

# National University of Study & Research in Law

## Kanke, Ranchi

Ref: NUSRL/Rnc/2017/7064-D(1)

Date: 11-08-17

### Notice Inviting Tender

For Supply, Installation and commissioning of LAN at NUSRL, Ranchi.

Tender No: NUSRL/RNC/2017/

Date:

SI No	Details	
1	Last date of Submission of Tender	25 / 08 / 2017, upto 4 pm
2	Tender Opening Date	31/08 / 2017, at 3:00 pm onwards
3	Tender Fees	1000/- (non-refundable) Demand Draft in favour of “The Registrar, NUSRL, Ranchi” payable at Ranchi.
4	EMD( non-interest bearing)	100000/- (Rupees one lac only) Demand Drafts in favour of “The Registrar, NUSRL, Ranchi” payable at Ranchi.
5	Tender document to be submitted at	The Assistant Registrar (In-charge) National University of Study & Research in Law Kanke, Ranchi,
6	Site Survey	Bidders are requested for survey the entire Campus for better understanding of BOQ.

Sealed Tenders are invited from eligible, reputed and experienced companies for “Supply & Installation of LAN setup in Hostels & Campus at NUSRL,Ranchi”.

This Tender document can be downloaded from Institute’s website [www.nusrlranchi.ac.in](http://www.nusrlranchi.ac.in).

Offers as per “Technical Bid” & “Price Bid” in prescribe formats in separate covers duly superscribed as “*Technical Bid for Supply & Installation of LAN in Campus at NUSRL, Ranchi*” and “*Price Bid for Supply & Installation of LAN in Campus at NUSRL, Ranchi*” and both the sealed covers are to be put in a bigger cover which should be sealed and superscribed as “*Tender for Supply & Installation of LAN in Campus at NUSRL, Ranchi*” respectively and should be delivered thereon through Registered Post/ Courier/Speed Post/ or in person to be dropped in the Tender Box kept for this purpose in Administration building on or before 25/08/2017 upto 4 p.m. Tenders received after the due date and time will not be considered or accepted, no request or appeal will be entertained for this.

### **Instructions to Bidders:**

- Documents are to be put in Technical Bid: Following documents and papers to be put into this bid without any deviations :
  - 1.1. Demand Draft for EMD & Tender Fees towards this tender.
  - 1.2. Properly filled-up Annexure – I (Bidders & OEM criteria) and its all supporting documentary evidence.
  - 1.3. Properly filled-up Annexure – II (Technical compliance sheet) and its supporting documents like Datasheets / Spec sheet.
  - 1.4. Properly filled-up Annexure – III (BOQ & Make-Model List)
  - 1.5. Properly filled-up Annexure – IV (Terms & Conditions)
- Documents are to be put in Price Bid: Following document to be put into this bid without any deviations :
  - 2.1 Properly filled-up Annexure – V (Price Bid Format)

# National University of Study & Research in Law

Kanke, Ranchi

Supply & Installation of LAN in Campus at NUSRL, Ranchi

## Annexure I (Technical Bid)

### Bidder / OEM criteria

Sl. No.	Qualifying Criteria for Bidders / OEMs	Bidder Response
1	A. Name of the Organization / Bidder	
	B. Principal Address with Contact details of the Organization / Bidder	
	C. Profile of your company / Organization / Bidder:	
	C1. Year of establishment	
	C2. Annual turnover for the last 3 years <b>(should be over 2 Crores)</b> **Please furnish 3 years audited Balance sheet	FY 2017-2018 : FY 2016-2017 : FY 2015-2016 :
	C3. Organization Status (should be a Register Company / partnership Firm under Govt. act.) **Please furnish Incorporation Certificate	
	C4. Service Center / Technical / Manpower Location / Office / Setup details which is in Ranchi area.	
2	The Bidders should have executed at least 2 (Two) orders each of minimum Rs.30 lakh or one order of more than Rs.50 lakh of similar nature (Wireless /LAN) during the last 5 (Three) years. (The second work order should not be a repeat order of the first one).	1. (Please furnish PO & Completion Certificate) : 2. (Please furnish PO & Completion Certificate) :
3	Tender Specific Authorization Certificate of the Quoted OEM.	MAF to be furnished
4	Onsite support at NUSRL Campus	Declaration on company Letter Head to be furnished.
5	Details of Technical Manpower	A list of Technical Manpower to be furnished
6	The OEM should have spare parts depot / service center / TAC in India	Details to be furnished
7	The Bidder should offer such LAN components / products of OEMs who are (a) Having presence in india for last 6 years or more and in the LAN business for last 10 years or more (b) ISO certified	(a) Supporting document for presence (b) ISO Certificate of OEM
8	The Bidder should not be Blacklisted/debarred or involved in any Corrupt & Fraudulent Practices by any Central / State government ministry/affiliate or Public sector undertaking.	Self-certification from the organization on letter head.

9	Documents related to allocation of Valid (1) PAN Number (2) VAT / CST Registration (Latest) (3) Service Tax Registration (Latest)	Self-attested photocopies of documents/certificates issued by the competent authority to be furnished.
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*BIDDER'S SIGNATURE:* \_\_\_\_\_  
*BIDDER'S NAME:* \_\_\_\_\_  
*BIDDER'S DESIGNATION:* \_\_\_\_\_

*DATE :* \_\_\_\_\_  
*OFFICIAL STAMP:*

# National University of Study & Research in Law

Kanke, Ranchi

For Supply, Installation and commissioning of LAN at NUSRL, Ranchi.

## Annexure II (Technical Bid)

### Technical Specifications

#### **BOQ-Item No - 01 . - Technical Specification of 24 Ports PoE L2 Switch**

Offered Make (Bidder to Mention) : \_\_\_\_\_ / (Acceptable Make List: Cisco , HP, Juniper/ equivalent

Offered Model (Bidder to Mention) :

S. No.	Technical Specification	Compliance (Yes/No)	Remark
<b><u>1</u></b>	<b><u>Architecture</u></b>		
1.1	The switch shall have minimum 24 RJ-45 auto-negotiating 10/100/1000 Mbps PoE ports		
1.2	The switch shall have 2 1000BASE-X SFP ports		
1.3	The switch shall support IEEE 802.3at PoE+ on minimum 12 ports		
1.4	The switch shall have minimum 185 Watts for PoE Power		
1.5	Shall support 1000 Base- SX, LX SFP transceivers		
1.6	Switching capacity of 52 Gbps		
1.7	Switching throughput of up to 38 million pps		
1.8	1 RJ-45 console port		
<b><u>2</u></b>	<b><u>Layer 2 Features</u></b>		
2.1	MAC Address table size of 8,000 entries		
2.2	Shall support IEEE 802.3ad Link Aggregation Control Protocol (LACP)		
2.3	Shall support IEEE 802.1D Spanning Tree Protocol		
2.4	Shall support IEEE 802.1w Rapid Spanning Tree Protocol for faster convergence		
2.6	Shall support Jumbo frames up to 9 kilobyte frame size		
2.7	Shall support IEEE 802.1AB Link Layer Discovery Protocol (LLDP)		
2.8	Shall support IEEE 802.1Q		
<b><u>4</u></b>	<b><u>Security &amp; QOS</u></b>		
<b><u>4.1</u></b>	Should support SSL,https		
4.2	IEEE 802.1p/Q		
4.3	should support Broadcast control		
<b><u>5</u></b>	<b><u>Management Features</u></b>		
5.1	SNMPv1, v2c and RMON support		
5.2	Shall support Port mirroring		
5.3	Shall support intuitive Web GUI (http/https) for easy management		
5.4	Shall support Network Time Protocol (NTP)		
5.5	Shall have an operating temperature of 0°C to 40°C		
5.6	Compliant with IEEE 802.3az standard requirements to save energy during periods of low data activity		
<b><u>6</u></b>	<b><u>Safety and Emission</u></b>		
6.1	UL 60950-1; EN 60825; IEC 60950-1; EN 60950-1.FCC Class A; EN 55022/CISPR-22 Class A;		
<b><u>7</u></b>	<b><u>Warranty period should be 5 years onsite.</u></b>		

**BOQ-Item No - 02 . - Technical Specification of 48 Ports PoE L2 Switch**

Offered Make (Bidder to Mention) : \_\_\_\_\_ / (Acceptable Make List: Cisco , HP, Juniper/equivalent

Offered Model (Bidder to Mention) :

S. No.	Technical Specification	Compliance (Yes/No)	Remark
1	<b>Architecture</b>		
1.1	The switch should have 48 x 10/100/1000 Base-T ports and four fiber Gigabit uplink port.		
1.2	Shall support 1000 Base- SX, LX, fiber modules		
1.3	The Switch should be 19" rack mountable.		
1.4	100 Gbps switching capacity		
1.5	Switching throughput of up to 77 million pps		
1.6	MAC Address table size of 16,000 entries		
2	<b>Resiliency and high availability</b>		
2.1	Shall support IEEE 802.3ad Link Aggregation Control Protocol (LACP)		
2.2	Shall support IEEE 802.1s Multiple Spanning Tree Protocol		
3	<b>Layer 2 and Layer-3 features</b>		
3.1	Shall support IPv4 Static routing		
3.2	Shall support IPv6 Static routing		
3.3	Shall support IEEE 802.1Q (4,094 VLAN IDs) and 256 VLANs simultaneously		
3.4	Shall support GARP VLAN Registration Protocol allowing automatic learning and dynamic assignment of VLANs		
3.5	Shall support Jumbo frame		
3.6	Shall be IPv6 Capable		
4	<b>Convergence and QoS</b>		
4.1	Shall support IEEE 802.1AB Link Layer Discovery Protocol (LLDP)		
4.2	Shall support IEEE 802.1p Traffic prioritization for real-time traffic classification		
4.3	Shall support traffic classification mapped to four queues		
4.4	Shall support Broadcast control, Rate limiting and Traffic prioritization		
4.5	Shall support Broadcast control to cut down on unwanted network broadcast traffic		
5	<b>Security</b>		
5.1	Hierarchical user management and password-based protection		
5.2	AAA/RADIUS/TACACS authentication		
5.3	MAC address authentication, 802.1x authentication		
5.4	Multiple 802.1x users per port		
5.5	SSH 2.0, TFTP and SSL		
5.6	IP-MAC-port binding		
5.7	ARP detection		
5.8	IGMP Snooping		
5.9	IPv6 ACL/QoS		
6	<b>Management &amp; maintenance</b>		
6.1	Configuration through Limited CLI, Telnet, and Console port		
6.2	SNMPv1/v2/v3		
6.3	Remote Monitoring (RMON) alarms, events and history records		
6.4	Web-based Management		
6.5	NTP		
6.6	System logs		
7	<b>Environmental Feature</b>		
7.1	Shall have an operating temperature of 0°C to 40°C		
7.2	Operating relative humidity 10% to 90%, noncondensing		

<b>8</b>	<b>Safety and Emission</b>		
8.1	UL 60950/IEC 60950-1/EN 60950-1 and FCC part 15 Class A/VCCI Class A/EN 55022 Class A;		
<b>9</b>	<b>Warranty period should be 5 years onsite.</b>		

**BOQ-Item No - 03 . - Technical Specification of 9U Network Rack**

**Offered Make (Bidder to Mention) :** \_\_\_\_\_/(Acceptable Make List: Valrack,WQ,D-Link/equivalent)

**Offered Model (Bidder to Mention) :**

S. No.	Technical Specification	Compliance (Yes/No)	Remark
1	19", 9U x 500mm width x 450mm depth Wall Mount Networking Rack		
2	It should confirm to DIN 41494 or equivalent standard		
3	It should be welded construction with steel frame		
4	Lockable tough ended glass front door		
5	19" mounting angle made of formed steel		
6	Powdered coated standard finish		
7	Top & Bottom welded cover with vented & cable entry exit cut outs		
8	2 pair of 19" mounting rails		
9	1U Cable Manager		
10	Roof Mounted Fan Unit		
11	230V AC, 6 way, 5 Amp Power Distribution Unit		
12	Mounting Hardware		
13	OEM should have valid ISO 9001 & ISO 14001 for design & development for wired & wireless networking products.		
14	All the passive components including rack should be from same make		

**BOQ-Item No - 04 . - Technical Specification of 27U Network Rack**

**Offered Make (Bidder to Mention) :** \_\_\_\_\_/(Acceptable Make List: Valrack,WQ,D-Link/equivalent)

**Offered Model (Bidder to Mention) :**

S. No.	Technical Specification	Compliance (Yes/No)	Remark
1	19", 27U x 800mm width x 1000mm depth Floor Standing Networking Rack		
2	It should confirm to DIN 41494 or equivalent ISO standard		
3	It should be welded construction with steel frame		
4	Lockable double toughended glass front door		
5	19" mounting angle made of formed steel		
6	Powdered coated standard finish		
7	Top & Bottom welded cover with vented & cable entry exit cut outs		
8	4 sets of casters wheel		
9	4 sets of adjustable levellers		
10	Horizontal Power Distribution Unit with 6 x 5/15A sockets Round Pin, 230 Volts AC, 32 Amp with Plug		
11	1U Horizontal Cable Manager		

12	Mounting Hardware set		
13	Atleast 2nos. Of FANs for cooling purpose		
14	OEM should have valid ISO 9001 & ISO 14001 for design & development for wired & wireless networking products.		
15	All the passive components including rack should be from same make		

**BOQ-Item No - 05 . - Technical Specification of 24 Port Cat6 Patch Panel**

**Offered Make (Bidder to Mention) :** \_\_\_\_\_ / (Acceptable Make List: Tyco,AMP,D-Link/equivalent)

**Offered Model (Bidder to Mention) :**

S. No.	Technical Specification	Compliance (Yes/No)	Remark
1	Should be made of powder coated steel, in 24 port configurations.		
2	Allow for a minimum of 200 re-terminations without signal degradation below standards compliance limit.		
3	Have port identification numbers on the front of the panel.		
4	Should have self adhesive, clear label holders (transparent plastic window type) and white designation labels with the panel, with optional color labels / icons.		
5	IDC: Suitable for 22-26 AWG stranded and solid wire compatible with both 110 & Krone punch down tools		
6	Each port / jack on the panel should be individually removable on field from the panel.		
7	Improved cable management with optional cable management bar		
8	The Cat-6 transmission performance is in compliance with the ANSI/TIA/EIA 568C.2 standard		
9	<b>Jack Connector Specification:</b>		
10	Plastic Housing: ABS , UL94V-0 rated		
11	Operating Life: Minimum 750 insertion cycles		
12	Contact Material: Copper Alloy		
13	Contact Plating: 50μ" Gold plated on plug contact area		
14	Contact Force: 20N max ( IEC 60603-7-4)		
15	Plug Retention Force: 15 lb.		
16	<b>IDC Connector Specification:</b>		
17	Plastic Housing: Polycarbonate, UL94V-0 rated or equivalent		
18	IDC cap : ABS, UL 94V -0		
19	Contact Material: Copper Alloy		
20	IDC Contact Plating: Phosphor bronze with tin plated		
21	Insertion Force: 20N max ( IEC 60603-7-4 )		
22	Wire Accommodation: 22-26 AWG solid		
23	OEM should have valid ISO 9001 & ISO 14001 for design & development for wired & wireless networking products.		
24	All the passive components including rack should be from same make		

**BOQ-Item No - 06 . - Technical Specification of 1M UTP Cat6 Patch Cord**

Offered Make (Bidder to Mention) : \_\_\_\_\_ / (Acceptable Make List: Tyco,AMP,D-Link/equivalent)

Offered Model (Bidder to Mention) :

S. No.	Technical Specification	Compliance (Yes/No)	Remark
1	Category 6 UTP factory crimped Patch Cord --1Mtr & 2Mtr		
2	Patch Cord should have shielded boot at both ends		
3	The Patch Cord shall, at a minimum comply with proposed ANSI/TIA/EIA-568-C.2-1 Commercial Building Cabling Standards Transmission Performance Specifications for 4 pair 100W Category 6 Cabling.		
4	Equipped with modular 8-position modular plugs on both ends, wired straight through with standards compliant wiring.		
5	Should have 50 micro inches of gold plating over nickel contacts.		
6	Should be covered by ETL verification program for compliance with TIA 568C.2-1.		
7	Conductor size: 24 AWG stranded bare copper		
8	Max O.D.: 5.6mm (.22")		
9	Jacket: PVC UL-94V-O		
10	Temperature range: -10oC to +80oC		
11	Operating life: Minimum 750 insertion cycles		
12	Contact blade: Phosphor bronze		
13	Contact plating: 50μ" Gold		
14	Plug dimensions & tolerances compliant with FCC Part 68.500 and IEC 60603-7		
15	Approvals: UL 444 for copper conductor		
16	Dielectric withstanding voltage :500 V AC		
17	Insulation resistance : 35 M Ohm (Max )		
18	Operating temperature: -10oC to 80oC		
19	OEM should have valid ISO 9001 & ISO 14001 for design & development for wired & wireless networking products.		
20	All the passive components including rack should be from same make		

**BOQ-Item No - 07 . - Technical Specification of 2M UTP Cat6 Patch Cord**

Offered Make (Bidder to Mention) : \_\_\_\_\_ / (Acceptable Make List: Tyco,AMP,D-Link/equivalent)

Offered Model (Bidder to Mention) :

S. No.	Technical Specification	Compliance (Yes/No)	Remark
1	Category 6 UTP factory crimped Patch Cord --1Mtr & 2Mtr		
2	Patch Cord should have shielded boot at both ends		
3	The Patch Cord shall, at a minimum comply with proposed ANSI/TIA/EIA-568-C.2-1 Commercial Building Cabling Standards Transmission Performance Specifications for 4 pair 100W Category 6 Cabling.		



4	Equipped with modular 8-position modular plugs on both ends, wired straight through with standards compliant wiring.		
5	Should have 50 micro inches of gold plating over nickel contacts.		
6	Should be covered by ETL verification program for compliance with TIA 568C.2-1.		
7	Conductor size: 24 AWG stranded bare copper		
8	Max O.D.: 5.6mm (.22")		
9	Jacket: PVC UL-94V-O		
10	Temperature range: -10oC to +80oC		
11	Operating life: Minimum 750 insertion cycles		
12	Contact blade: Phosphor bronze		
13	Contact plating: 50μ" Gold		
14	Plug dimensions & tolerances compliant with FCC Part 68.500 and IEC 60603-7		
15	Approvals: UL 444 for copper conductor		
16	Dielectric withstanding voltage :500 V AC		
17	Insulation resistance : 35 M Ohm (Max )		
18	Operating temperature: -10oC to 80oC		
19	OEM should have valid ISO 9001 & ISO 14001 for design & development for wired & wireless networking products.		
20	All the passive components including rack should be from same make		

*BIDDER'S SIGNATURE:* \_\_\_\_\_  
*BIDDER'S NAME:* \_\_\_\_\_  
*BIDDER'S DESIGNATION:* \_\_\_\_\_

*DATE :* \_\_\_\_\_  
*OFFICIAL STAMP:*

# National University of Study & Research in Law

Kanke, Ranchi

For Supply, Installation and commissioning of LAN at NUSRL, Ranchi.

## Annexure III (Technical Bid)

### BOQ & Make-Model List

#### COMPONENTS:

SL	Item	Description	UoM	Qty	Make & Model
1	24 Port Managed Network Switch	24 Port 10/100/1000 Base – T, With 2 SFP Slot, 12Port PoE+ Managed Switch	Nos	39	
2	48 Port Managed Network Switch	48 Port 10/100/1000 Base – T, With 4 SFP Slot, Managed Switch	Nos	1	
3	9U Wall Mount Rack	9U Wall Mount Rack With PDU, Fan, Cable Manager & Hw	Nos	18	
4	27U Floor Rack	27U Floor Mount Rack With PDU, Fan, Cable Manager & Hw	Nos	1	
5	24 Port CAT-6 Patch Panel	24 Port UTP Cat6 Patch Panel, Fully Loaded	Nos	41	
6	CAT 6 Patch Cord (1 Mtr.)	UTP Cat6 Patch Cord – 1M length	Nos	1200	
7	CAT 6 Patch Cord (2 Mtr.)	UTP Cat6 Patch Cord – 2M length	Nos	1200	

*BIDDER'S SIGNATURE:* \_\_\_\_\_  
*BIDDER'S NAME:* \_\_\_\_\_  
*BIDDER'S DESIGNATION:* \_\_\_\_\_

*DATE :* \_\_\_\_\_

*OFFICIAL STAMP:*

# National University of Study & Research in Law

Kanke, Ranchi

For Supply, Installation and commissioning of LAN at NUSRL, Ranchi.

## Annexure IV (Technical Bid)

### Terms & Conditions

SL	Terms & Conditions Details	Acceptance of Bidder (Accepted / Not Accepted)	Remarks / Comments of Bidder (if not Accepted)
01	<b>Material Delivery :</b> Within 30 days from the date of PO		
02	<b>Work Completion :</b> Within 2 weeks from the date of material Delivery		
03	<b>Freight charges to NUSRL, Ranchi :</b> Bidder's responsibility, included in the offer		
04	<b>Warranty Terms of Materials :</b> 5 Years from the date of Delivery		
05	<b>Warranty Terms of Service :</b> 3 Years from the date of Work Completion		
06	<b>Payment Terms :</b> 95% of payment are made against satisfactory completion of work and rest 5% payment is retained as "performance security" for a period of one year		
07	<b>NUSRL's Scope :</b> (a) Required UPS Power Outlets near Rack / AP locations (b) Adequate & safe space for keeping the materials during delivery & execution (c) Down time (if required) during execution		
08	<b>Bidder's Scope :</b> (a) Project to be completed on Turnkey basis and as per NUSRL satisfaction (b) Project Documentation to be provided after execution (c) Necessary Training to be given after execution (d) 3 Years onsite Support for any breakdown service issues (e) Remote support / Telephone support for any other Service issues		

BIDDER'S SIGNATURE: \_\_\_\_\_

BIDDER'S NAME: \_\_\_\_\_

BIDDER'S DESIGNATION: \_\_\_\_\_

DATE : \_\_\_\_\_

OFFICIAL STAMP:

# National University of Study & Research in Law

**Kanke, Ranchi**

For Supply, Installation and commissioning of LAN at NUSRL, Ranchi.

## Annexure V (Price Bid)

<b>PRICE BID FORMAT</b>
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**A - COMPONENTS:**

SL	Item	Description	UoM	Qty	UNIT Rate	Total Amount	Tax Extra (in %)
1	24 Port Managed Network Switch	24 Port 10/100/1000 Base – T, With 2 SFP Slot, 12Port PoE+ Managed Switch	Nos	39			
2	48 Port Managed Network Switch	48 Port 10/100/1000 Base – T, With 4 SFP Slot, Managed Switch	Nos	1			
3	9U Wall Mount Rack	9U Wall Mount Rack With PDU, Fan, Cable Manager & Hw	Nos	18			
4	27U Floor Rack	27U Floor Mount Rack With PDU, Fan, Cable Manager & Hw	Nos	1			
5	24 Port CAT-6 Patch Panel	24 Port UTP Cat6 Patch Panel, Fully Loaded	Nos	41			
6	CAT 6 Patch Cord (1 Mtr.)	UTP Cat6 Patch Cord – 1M length	Nos	1200			
7	CAT 6 Patch Cord (2 Mtr.)	UTP Cat6 Patch Cord – 1M length	Nos	1200			
<b>SUB TOTAL: (A)</b>							

**B-SERVICES:**

SL	Item	Description	UoM	Qty	UNIT Rate	Total Amount	Tax Extra (in %)
1	INSTALLATION OF SWITCH	INSTALLATION OF ACTIVE DEVICE (SWITCH)	40	Nos.			
2	Rack installation	INSTALLATION OF 9U and 27U RACK	19	Nos.			
3	INSTALLATION OF JACK PANEL	INSTALLATION OF 24 PORT JACK PANEL	41	Nos.			
<b>SUB TOTAL: (B)</b>							
<b>GRAND TOTAL FOR ENTIRE LAN PROJECT (A + B ):</b> ** Taxes Extra as per above mentioned rate							

**BIDDER'S SIGNATURE:** \_\_\_\_\_  
**BIDDER'S NAME:** \_\_\_\_\_  
**BIDDER'S DESIGNATION:** \_\_\_\_\_

**DATE :** \_\_\_\_\_  
**OFFICIAL STAMP:**

- END -