

**(UNDER JURISDICTION OF SINGRAULI COURT ONLY)**

नॉर्दर्न कोलफील्ड्स लिमिटेड  
(मिनिरातना कंपनी)  
(कोल इण्डिया लिमिटेड की अनुषंगी  
कंपनी)



**Northern Coalfields Limited**  
**(A Miniratna Company)**  
(A subsidiary of Coal India Limited)

**Materials Management Department**



**CIN- U10102MP1985GOI003160**

**An ISO: 9001, ISO: 14001 & OHSAS: 18001 Certified Company**

पोस्ट- सिंगरौली कोलियरी, जिला- सिंगरौली, म.प्र., पिन 486889/ Post- Singrauli Colliery, Distt- Singrauli, M.P. PIN-486889

Phone: 07805- 266388, (FAX) 266640 email: [gmmm@ncl.gov.in](mailto:gmmm@ncl.gov.in) website : [www.nclcil.in](http://www.nclcil.in)

Ref. No. 63834005 /216A1064

Date: 14/16.04.2018

**FORMAL ORDER**

To

M/s. Konica Minolta Healthcare India Pvt. Ltd. , Office No. 201, 2 <sup>nd</sup> Floor ,Atrium 2, Andheri, Kurla Road , Chakla , Andheri (E), Mumbai – 400 059	<b>Fax No.:</b> 22-61916996 PCC: BY REGISTERED POST Vendor Code : Being communicated separately Type of tender: Open(Domestic) Type of Vendor – Trader ( category- Gen.)
---	--

Sub :This office E-Procurement Tender No. NCL/SGR/MMD/216A1064/51 dtd. 06.09.2016 for supply of Computed Radiography Unit & 2D Colour Doppler Ultrasound Machine (Tender ID:2016\_NCL\_47892\_1 ).

Ref: Your offer submitted on e-procurement portal (Bid ID : 38763 submitted on 4.10.2016 )  
:Your price justification letter No. KMHI/West/NCLCR/20170929 dtd. 29.09.2017 ,  
letter No. 20180125 dtd. 25.01.2018 and last letter No. 20180229 dtd. 02.04.2018.

Dear Sirs,

With reference to the above, we hereby place our Formal Supply Order on you for supply of the following material. The supply shall be governed by the specification, prices, terms & conditions mentioned here under and also unless otherwise specified as per General Terms & Conditions enclosed with the NIT.

**SCOPE OF SUPPLY:**

Sl. No.	Description	Qty. (No)	Unit Basic Price (Rs.)	Ext. value (Rs.)
1.	Computed Radiography Unit Make-Konica Minolta, Inc, ,Japan Model: a) Direct Digitiger- Regius Model-110HQ, b) work station- Regius CS7, c)Laser Iimager- Drypro Model 873 (Detailed Technical Specifications as per Enclosed Annexure-I)	01	1280000.00	1280000.00
2	2D Colour Doppler Ultrasound Machine Make: Sonoscape, China Model: S22 (Detailed Technical Specifications as per Enclosed Annexure-I)	01	1453125.00	1453125.00
Total Amount				27,33,125.00
<b>Rupees Twenty Seven Lakh Thirty Three Lakhs One Hundred Twenty Five only</b>				

**TERMS & CONDITIONS:**

**Basis of Price :** Prices are on FOR destination basis inclusive of Packing & Forwarding , Freight & Insurance charges up to destination. The prices shall remain firm till completion of supplies.

**GST** : GST shall be payable extra at actuals at legally applicable rate at the time of supply , which is presently applicable as GST@ 12% .

**Installation & Commissioning** - Installation and commissioning of the equipment at site will be done by you free of cost. The Installation of Equipment will be done at Nehru Shatabdi Chikitsalaya, Jayant. Installation / Inspection Report to this effect would be issued by CMS, NCL, Singrauli or his authorized representative.

**DELIVERY PERIOD**:- Within 120 days from the date of issue of this supply order . No materials should be supplied beyond the specified delivery period unless amendment for extension of delivery period is obtained from the purchaser i.e. NCL.

**CONSIGNEE**:- CMS (Stores), Nehru Shatabdi Chikitsalaya (NSC), PO: Jayant Colliery, Distt.: Singrauli (M.P.) Pin.:486 890.

**SECURITY DEPOSIT**: You will be required to submit Security deposit @ 10% of the total value of the equipment on FOR Destination (Landed Value including CAMC charges) i.e. Rs. 4,28,830.00 at NSC, Jayant in the form of Demand Draft in favour of Northern Coalfields Limited payable at NSC, Jayant within 15 days of issue of supply order. The Security Deposit can also be submitted in the form of Bank Guarantee of any schedule Bank as per the format enclosed (Annexure-II) & it shall remain valid for a period of minimum 06 months from the date of its issue.

Note : In case, Security Deposit is submitted in the form of Bank Guarantee, the followings may pl be noted :

- i. The Bank Guarantees should be issued through Structured Financial Messaging System.
- ii. Beneficiary bank / branch IFSC Code: ICICI0003529 should be mentioned.
- iii. Beneficiary Bank / Branch Name & address should be mentioned as ICICI Bank Ltd., Singrauli Branch, Plot No. 86, Opp. Post Office, Ward No. 3, Morwa, Tehsil Singrauli, Madhya Pradesh – 486889
- iv. If the Bank Guarantee is issued by ICICI Bank branches, the following may please be incorporated:

“We shall be liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if you serve upon us a written claim or demand on or before ..... at ICICI Bank Ltd., Plot No. 86, Opp. Post Office, Ward No. 3, Morwa, Tehsil Singrauli, Madhya Pradesh – 486889.”

Security Money shall be refunded within 30 (thirty) days of satisfactory execution of the contract. For unsatisfactory performance and/or contractual failure, the security money shall be forfeited.

**PAYMENT TERMS:**

**(i) For Equipments:-**

(a) 80% payment including all taxes and duties shall be arranged by the concerned paying authority of the consignee within 21 days after delivery of the equipment along with accessories and receipt and acceptance of PBG @ 10% of order value and CAMC agreement or the date of submission of bill(s) whichever is later.

(b) Balance 20% payment shall be released within 21 days after successful installation/ commissioning of the equipment.

Ref. No. 63834 /216A1064  
M/s. Konica Minolta Healthcare India Pvt. Ltd.

Date: 14.04.2018

(ii) For CAMC Charges:-Payment for CAMC charges is to be released on yearly basis within 21 days of submission of bill and on receipt of satisfactory compliance report from user hospital. The payment shall be made by Electronic Fund Transfer (EFT) or e-payment.

Bankers Name, Address & Account No.:- HDFC Bank Ltd, J B Nagar , Sahar Plaza, J B Nagar, Andheri - Kurla Road, Andheri (East), Mumbai - 59. Current Bank Account No. 602320020186 , IFSC Code HDFC0001204

**PAYING AUTHORITY:** The Area Finance Manager, Nehru Shatabdi Chikitsalaya, Jayant, Northern Coalfields Limited, P.O.: Jayant Colliery, Distt.: Singrauli (M.P.)-486 890.

**SUBMISSION OF BILLS:** Initially bill for 80% amount with taxes & duties ,duly stamped and pre-receipted shall be submitted in triplicate to the Paying Authority with the following documents:

- (i) Consignment Note.
- (ii) Challan.
- (iii) Copy of Bills.
- (iv) Guarantee/Warranty Certificate.
- (v) Performance Bank Guarantee @ 10%.
- (vi) Bi-partite CAMC Agreement.
- (vii) Copy of the Inspection Note.
- (viii) Any other document required as per order duly authenticated.

Note:- A set of above documents should be submitted to the consignee.

After installation & commissioning of microscopes , bill for balance 20% amount, duly stamped and pre-receipted shall be submitted in triplicate to the Paying Authority alongwith installation certificate.

**Submission of Import Document** – Since both the ordered items are imported in nature, firm shall be required to submit the following documents as per NIT with each supply:

- (i) Self attested copy with original principal's invoice / packing list
- (ii) Self attested copy of Bill of Lading/Airway Bill
- (iii) Self attested copy with original Bill of Entry.
- (iv) As per contractual requirement (If any) guarantee/warranty certificate
- (v) Certificate of Origin

Firm shall be required to provide clear linkage of items as per order with documents furnished under clause (i),(ii) & (iii) .

The originals mentioned under (i) & (iii) shall be returned back to the firm after verification and endorsement.

Besides the above, firm shall also be required to submit a certificate from the Auditor of the bidder/supplier certifying that the custom duty has been paid as per prevailing Custom Rates and refund, if any, shall be passed on to the buyer. In case country of origin is indicated in the packing list/ principal's invoice, separate country of origin certificate shall not be required.

**PACKING:** Material should be properly packed in cartoon Boxes to avoid damage of the content during transit Packing of all the materials shall conform to the requirements of the carriers.

**MODE OF DESPATCH :** Road transportation on Door Delivery basis at your risk.

**LOWEST PRICE CERTIFICATE:** You shall certify on the body of each bill that the “prices charged are the lowest and is the same as applicable to other Government departments / Public Sector Undertakings, CIL and its subsidiaries & other Organisations”.

**INSPECTION:** Final Inspection shall be carried out by the consignee or his authorized representative at the site of consignee and the same shall be final. The stores found defective or not in accordance with the supply order specification will be rejected and intimated for free replacement within 30 (thirty) days from the date of intimation.

**RISK PURCHASE:** In the event of failure of supplier to deliver or dispatch the stores within the stipulated date / period of the supply order, or in the event of breach of any of the terms and conditions mentioned in the supply order, Northern Coalfields Limited have the right to purchase the stores from elsewhere after due notice to the defaulting supplier at the risk and cost of the defaulting supplier. It is mentioned clearly that in the event of failure of the supplier as detailed above, the cost as per risk purchase exercise may be recovered from the bills against any other supplies pending at NCL and also in any other Subsidiary Company/Coal India Ltd.

**LIQUIDATED DAMAGE CLAUSE:** In the event of failure to deliver the stores within the stipulated date/period in accordance with the samples and/or specification mentioned in the supply order and in the event of breach of any of the terms & conditions mentioned in the supply order, NCL shall have the right:

- a. To recover from the successful tenderer as agreed liquidated damages, a sum of 0.5% (half percent) of the price of any stores which the successful tenderer has not been able to supply as aforesaid for each week or part of a week during which the delivery of such stores may be in arrears limited to 10% (ten percent). Where felt necessary the limit of 10% can be increased to 15% at the discretion of Head of the Materials Management Division.
- b. Or to purchase elsewhere after due notice to the successful tenderer on the account and at the risk of the defaulting supplier the stores not supplied or others of similar description without canceling the supply order in respect of the consignment not yet due for supply or
- c. To cancel the supply order or a portion thereof and if so desired to purchase the stores at the risk and cost of the defaulting supplier and also
- d. To extend the period of delivery with or without penalty as may be considered fit and proper the penalty, if imposed shall not be more than agreed liquidated damage referred to in clause (a) above,
- e. To forfeit the security deposit fully or partly
- f. Whenever under this contract, a sum of money is recoverable from and payable to the suppliers, NCL shall be entitled to recover such sum by appropriating in part or in whole for deducting any sum or at any time thereafter may become due to the successful tenderer in this or any contract should this sum be not sufficient to cover the full amount recoverable, the successful tenderer shall pay NCL on demand the remaining balance. The supplier shall not be entitled to any gain on any such purchase.

**FORCE MAJEURE:** If the execution of the contract/supply order is delayed beyond the period stipulated in the contract/supply order as a result of outbreak of hostilities, declaration of an embargo or blockage or fire, flood, acts of nature or any other contingency beyond the supplier's control due to act of God, then the NCL may allow such additional time by extending the delivery period as he considers to be justified by the circumstances of the case and its decision in this regard shall be final. If and when additional time is granted by the purchaser, the contract/supply order shall be read and understood as if it had contained from its inception the delivery date as extended. Power failure will not be considered as a force majeure conditions.

- (a) The successful bidder will advise, in the event of his having to resort to this clause, by a registered letter, duly certified by the local chamber of commerce, or statutory authorities, the beginning and end of the causes of the delay, within 15 days of the occurrence and cession of such force majeure conditions. In the event of delay last out of force majeure,

NCL will reserve the right to cancel the contract, and provisions governing termination of contract as stated in the bid documents will apply.

- (b) For delay arising out of Force majeure, the bidder will not claim any extension in completion date for a period exceeding the period of delay attributable to the causes of force majeure and neither NCL nor the bidder shall be liable to pay extra cost provided it is mutually established that the force majeure conditions did actually exist.

**Comprehensive Annual Maintenance Contract(CAMC)**

The following will be the charges for CAMC for 08 years will start after successful completion of 02 years warranty period ;

Item Sl. No.	1 <sup>st</sup> Year (after warrantee period of 02 years)	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> Year	7 <sup>th</sup> Year	8 <sup>th</sup> Year
1	50000.00	50000.00	50000.00	50000.00	50000.00	50000.00	50000.00	50000.00
2	80000.00	80000.00	80000.00	80000.00	80000.00	80000.00	80000.00	80000.00

GST as applicable during CAMC period shall be paid extra. Present rate is 18.00%.

**The scope of work and penalty clause of this CAMC will be as under:-**

1. The CAMC will be effective from the day after successful completion of warranty/guarantee period of 02 years. Minimum 04 visits /annum (quarterly basis) is to be done with unlimited breakdown call to be attended.

(a) If the breakdown is attended and rectified within 120 hours (5 days) at our site, no penalty/deduction will be made from the CAMC bill.

(b) If it is not rectified within 120 hours (5 days) i.e. stipulated period at our site, deduction will be made @ double the prorata basis CAMC charges per day from the bill after allowing stipulated period of 120 hours i.e. 5 days.

(c) If the problems are required to be rectified at Principal/Dealer's /Indian Agent's site/workshop/premises, additional 7 days period will be allowed i.e. total 12 days from the date of initial break down report. Normal CAMC charges for additional 7 days period will be deducted from the bills of CAMC on prorata basis. If the equipment is not made available in all respect after rectification from the dealer's/Indian agent site / premises within 12 days, there will be a provision to deduct @ double the CAMC charges/day on prorata basis from the bills for the delayed period.

2. CAMC will be comprehensive and include supply of spare parts & other overhead costs with maintenance back-up , fitment, maintenance , repair of equipment , its part and accessories . Arrangement of spares will be the sole responsibility of the firm for which no extra charges will be paid to the party by NCL, as it has already been incorporated in CAMC Charges.

3. In the event of failure of the to execute the CAMC as per agreed NIT terms and conditions, the entire responsibility to execute the CAMC will be on your account.

4. In case the Principal/OEM changes the Dealer/Indian Agent, it will be the sole responsibility of the Principal/OEM to communicate the same immediately to NCL management to get the CAMC executed uninterrupted through their re-appointed/nominated Dealer/Indian Agent till CAMC period as per NIT. It will be the sole responsibility of the Principal/OEM to ensure that there is no discontinuation of the CAMC due to change/re-appointment of dealer / Indian agent etc. CMS NCL or his authorized representative will represent NCL for agreement and its further renewals.

**PRICE FALL CLAUSE:** You have to undertake that you have not supplied / is not supplying similar product/systems or subsystems at a price lower than that offered in the present Bid in respect of any other Ministry / Department of the Government of India or PSU and if it is found at any stage that similar product / Systems or Subsystems was supplied by you to any other Ministry / Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by you to the us.

**WARRANTY/GUARANTEE:** You will give a warranty for satisfactory performance of the supplied materials for a period of 24 months from the date of installation & commissioning or 30 months from the date of receipt and acceptance at consignee's end whichever is earlier. The supplier shall be responsible for any defect that may, under the condition provided for by the contract and under proper use, arise due to faulty materials, design or workmanship and shall remedy such defect his own cost. If it becomes so necessary for the supplier to replace or to renew any defective supply, such replacement or renewal shall be made by the supplier 100% free of cost without any extra cost to Northern Coalfields Limited. The new goods should be supplied on FOR destination basis free of cost..

Warranty replacement should be completed within a reasonable period maximum within one month from the date of claim free of cost up to ultimate Consignee's end. All cases of warranty replacements will be decided on the basis of joint inspection of the failed goods held between the user's representative and the supplier's representative.

**PERFORMANCE BANK GUARANTEE (PBG):** You are required to submit the Performance Bank Guarantee for 10% of the total value of the equipment on landed basis inclusive of applicable taxes & duties i.e. Rs. 4,28,830.00 at NSC, Jayant. The performance guarantee for 10% (ten percent) of order value will be taken in the form of a Bank Guarantee in Prescribed Format (Annexure-III enclosed) valid for warranty period of two years + CAMC period of 08 years (i.e. for 120 months) from the date of Installation/Commissioning of the Equipment at site to cover both satisfactory performance and warranty period.

You shall have the option to get converted the Security Deposit amount into the Performance Bank Guarantee or submit Performance Bank Guarantee separately. In case you get the security deposit converted into Performance Bank Guarantee and security deposit is less than the required Performance Bank Guarantee amount, you shall have to submit the separate Performance Bank Guarantee for the additional required amount. In case Performance Bank Guarantee is submitted separately, security deposit shall be released against submission of Performance Bank Guarantee.

The Performance Bank Guarantee shall be released after fulfillment of all contractual obligation including warranty / guarantee conditions stipulated in the contract. For unsatisfactory performance and/or contractual failure, NCL shall have the full right to invoke/encash the Performance Bank Guarantee.

The Performance Bank Guarantee shall be issued by a scheduled Bank in the format attached as Annexure-III and shall be irrevocable and unconditional and NCL shall have the powers to invoke/encash it notwithstanding any dispute or difference between supplier and NCL pending before the court, tribunal, arbitrator or any other authority.

Note : In respect to submission of Performance Bank Guarantee ,following may pl be noted :

- i. The Bank Guarantees should be issued through Structured Financial Messaging System.
- ii. Beneficiary bank / branch IFSC Code: ICICI0003529 should be mentioned.
- iii. Beneficiary Bank / Branch Name & address should be mentioned as ICICI Bank Ltd., Singrauli Branch, Plot No. 86, Opp. Post Office, Ward No. 3, Morwa, Tehsil Singrauli, Madhya Pradesh – 486889
- iv. If the Bank Guarantee is issued by ICICI Bank branches, the following may please be incorporated:

“We shall be liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if you serve upon us a written claim or demand on or before ..... at ICICI Bank Ltd., Plot No. 86, Opp. Post Office, Ward No. 3, Morwa, Tehsil Singrauli, Madhya Pradesh – 486889.”

In case, Security Money has been submitted in the form of Bank Guarantee, the same may be converted in to performance bank guarantee (PBG) for Equipment as well as towards CAMC. PBG should not be less than 10% of landed value of order.

**IDENTIFICATION MARK**:-Manufacturer’s distinctive identification mark /symbol must be clearly embossed / punched / engraved on the equipment , as far as practicable, at a visible place, which is not subjected to normal wear and tear, for convenience of identification any time.

**Manufacturer Test Certificate**: Manufacturer’s test certificate must be enclosed along with supplies.

**Jurisdiction of Court**:- Any dispute arising out of this order will be subject to the jurisdiction of Singrauli Dist. Court (MP) only.

This order is also governed by the General Terms & Conditions of supply of stores enclosed with the NIT and all the terms & conditions thereof will be applicable unless otherwise specified in this order.

You are requested to kindly acknowledge receipt and acceptance of order within 10 (Ten) days of issue of order. In case no reply is received, it will be presumed that the order has been accepted by you.

Yours faithfully,

(Prateek Singh)  
Asst. Manager(X/MM)

(M M Sarewar)  
Chief Manager(MM)

*For and on behalf of Northern Coalfields Limited  
Singrauli.*

**Encl:-**

1. Technical Specification – Annexure-I.
2. Format for Bank Guarantee for Security – Annexure-II.
3. Bank Guarantee Format for Performance Bank Guarantee – Annexure-III.

**Copy forwarded to:-**

1. The Chief Vigilance Officer, NCL, Singrauli.
2. The CMS), NCL, Jayant.
3. Consignee: CMS (Stores), Nehru Shatabdi Chikitsalaya (NSC),Jayant
4. Paying Authority: The Area Finance Manager, NSC, Jayant
5. The GM (Fin)/GM (MM)/HOD, NCL, Singrauli.
6. Progress Cell, MM Deptt., Singrauli.
7. The GM (MM)/I/c, BCCL/ECL/CCL/MCL/SECL/WCL/CPDIL/CIL.
8. M/S SonoScope, 4/F, Yizhe Building, Yuquan Road,Shenzhen, 518051, China
- 9.M/S Konica Minolta, Inc, 1Sakura-manchi, Hino-shi Tokyo 191-8511, Japan

**B.C. No. :** Budget certified by NSC, Jayant is as under :

(i) For Equipment : under capital head for Rs. 30,61,100.00 , year 2018-19 , Page No. 161/01 , A/C Head 150216

(ii) For CAMC charges : Under Rev Head for Rs.153400.00 per year x8 i.e for Rs. 12,27,200.00 , year 2018-19 , Page No. 76/01 , A/C Head 004008.

**FC No. :** NSC/REV/18-19/21 dtd. 11.04.2018.

This issues with the approval of competent authority.

(Prateek Singh)  
Asst. Manager(X/MM)

(M M Sarewar)  
Chief Manager(MM)

**Technical specifications for Computed Radiography unit**

Computed Radiography unit should broadly comprise of following modules/ components:-

- a) Image recording system (cassettes & reading plates)
- b) Image reading system (reader/ digitizer)
- c) Identification & CR processing workstation.
- d) Dry imager.

**1. Image recording system (cassettes & imaging plates):-**

The following sizes of radiography cassettes along with image plates should be supported by the unit:-

- a) 35 cm X 43 cm or 14" X 17" : 4 nos.
- b) 24 cm X 30 cm or 10" X 12" : 4 nos.
- c) 18 cm X 24 cm or 8" X 10" : 4 nos.

**2. Image reader (CR reader/ digitizer)**

- a) The system should be compatible for general Radiography.
- b) The CR reader / digitizer should be latest high end single cassette reader and able to process 65 image plates/hr or more of the largest size cassette.
- c) The system should be able to get the first image on the monitor within 60 seconds or less.
- d) For ease of operation, system should have a graphical user interface, preferably with a touch screen.
- e) CR reader / digitizer must be able to handle phosphor image plates. CR Reader capable of handling dual side image plates, will be preferred.
- f) It should have a resolution of 6 pixels/mm (minimum) for standard resolution cassettes & 10 pixel / mm (minimum) for high resolution cassette reading.
- g) Digitizer must have a resolution of 20 pixel / mm (minimum) for screening mammography.
- h) Gray scale resolution: CR reader / digitizer should have a minimum resolution of 12bits/pixel for images sent to CR processing station.
- i) Preset anatomical processing should be available.
- j) It should have status display, preferably on a LCD indicating error status etc.

**3. Identification Station & CR processing workstation (2 nos.- one with the main system and another in Radiologist's Room):-**

- a) The processing station must have latest and easy operating system, minimum 4GB RAM, minimum 500 GB Hard disk, Processor- Core2Duo or better and 19 inch flat panel touch screen clinical grade monitor with at least 1.3 MP resolution and wide viewing angle. The PC hardware and monitors must be from reputed brands like DELL, HP etc.
- b) Processing server must be capable of identification of patient demographics to the acquired images.
- c) The server and /or ID station must be DMWL (DICOM modality worklist) compliant to access patient and study data from HIS or RIS.
- d) It should provide display of acquired images with greater details of demographics viz. patient/ study listing for easy access, any format image view, multiple patients view at a time, image comparison.



- e) The server must provide full amount of post processing features viz. geometric corrections, window level algorithms, annotation like markers, predefined text, drawing lines and geometrical shapes, multi-scale image processing, measuring distance and angles, shuttering, histograms, zoom, gray scale reversal, edge enhancement, noise reduction, indication of gray scale saturation level, latitude reduction etc.
- f) It should facilitate full fledged DICOM printing and should be able to print multiple formats of patient study.
- g) Should be able to send DICOM images to DICOM workstation or PACS without loss of information
- h) Should be equipped with DICOM CD writer for transferring image
- i) Should be able to store image on external device viz. CD and pen drive etc.
- j) The system should have a facility to indicate over /under exposure in the preview screen. Kindly specify the image preview time.
- k) The software must have dedicated mammography image processing software.
- l) System should have software security feature like user names and password to prevent unauthorized operation.
- m) System should have the capability to enter patient details at the reception using the ordinary PC and this data should be automatically transferred to the CR system to avoid delays in patient examination.

#### **4. Dry imager:**

- a) The system must have a dry imager without need of any wet chemistry.
- b) Touch panel operating system
- c) Automatic calibration and unrivalled image quality.
- d) It must be DICOM 3.0 compatible allowing multiple modalities to be connected at a time
- e) The system must be able to print at least 60 films/ hr of the largest size
- f) The system must deliver its first film within 90 seconds from the request sent
- g) The imager must have spatial resolution of 500 dpi minimum
- h) The system must have contrast resolution of 14 bits/ pixel or more. The system must have at least three online film drawers and should be capable of printing 8" X 10", 10" X 12", 14" X 17" films.
- i) The imager should support daylight loading of films.
- j) Printer status should be on display for any error status etc.

5. Suitable UPS back up must be provided for 30 minutes backup for the whole system. Specify the make of UPS.

6. Additional specialty software/hardware, if any should be quoted separately as optional.

7. The availability of above mentioned features and technical specification must be substantiated with authentic published documents from manufacturer or regulatory bodies.

8. Digitizer and Dry Imager should be from one manufacturer only and should be CE and /or FDA approved (Relevant certificate should be enclosed).

9. The successful bidder will have to ensure onsite training of end users for a period not less than four weeks after installation of the unit.

10. The Unit with UPS (including batteries), IP Plates and accessories supplied should have two years of warranty / guarantee followed by eight years of CAMC (with spares).

**Technical Specifications for 2D Colour Doppler Ultrasound Machine (Trolley Mounted)( Required Qty.- 01 No.) :-**

1. System should have following Applications with extensive Calculation software package:
  - a) Obstetrics and Gynaecology
  - b) Abdomen
  - c) Vascular
  - d) Endocavitary application- Transvaginal
  - e) Musculoskeletal and small part
2. System should have following Modes:
  - a) 2-D Mode
  - b) M Mode
  - c) Pulsed Wave Mode
  - d) Colour Flow Imaging
  - e) Colour / Power Doppler Imaging
  - f) Tissue Harmonic Imaging
  - g) Duplex and Triplex Mode simultaneity (all three modes 2D, Colour & Doppler Modes simultaneously).
  - h) Anatomical M mode
  - i) Tissue Doppler imaging
3. Broad bandwidth Transducers:
  - a) Convex Array Transducer - Frequency 2-5 MHz (+/- 1 MHz)
  - b) Intracavitary (Transvaginal) Transducer - Frequency 4-10 MHz (+/- 2MHz)
  - c) Linear Array Transducer - Frequency 5-10 MHz for superficial application
4. Transducer should have broad Bandwidth Beam Former technology for high resolution 2D imaging.
5. Scan depth should be 28 cm or more for convex transducer.
6. System should have at least 2 active ports + 1 parking port/slot for transducers.
7. The system should have:
  - a) Dual &/ Quad split display
  - b) Duplex for simultaneous B mode & Spectral Doppler
  - c) Facility of Full screen / panoramic imaging.
  - d) The system should support real time acquisition and display of two image planes simultaneously with colour
  - e) Facility for zoom (real-time and frozen image)
  - f) Cineloop review facility in individual and mixed modes with memory upto minimum of 2000 images and 60 seconds of M Mode data.
  - g) One touch image optimization & automatic real-time Doppler tracing.
8. System should have Controls for Time Gain Compensation (TGC - slide pot control), variable power, dynamic range & overall gain control so that following parameters can be adjusted on stored / live image.- Gain , TGC, Dynamic range, Gray map, Colour map, Colour gain, doppler gain & doppler angle correction.

9. Gray Scale - minimum 256 or more. System dynamic range to be about 200 dB.
10. The system shall support Tissue Harmonic Imaging available in colour flow imaging and M-Mode rendering modes.
11. Independent steering of B mode and Colour beam on linear probe.
12. High resolution, flicker free, antiglare, LCD/LED medical grade flat panel display of 17" or more, with maximum viewing angle.
13. Alpha numeric key board with track ball.
14. Complete package for measurement & calculation for all applications mentioned at Sr no 1, with digital calipers for distance, area, volume, circumference & Doppler wave form parameters measurements etc.
15. PW doppler analysis in Auto & Manual mode.
16. Image management facility:
  - a) Inbuilt hard disk with memory of minimum 500 GB having facility to store about 1,00,000 images and 2 minutes of clip store, should have the facility of performing calculations and annotations on store images.
  - b) Direct storage of Images & Cine loops in Hard disk
  - c) Patient id display
  - d) Provision for reverse & invert facility
17. Image archival & Transfer:
  - a) System should have inbuilt CDRW, DVD, USB Drive with the facility to transfer image.
  - b) USB port (minimum one)
  - c) DICOM 3 Compatible with Life time DICOM Licence
  - d) Upgradability for PACS
  - e) Direct connectivity to Laser/Thermal Printer for printing images & reports.
18. User Interface:
  - a) PC- based operating principles
  - b) Task light with back-lit illumination of control panel
  - c) System should have on screen menu for easy and immediate access to imaging controls.
19. System must have fast boot-up time (for start-up to scanning)
20. System must be sturdy, resistant to breakage & damage on fall / hit against the wall/hard surface.
21. System should have wrist support to help reduce operative repetitive stress injuries.
22. System should have CE and /or FDA (US) approval.
23. Standard Accessories:
  - a) B/W Thermal printer ( Specify make of Thermal printer)
  - b) Free Software upgrade during the period of Warranty & CAMC
  - c) Probe Protection covers / probe connector cover for all probes

- d) UPS of appropriate rating with 30 minutes back up additional to in-built battery back-up. Specify the make of UPS.
- e) Trolley and castor wheel

24. Warranty for 02 (Two) years and 08 (Eight) years CAMC with Accessories (including UPS batteries).

(Prateek Singh)  
Asst. Manager(X/MM)

(M M Sarewar)  
Chief Manager(MM)

नार्दन कोल्डफिल्ड्स लिमिटेड  
एक मिनी रत्न कम्पनी  
सामग्री प्रबन्धक विभाग  
पो० ओ० सिंगरौली कोलियरी  
जिला सिंगरौली , म०प्र० ४८६८८९  
फैक्स नं० ०७८०५-२६६३८८/२६६६४०



Northern Coalfields Limited  
(A Mini Ratna Company)  
PO- Singrauli Colliery,  
Distt- Singrauli, MP- 486 889  
(An ISO 14001,ISO 9001,OHSAS-18001 &  
SA 8000 Certified Company)  
Materials Management Wing  
Tel : 07805-266413/256615



## ANNEXURE-II

### FORMAT FOR BANK GUARANTEE FOR SECURITY

In consideration of M/s Northern Coalfields Limited (a subsidiary of Coal India Limited) Singrauli, PO- Singrauli Colliery, Distt. Singrauli (MP) (herein after called “the company”) having agreed to exempt M/s.....from the demand, under terms and conditions of an agreement/ order No. ....date .....made between the company and the said contractor (s) for ..... (Herein after called “the said description of the agreement/ order”) of Security Deposit for the due fulfillment by the said contractor(s) of the terms and conditions contained in the said agreement, on production of a Bank Guarantee for Rs.....(Rs.....) Only.

1. We, .....(indicate the name of the Bank with address) ( Herein after referred to as “the Bank” ) at the request of the contractor(s) do hereby undertake to pay to the company an amount not exceeding Rs.....against any loss or damage caused to or would be caused to or suffered by the company by reason of any breach by the said contractor(s) of any of the terms or conditions contained in the said agreement.
2. We, .....(indicate the name of Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the company stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the company by reason of breach by the said contractor (of any of the terms and conditions contained in the said agreement or by reason of the said contractor(s) failure to perform the said agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....
3. We undertake to pay to the company any money so demanded notwithstanding any dispute or disputes raised by the said contractor(s) in any suit or proceeding pending before any court or Tribunal relating there to our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the said contractor (s) shall have not claim against us for making such payment.
4. We..... (Indicate the name of bank) further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continued to be enforceable till all the dues of the company under or by virtue of the said agreement have been fully paid and its claim satisfied or discharged or till the company certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this Guarantee. Unless a demand or claim under this Guarantee is made on us in writing on or before the .....we shall be discharged from all liability under this Guarantee thereafter.

5. We, .....(indicate the name of bank) further agree with the company..... to the company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the company against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reasons of any such variation, or extension being granted to the said contractor(s) or for forbearance, act or omission on the part of the company or any indulgence by the company to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for would, but for this provision, have effect of so relieving us all. The Bank further agrees that in case this guarantee is required for a longer period and it is not extended by the Bank beyond the period specified above, the bank shall pay to the company the said sum of Rs.....or such lesser sum as may then due to the company and the company may demand.
6. This Guarantee will not be discharged due to the change in the constitution of the Bank or the said contractor(s).
7. The Bank has under its constitution power to give this Guarantee and Mr..... who has signed it on behalf of the Bank have authority to do so.
8. We, .....lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the company in writing.

Dated the .....day of.....

Signature of the authorized person  
For and on behalf of the Bank

नार्दन कोल्डफिल्ड्स लिमिटेड  
एक मिनी रत्न कम्पनी  
सामग्री प्रबन्धक विभाग  
पो० ओ० सिंगरौली कोलियरी  
जिला सिंगरौली , म०प्र० 486889  
फैक्स नं० 07805-266388/266640



Northern Coalfields Limited  
(A Mini Ratna Company)  
PO- Singrauli Colliery,  
Distt- Singrauli, MP- 486 889  
(An ISO 14001, ISO 9001, OHSAS-18001 &  
SA 8000 Certified Company)  
Materials Management Wing  
Tel : 07805-266413/256615



### ANNEXURE-III

#### FORMAT FOR PERFORMANCE GUARANTEE

M/s ..... a company having its office at..... (hereinafter called the supplier) has entered into a Contract No.....with Northern Coalfields Limited (hereinafter called the Purchaser) to supply equipment on the terms and conditions contained in the said contract.

It has been agreed that hundred percent (100%) payment of the value of the contract will be made to the Supplier in terms of the said Contract on the seller furnishing to the Purchaser, a Bank Guarantee for the sum of Rs.....equivalent to 10% of the value of the contract by the seller, as Security for the due and faithful performance of the terms of the said contract and against any loss or damage caused to or would be caused to or suffered by purchaser by reason of any breach by the said supplier of any of the terms or conditions contained in the said contract.

1. We,.....Bank Ltd. do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Purchaser stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Purchaser by reason of any breach by the said Supplier of any of the terms or conditions contained in the said contract or by reason of the Supplier's failure to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. We shall not with hold the payment on the ground that the seller has disputed its liability to pay or has disputed the quantum of the amount or that any arbitration proceeding or legal proceeding is pending between purchaser and the supplier regarding the claim. However, our liability under this guarantee shall be restricted to an amount not exceeding .....
2. We, .....Bank Ltd further agree that the guarantee herein contained shall come into force from the date here of and shall remain in full force and effect during the period that would be taken for the performance of the said contract and that it shall continue to be enforceable till all the dues of the purchaser under or by virtue of the said Contract have been fully paid and its claims satisfied or purchaser certifies that the terms and condition of the said Contract have been fully and properly carried out by the said Supplier and accordingly discharges the guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the .....(date to be given) .....months from the date of the Bank Guarantee, we shall be discharged from all liability under this guarantee thereafter.
3. We, ..... Bank Ltd. further agree with said Purchaser that the Purchaser shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract/ agreement or to extend time of performance by the said Supplier(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Purchaser against the said Supplier and to forbear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said supplier or for any forbearance act or omission on the part of the purchaser or any indulgence

by the Purchaser, to the said supplier or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us. The Bank further agrees that in case this guarantee is required for a longer period and it is not extended by the said supplier beyond the period specified above, the Bank shall pay to the Purchaser the said sum of Rs..... (Specify the amount) or such lesser sum as may then be due to the purchaser and as the Purchaser may demand.

4. We,.....Bank Ltd lastly undertake not revoke this guarantee during its currency except with the previous consent of the Purchaser, in writing.

5. The Bank has under its constitution power to given this guarantee and Mr. .... , Manager, who has signed it on behalf of the Bank has authority to do so.

6. This Bank Guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.

Dated .....Day of.....

Signature of the authorized person  
For and on behalf of the Bank