

**Form PPIM-1B**

[Para 1.17(ii)]



**NATIONAL INSTITUTE OF TECHNOLOGY  
ROURKELA – 769 008, ORISSA**

(Form to be used for purchases above Rs.1.0 lakh; to be sent to at least six firms)

**Advertised/Limited Tender Enquiry**

**Department: Computer centre**

**Enquiry No: NITR/ 2007/ CC/ 527**

**Date: 12<sup>th</sup> Dec 2007**

**Important Dates**

To
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Event	Date	Time
Pre-bid Conference		
Last Date of submission of quotation	04/1/2008	3.00PM
Quotation Opening date	04/1/2008	3.10PM

Dear Sir,

We intend to purchase the commodities specified below and invite quotations in accordance with the terms and conditions detailed in the bid document. If you are interested, kindly send your offer with prices and complete terms within the time mentioned above.

Please send your quotation to:

Head, Department of Computer Centre Attn.: Prof S K Patra NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA – 769 008, ORISSA
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Yours sincerely,

Sarat Kumar Patra  
In-charge, Campus Networking

Encl :

- |     |  |
|-----|--|
| (1) | Schedule of requirement, specifications, dates etc.  |
| (2) | Bid document containing detail terms and conditions. |

**1. Schedule of requirements**

Sl. No.	Description of Goods/Service	Quantity
1	Providing <b>DSLAM based network connectivity to the campus LAN</b> for the residential complex in NIT, Rourkela over existing telephone lines	

**2. Specifications and allied Technical Details**

Pl refer to annexure-A
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**3. Format of Quotation** (tick appropriate box)

It is a single bid; please give all technical specifications and price bid in one envelope.

OR

It is a two-part bid with separate techno-commercial and price bids. Please see item 1.12 of instructions for method of bidding.

**4.** The bid envelope should be super-scribed with

Bid for Internet service vide Enquiry No. <b>NITR/ 2007/ CC/527</b> dated <b>12<sup>th</sup> Dec 2007</b>
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**5.** Quotations should be valid for a period of 60 days from the closing date of the bid.**6. Some important dates:**

- i. Last date for receipt of quotation:                      Date: 04 Jan 2008      Time: 3.00PM
- ii. Opening of techno-commercial bid:                      Date: 04 Jan 2008      Time: 3.10 PM
- iii. Opening of Financial bid:

**7. Warranty** of 3 years for the hardware supplied (Exceptions as per Annexure).

**8(a) Excise Duty:** The Institute is exempt from Excise Duty. Please state applicable excise duty as a separate item.

**8(b) VAT/CST:** The Institute is not authorized to give C or D form. CST or VAT should be charge according to applicable rates.

**8(c) Entry Tax:** The State of Orissa charges entry tax on all goods entering the State. Please include it in your quotation as a separate item. Entry Tax will be reimbursed on production of proof of payment.

**9. Bid Security** (See Item 2.8 of instructions): **NIL**

**10. Performance Security** (See Item 2.10 of instructions): **NIL**

**11.** Please go through the enclosed "bid document" carefully for other bidding instructions.

**12(a)** Please send your quotations by Registered/Speed Post or Courier Service to:

Head, Computer Centre Attention: Prof S K Patra National Institute of Technology, Rourkela – 769 008
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OR (b) drop the quotation in the Tender Box kept in the office of the Department during the normal working hours of the Institute. Please do not hand over the quotation to any person by hand.

**13.** For technical details, you may contact

Prof. Sarat Kumar Patra Department of Electronics and Communication Eng (HOD Computer Centre) National Institute of Technology, Rourkela – 769 008 Phone: 0661 – 2462457; 94372 21578 (M) Fax: 0661 – 2462999
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**Form PPIM-1B (Contd.)**

[Para 1.17(ii)]

**NATIONAL INSTITUTE OF TECHNOLOGY  
ROURKELA – 769 008, ORISSA****BID DOCUMENT****1. Instructions to the bidders**

- 1.1 Sealed bids are invited on behalf of the Director, National Institute of Technology (NIT), Rourkela – 769 008, Orissa, from the intending bidders for supply of the goods/stores/equipments for the Institute as detailed in the enquiry letter.
- 1.2 The bidders should quote their offer/rates in clear terms without ambiguity.
- 1.3 The rates should be quoted both in figures and words and legibly written without any over-writings. In case of any correction, the same must be attested by the bidder with full signature. However, no over-writing is permissible. Manufacturer's price-list, where applicable, should be submitted along with the bid.
- 1.4 In case of any discrepancy between the rates in figures and that in words, the rate in words will be accepted as correct.
- 1.5 The last date for receipt of the bid is marked in the enquiry. In case the above date is declared a holiday for NIT, Rourkela, and the bids will be received up to the appointed time on the next working day.
- 1.6 The financial bids will be evaluated based on the recurring charges for 1 year and fixed charge which includes equipment cost and installation charges. The order for internet connectivity will be for a period of one year. Bidders are advised to take into account the market scenario and cost variation for the service in international market.
- 1.7 The bids may be sent by registered or speed post or by courier service, so as to reach the concerned department before the last date of receipt, or alternatively, be dropped in the tender box kept at the Department office. The name of the Department is mentioned in the Enquiry.
- 1.8 The bidder may modify his bids before the last date appointed for receipt of the bids by sending an amendment to the bid. No bid shall be modified after the deadline for receipt of the bids.

- 1.9 If a prospective bidder requires any clarification in regard to the bidding documents, he may make a request the concerned officer or faculty member at least 15 days before the deadline for receipt of bids.
- 1.10 Bids received after the deadline of receipt indicated in para 1.5 above, shall not be taken in to consideration.
- 1.11 Each bidder shall submit only one bid. A bidder, who submits more than one bid, shall be disqualified and considered non-responsive.
- 1.12 (In respect of high value plant, machinery etc. of a complex and technical nature). The bids may be submitted in two parts, viz., technical bid and financial bid. The above two bids may be sealed by the bidder in separate cover duly super-scribed and both these sealed covers are to be put in a bigger cover which should also be sealed any duly super-scribed. The bidding format is specified in the quotation enquiry.
- 1.13 The cover containing the bid must be sealed and super-scribed "Bid for Internet Service vide No. NITR/ 2007/ CC/ 487 dated 17<sup>th</sup> Nov 2007" as given under item 4 of the enquiry.
- 1.14 The bids shall be opened in the Board room of the institute at the date and time given on the top of the document. The bidders are advised to send their authorized representatives to attend the bid opening, if they so desire. In the event of the above bid opening date being declared holiday for the NIT, Rourkela, bids will be opened at the appointed time and place on the next working day.
- 1.15 The bidder has to sign in full at all pages of the bidding document.
- 1.16 The bidders should enclose documents showing past business, volume of transaction during the past years, references from major public or private sector clients, academic institutions like IITs, NITs and other institutes of repute.

## **2. Conditions of the bid**

- 2.1 The rates quoted should preferably be net, inclusive of all taxes and duties, packing, forwarding, freight, Insurance and all other incidental charges. In case these charges are quoted extra in addition to the quoted rates, the amount thereof or advolerum rate must be specified. Packing, forwarding, freight, entry tax etc., when quotes separately are reimbursable at actuals. If external agencies are employed, their receipts must be enclosed with the invoice.

- 2.2 Duties and Taxes are to be quoted separately. Advolenum rates thereof should be clearly indicated with reference to the relevant Acts and Rules. Entry Tax, if any paid, shall be reimbursed on production of proof. Entry Tax should be shown as a separate component.

**It may be noted that the Institute is exempt from paying Excise Duty vide Government Notification No. 10/97 dated 01.03.1997 [Registration No.: TU/V/RG-CD(227)/2001, dated 10.12.2001]. The Institute is not authorized to issue C or D forms. CST and VAT may be charged at applicable rates.**

- 2.3 The goods are required to be delivered at the indenting Department of NIT, Rourkela, and must be dispatched within 30 days from the date of placement of the supply of order under the risk and arrangement of the bidder and offers with delivery beyond the above period shall be treated as unresponsive. In case the delivery time is higher, the same must be mentioned clearly in the quotation.
- 2.4 The bid should remain valid for a period of 60 days from the date of opening. In case your offer has a different validity period that should be clearly mentioned in the quotation.
- 2.5 Conditional discount, if any, offered by the bidder shall not be considered at the time of evaluation.
- 2.6 The goods offered should strictly conform to the specification and technical details mentioned in para 4 below.
- 2.7 The Institute may like to conduct pre-dispatch inspection of goods, where applicable.
- 2.8 Period of guarantee/warranty, where applicable, should be specified in the bid.
- 2.9 The successful bidder has to furnish "Performance Security" for an amount specified in the enquiry, in the form of Account Payee Demand Draft, Fixed Deposit Receipts and/or unconditional Bank guarantee en-cashable on demand from the Director, NIT, Rourkela, from a Commercial Bank with validity period of sixty days beyond the date of completion of all contractual obligations of supplier including guarantee/warranty obligations. The Performance Security is to be furnished in favour of the Director, National Institute of Technology, Rourkela, within ten days of intimation, failing which his bid security will be forfeited.

Alternatively, fixed percentage of the cost of the stores as stated in the enquiry may be retained by the Institute in its

Maintenance Fund towards performance security, which will be released six months after the completion of warranty period.

- 2.10 If the successful bidder, on receipt of the supply order, fails to execute the order within the stipulated period, in full or part, it will be open to the Director, NIT, Rourkela to recover liquidated damage from the firm at the rate of 1 percent of the value of undelivered goods per month or part thereof, subject to a maximum of 5 percent of the value of undelivered goods. Alternatively, it will also be opened to the Director, to arrange procurement of the required goods from any other source at the risk and expenses of the bidder.
- 2.11 The successful bidder may be required to execute a contract, where applicable.
- 2.12 The bidder has to furnish up to date VAT and Income Tax Clearance Certificate along with the bid.
- 2.13 Payment (*100 percent*) will be made by Account Payee Cheque/ Bank Draft, within 30 days from the date of receipt of the goods in good condition or receipt of the bill, commissioning of the equipment, where applicable, whichever is later/latest. If the payment is not made by the Institute within this stipulated date, the vendor may claim compensation at rates fixed by the Institute.
- 2.14 In the event of any dispute arising out of the bid or from the resultant contract, the decision of the Director, NIT, Rourkela shall be final.
- 2.15 The bid document/resultant contract will be interpreted under Indian Laws.

**Annexure-A****Detail specification of the facilities/ infrastructure in form of equipment to be provided.**

The work will be awarded in a turnkey basis. This will include exchange equipment, customer premises equipment, racks for mounting DSLAM equipment, connectivity at telephone exchange, passive network at customer premises. The work should include a warrantee for 3 years for the exchange equipment and 1 year for customer premises equipment.

Following is list of types of quarters to be provided with ADSL connectivity. The BOQ for the equipment, accessories have to be finalized/ made for providing connectivity to these houses in NIT Campus. (All quarters should be provided with connectivity. More than one quarter can share the telephone connection for ADSL service). All quarters have telephone connection from the telephone exchange in the campus.

Sl.	Type of quarter	Number of Quarters	Quarter description
1	A	19	All quarters are separately constructed and are single storey.
2	B	22	
3	C	30	
4	D (Single)	20	These houses are in 10pairs with a common wall between.
5	D(Flat)	36	2-storey flats with 4 quarters in each block, total 9blocks (36 quarters).
6	D (Flat – small)	8	
7	D (Single)	1	
8	Bachelor Flat	24	2-storey blocks with 6 quarters in each block, total 4blocks (24 quarters).
9	Transit Flat	18	3-storey blocks with 6 quarters in each block, total 3blocks (18 quarters).
10	Flat E-Type	10	3-storey blocks with 6 quarters in each block, total 3blocks (18 quarters).
11	E Type	40	These houses are in 20pairs with a common wall between.
<b>Total</b>		<b>228</b>	<b>Connectivity to be provided to these 228 houses</b>

**Passive Work:**

The firm participating in the tender must provide a turn-key solution for the work mentioned above. The will provide the DSLAM switches, ADSL splitters/ modems at customer premises, providing RJ45 IO outlets, passive cabling in the home premises. The DSLAM equipment will be located at the Telephone exchange in NIT Campus. The firm will undertake the wiring of DSLAM switches form telephone wiring distribution frame and also provide. Network connectivity in form of 100Mbps connection will be provided by NIT, Rourkela in the telephone exchange for the purpose.

**Specification of D-SLAM Equipment (Switches)**

Port details:

- 24/48 ADSL/ ADSL2/ ADSL2+ ports



- 48 Splitter Ports
- 1 port 100/1000 BASE-T and 1X1000BASE-T LX port for network connectivity. The set of stackable equipment can have single LX connectivity
- Console port-1no

Protocol handling details:

- 128 MAC address per DSL ports
- MULTICAST Mac addresses
- 512 VLANs at-least
- Configurable packet size: 64bits – 1542bits

ADSL/ ADSL2/ ADSL2+ Details:

- Downstream data rate: 32kbps to 10.5Mbps
- Upstream data rate: 32kbps to 1Mbps
- Compliance with all ADSL standards
- Maximum Cable distance support: 3km

Management capabilities:

- Microsoft based SNMP GUI
- Telnet/ Ethernet/ SNMP management
- All units supplied should have cascading capability for management with single port.
- Firm ware upload and download facility using ftp
- Diagnostic LEDs for power, maintenance, alarm, all ADSL ports, master/ slave indication

Environmental Conditions:

- Power Supply: 42V to 56V DC (NIT will provide 48V DC in the telephone exchange for connectivity. Equipment will be placed in telephone exchange)
- All equipment provided should together consume around 1KW power maximum.

Quantity

- Suitable for providing connectivity to all the houses listed above.
- There should Suitable rack for mounting all the racks should be included in the offer
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Warrantee: 3 Years onsite warranty

## **Specification of ADSL2 modems/ router (customer Premises Equipment)**

Type: Broadband ADSL2+ routers with 1/ 4 ports for customer premises network connectivity

- 1 RJ11 ADSL port
- 1 OR 4 ports 10/100BASE-TX on RJ45
- Standards: Compatibility to ADSL/ ADSL2/ ADSL2+
- Data Rate: 8Mbps down-stream and 832kbps up-stream
- Facility to support static IP address and also DHCP IP addressing
- Support for VLAN on each of the ports
- The routers provided should be at most of 2 varieties
- Facility for enabling/ disabling of each of the ports by administrator

## **Specification for Passive Equipment and other general conditions:**

- CAT5e cable and RJ45 jacks with face plate will be provided by NIT. These are AMP make product.
- The system integrator cum supplier will be responsible for providing cabling in customer premises, connecting the ADSL routers, fixing IO at houses. The box for mounting the IO, casing and capping materials must be supplied.
- The total cabling will be approximately 3000m. Firm will be selected based on price for 3000m cabling but payment will be made on actual quantity of cabling made.
- The companies are to quote for service component in the form of cabling (CAT5e) limited to 3000m, IO in installation, supply of casing and capping materials of very good quality, supply of IO boxes, installation of ADSL customer equipment, providing electrical power switch board if needed at customer location (limited to 2m distance for power).
- The casing and capping used for cabling should be of very good quality. The installation will be made after the casing and capping materials are approved by the institute.
- Where ever possible 2-3 cable can be drawn through common path. Care should be taken to limit the amount of wiring layout.
- Quantity of each of the materials quoted must be mentioned in the quotation. Full price calculation should also be provided.
- Quotation should contain the pricing in two parts. First part should contain the pricing for the active equipment, second part should contain cost of system integration, services and materials (like IO boxes, wiring material, electrical boards etc) separately.
- The firms may visit the campus before quoting.
- Resellers must have the authorization letter from principals for selling active equipment particularly DSLAM.
- The quotation should have clear technical bid and financial bid made separately.