital spot maximum mA: \_\_\_\_\_

Pulsed fluoroscopy maximum mA at what PPS:

**X-RAY TUBE SPECIFICATIONS:**

The X-ray tube must be a dual focus stationary anode tube.

Yes

No

☐☐

The Vendor must complete the following:

Small focal spot size: \_\_\_\_\_

Large focal spot size: \_\_\_\_\_

Anode heat capacity: \_\_\_\_\_

Anode cooling capacity: \_\_\_\_\_

Cooling rate: \_\_\_\_\_

Housing heat capacity: \_\_\_\_\_

What protection is provided for tube overload?

#### IMAGING SYSTEM SPECIFICATIONS:

##### ACQUISITION:

Display of collimator position on the fluoroscopic image without radiation.

Control and display of opening and closing of the iris diaphragm on the monitor without radiation.

State type of video capture device.

Monitors:

State resolutions of monitor: \_\_\_\_\_

Single or dual monitors? \_\_\_\_\_

State size of monitors. \_\_\_\_\_

Are the monitors anti-glare?

Yes ☐ No ☐

#### DIGITAL IMAGE PROCESSING SPECIFICATIONS:

Automatic brightness control: Yes No

Noise filter: Yes No

Motion artifact and noise reduction: Yes ☐ No

Edge enhancements: Yes No

Maximum Image Storage: Yes No

Last Image Hold: Yes No

Patient Information annotation: Yes No

Dose summary: Yes No

#### SYSTEM FUNCTIONS AND IMAGE MANAGEMENT SPECIFICATIONS:

The system must provide a simple method to input patient information.

Yes No

The system must allow for the change of image orientation on the display screen during exposure or using the last image hold. Functions should include: image rotation, left to right and top to bottom image reversals.

Yes ☐ No ☐

The system must provide a DICOM 3.0 interface capability that can be connected to the Hospital's network to facilitate the transfer of images for archiving and print purposes.

Yes ☐ No ☐

#### NETWORKING SPECIFICATIONS:

The system must be PACS/ DICOM 3.0 compatible/ compliant.

Yes ☐ No ☐

The system **MUST** support the following DICOM 3.0 interfaces.

- |  |                                     |                                    |
|--|-------------------------------------|------------------------------------|
| ▪ DICOM print/ store:                      | Yes <input type="checkbox"/>        | No <input type="checkbox"/>        |
| ▪ DICOM Modality Worklist Management:      | Yes <input type="checkbox"/>        | No <input type="checkbox"/>        |
| ▪ DICOM Send/ receive:                     | Yes <input type="checkbox"/>        | No <input type="checkbox"/>        |
| ▪ DICOM Query/retrieve:                    | Yes <input type="checkbox"/>        | No <input type="checkbox"/>        |
| ▪ DICOM Modality Performed Procedure Step: | <b>Yes</b> <input type="checkbox"/> | <b>No</b> <input type="checkbox"/> |

#### ERGONOMICS:

The Vendor **WILL** be required to provide a two week on site evaluation of the proposed system.

Yes ☐ No ☐

Please list ergonomic advances of the quoted units:

Unit Movement:

C- Arm movement:

Technical Controls:

Locks:

Positioning:

Bidders **must** complete and submit the Bid Sheet. Type or legibly print the information required on the Bid Sheet. All questions or areas on the Bid Sheet must be answered, even if it is only to indicate that the referenced item is not available; blank items will be assumed to be unavailable and may result in rejection of the Bid. Where yes/no questions are asked and the space is left blank by the Bidder, the assumption will be that the answer to the question is no.

## **MOBILE C-ARM RADIOGRAPHY/FLUOROCOPY SYSTEM**

Mobile Analog C-Arm Radiography/Fluoroscopy Unit Price:

\$ \_\_\_\_\_

### **OPTIONS:**

**In your tender response please include pricing for the following options as a separate line item from the price of the unit.**

Training of In-house Bio-Med technologist to service unit.      \$ \_\_\_\_\_

Please list optional pricing for 12" tri-mode image intensifier      \$ \_\_\_\_\_

Five year post-warranty, service contract.

Year 1:      Full                              Shared

Year 2:

Year 3:

Year 4:

Year 5:

**Failure to submit this signature page will render the bid NON-COMPLIANT and bid will be disqualified.**

Required Signature:

\_\_\_\_\_  
Authorized Company Representative Signature Date Vendor Information:

Company Name and Address:

Telephone Number

Fax Number

Email

Web Address:

IN SIGNING THIS PAGE AND SUBMITTING YOUR BID, BIDDER ACKNOWLEDGES  
HAVING READ, UNDERSTOOD AND AGREED TO THE TERMS AND CONDITIONS  
IN THIS DOCUMENT.