



TENDER DOCUMENTS

PROCUREMENT OF INFRASTRUCTURE EQUIPMENT FOR

ESTABLISHMENT OF DATA CENTER - NUTECH

NUTECH/SCM/ Infrastructure Equipment For Establishment Of Data Centre -2019/TD-042

NATIONAL UNIVERSITY OF TECHNOLOGY

TENDER NOTICE

National University of Technology (NUTECH)

NUTECH/SCM/ Infrastructure Equipment for Establishment of Data Centre - 2019/TD-042

Sealed bids are invited from Government / FBR Registered Firms for the procurement of Infrastructure equipment for establishment of Data Centre NUTECH.

1. Tender documents containing terms & conditions and detailed specifications of items can be downloaded from NUTECH website "<https://nutech.edu.pk/d-p.php>" w.e f **22 Feb 2019**.
2. Quotations shall be submitted as per requirement of the tender documents.
3. Bidders will be required to submit bank draft/PO equal to 5% of quoted value as Bid Bond in favor of National University of Technology (NUTECH).
4. Sealed bids with detailed specification should reach on the following address latest by **1100 hours on 19 March 2019**. Late submission will not be entertained.
5. Bids will be opened at **1130 hours on 19 March 2019 at SCM Office**.
6. Project is to be completed in 60 days from the date of award of contract.
7. Submit Rs 1500/- as Tender fee in favour of NUTECH HBL account: **NUTECH Tendering and contracts, 5037- 000210755**. Please attach bank receipt with technical offer. Offers will not be entertained without payment of processing fee.

Deputy Director (Supply Chain Management Office)
NATIONAL UNIVERSITY OF TECHNOLOGY (NUTECH) UPROAD,SECI-12,
ISLAMABAD
Tel: 0092-51-5476768, Ext :178



NATIONAL UNIVERSITY OF TECHNOLOGY

SUPPLY CHAIN MANAGEMENT OFFICE

INVITATION TO TENDER

Submission Date/Time 19 Mar 2019 at 1100 hours

1. NUTECH desires to procure the list of item(s)/Store(s) as per **Annexure-A**. Interested bidders are requested to send their bids through courier or deliver at NUTECH under two separate sealed envelopes (placed together in third envelope), marked clearly, "**Technical Offer**" and "**Commercial Offer**", respectively to the undersigned, latest by or before above mentioned due date. If due to any unforeseen circumstances, NUTECH establishment remains closed, then the last date of submission will be extended to next working day.
2. Please also note that Technical Offer should contain only Annexes-A & B duly filled in (supported with relevant technical literature /details/ catalogues etc) and receipt of tender processing fee. Commercial Offer will contain Annexure-C and bid bond (Dully mentioned and placed in separate envelop). Please ensure no space is left blank in the annexes.
3. Following must be noted for this IT (Invitation to Tender):-
 - a. 2 x copies of technical offer are to be provided.
 - b. Annexes A, B and C must be signed and stamped. Attach only relevant documents.
 - c. Please complete all document as per given format. Do not use your format or letter head. Offer may be rejected if given format is not followed.
 - d. Validity of offer will be 90 days.
 - e. Delivery period will be 60 days from the date of award of contract.
 - f. The firm should provide point to point acceptance of each clause of IT and special instructions attached with IT.
 - g. Quote firm will render a certificate with technical offer that firm is neither defaulter nor blacklisted by any Government / semi Government organization directly or indirectly.
 - h. Tender(s) must be accompanied with a Bid Bond in agreement of faithful compliance of the conditions of Contract/Purchase Order. This amount will be equivalent to 5% of the total quoted value. In case of non-acceptance of any offer, the Bid Bond will be returned to the bidder by fastest possible means. The Bid Bond amount submitted by the successful bidder

will however be refunded on effective termination of Contract/ Purchase Order. (The Bid Bond will be forfeited in case of default by the bidder from his commitments made through his offer). Submission of Bid Bond is mandatory; otherwise your offer will be rejected.

- i. 2 years warranty against 5% bank guarantee will be required from the successful bidders from the date of commissioning.
- j. Rates should be quoted on Free Delivery basis at NUTECH Islamabad.

4. We reserve the rights to accept or reject any or all tenders as a whole or in part without assigning any reason whatsoever. The decision in this regard will be firm, final and binding on all bidders.

DD (Supply Chain Management)



NATIONAL UNIVERSITY OF TECHNOLOGY

SUPPLY CHAIN MANAGEMENT OFFICE

TECHNICAL OFFER

Annex A

User Reference No **SCM/ Infrastructure Equipment for Establishment of Data Centre-2019/TD-042** Date: **12-02-2019**

Technical Specification

Ser	Items	Description	Country of Origin	A/U	Qty Req	Bidder Compliance		Tech Scrutiny to be done by user	
						Yes	No	Accepted	Rejected
						Reason of Rejection			
1	Racks Overhead Cable Management	Cable Ladder 6" (15cm) Wide w/Ladder Attachment Kit, Cable Ladder 12" (30cm) Wide w/Ladder Attachment Kit, 2 x Cable Trough, Open Bottom, 800mm, 6 x Cable Trough 800mm, 6 x Data Cable Partition, 6 x Data Cable pass-through and 2 x InRow Bridge Partition Data Cable 800 MM.	USA/ EUROPE	Job	01				
2	InRow Cooling System	InRow (APC or equivalent), 40kW, 600mm Air Cooled, 380-415V, 50/60Hz, with humidifier, Leak Sensor Extension Cable - 20 ft (6.1 m), Condenser 46kw 230V/1 50H, Flooded Receiver, 20Litre 219mm diameter and 5x8 Start-Up Service.	USA/ EUROPE	No's	02				
3	UPS with Hot Swappable Battery Modules	32kW (APC or equivalent), All-In-One, Scalable to 48kW, 400V, with Additional High-Performance Hot Swappable Battery Module, 4 x IT Power Distribution Module 3x1 Pole 3 Wire 32A 3xIEC309 300cm, 360cm, 420cm, 2 x Modular IT Power Distribution Cable Extender 3 Wire 32A IEC309 120cm, Including Network Management Card, 5x8 Start-Up Service, backup time (10-15 Minutes at full	USA/ EUROPE	No's	02				

		load).						
4	Hot-Aisle Containment Solution	Ceiling Panel Mounting Rail - 1800mm (70.9in), Ceiling Panel Mounting Rail - 600mm (23.6in), 5 x Ceiling Panel - 900mm (36in), Aisle Containment Door x 2 – Sliding, Door Post, 900 - 1200mm (36 - 48in) Aisle Width, Door Header - 42U.	USA/ EUROPE	Job	01			
5	Environmental Monitoring System	Rack Monitor 570 x 01, Temperature & Humidity Sensor x 3, Camera Pod 160 x 4, USB Latching Repeater Cable, LSZH - 5m, 1 x 24 Port 10/100 Ethernet Switch for cooling, UPS, T&H rack sensors monitoring.	USA/ EUROPE	Job	01			
6	DCIM	Data Center Infrastructure Management Expert Software 250Nodes with 5years license. Including installation and integration.	USA/ EUROPE	No's	01			
7	Fire Detection and Suppression System and VESDA	FM 200/ECARO-25 agent, Extinguishing Fire Control Panel , Optical Smoke Detector, Fire Alarm Bell, Fire Alarm Sounder, Abort Switch, Gas Cylinder, actuator & accessories with Installation open PVC Conduit (3/29)Cable, Sch. 40 pipe, Testing & Commissioning (Complete Job).	USA/ EUROPE	Job	400 sqft			
8	Electrical Panel, Power Distribution Boxes	a. Prisma Plus – DC Main Panel (Including UPS's & Cooling Input and Lighting, Fire Panel etc) as per equipment load.	USA/ EUROPE	No's	01			
		b. Prisma Plus - Auto Phase Sequence Correction Panel with Surge Protection. As per DC load. Note: NUTECH will provide IESCO/Generator supply upto data center with ATS/Panel.		No's	01			
9	Power Cabling	a. Input cable for UPS's, 1 X 4C X 50mm2 PVC/PVC Cable + E on Cable Tray. b. Input cable for InRow Cooling Unit, 1 X 4C X 16mm2 PVC/PVC Cable + E on Cable Tray.	Pakistani	MTR	40			
				MTR	40			

		c. Input cable for outer unit, 1 x 4C x 10mm2 PVC/PVC cable +E on cable tray.		MTR	100			
		d. Output 1 x 4C x 95mm2 PVC/PVC Cable + E on cable tray from ATS to Main DB		MTR	15			
10	Anti-Static Flooring	Antistatic Vinyl Flooring, 600mm x 600mm tile, 2mm thickness with copper mesh, inside Data Center	USA/ Europe	Sqft	400			
11	Rodent Repellent	Ultrasonic Rodent Repellent Rechargeable batteries and AC Plugin Option Safe for Humans.	USA/ Europe	No's	04			
12	Tool Kits	Crimping Tool, fluke tester, Cabling Service Kit, DSX Cable Analyzer, Set of Screw Drivers, Cable Cutter Plier, Nose Plier, Paper Cutter, Measuring tape (30ft). Measuring tape(120ft), Ladder (10ft) Hammer Digital Multimeter, RJ45 Connectors Box, Tagging Machine (Easy to use Label Maker, Cartridge: 12mm Qty=15 and 9mm Qty=15, Soldering Station).	USA/ Europe	No's	02			
13	Vacuum Cleaner	Heavy Duty Vacuum Cleaner	USA/ Europe	No's	01			
14	Blower	Fair line pressure gun	USA/ Europe	No's	01			
15	Drill Machine	Heavy duty Bosch Hilti dry drill machine with rotary hammer and all kind / size bitts	USA/ Europe	No's	01			
16	Anti-Dust Dispenser	Automatic Shoe Dispenser with accessories and 5 x plastic sheet rolls	USA/ Europe	No's	01			
17	Mobile Workstation	Mobile workstation with chair (as per approved sample)	USA	No's	01			
18	Paint and Civil works	a. Fire resistant Paint Works, Dampa False Ceiling including 2x2 anti-glare (500Lux) lights Inside Data Centre.	Local	Sqft	400			
		b. Earth pit for Data Center including digging,		Job	01			

		<p>boring, earthing material, main hole, earth bar (Separate Earth Pit for DC & equipment/metal object).</p> <p>c. 10mm tempered glass partition b/w DC and NOC including 1x Fire rated Door with complete installation and fitting.</p>		Sqft	155			
19	Passive Cabling Cat-6A	<p>a. Brand Cat 6A Net 10G Individually FTPair Solid Cable 500M Coil.</p> <p>b. 10G Unloaded 1u Keystone Patch Panel Black24 x RJ45 Ports Including Rear Cable Management Bar.</p> <p>c. 10G Cat 6A S-FTP RJ45 Patch Cord Grey 2m</p> <p>d. 10G Cat 6A S-FTP RJ45 Patch Cord Grey 3m</p> <p>e.</p> <p>f. Laying, Termination & Tagging with color coding.</p>	USA/ Europe	No's	01			
				No's	02			
				No's	20			
				No's	25			
				Job	01			
20	Copper Piping InRow Cooling	Installation of Cooling Indoor/Outdoor Units covered with Liquid and Hot gas hard copper piping in powder coated trays c/w, nitrogen, refrigerant charging, water tank etc all accessories and fittings.	USA/ Europe	Job	02			
21	Operational Training	Local Training / certification (CDFOM) of NUTECH DC Support Staff.		Job	02			

Special Instructions Infrastructure Equipment for Establishment of Data Centre

Description	Bidder			Tech Scrutiny to be done by User		
	Yes	No	Alternate Offer	Accepted	Rejected	Reasons of Rejection
Installation and Commissioning a. Commissioning of the equipment (Software & Hardware) will be carried out by OEM rep at his own cost and risk at designated place at NUTECH. b. Any Special requirement must be specified in the offer by the supplier.						
Standard & Compliance. Bidder must submit specification compliance in their bids, non-compliance (if any) against the product specification and general terms & conditions of the tender will lead to the disqualification of the bidder.						
Support Services a. 24x7x365 Support Services including public holidays. b. Suppliers to have in-country spares/Technical support and ensure spares and technical support/Assistance for next 3 years.						
Warranty Period a. 1 Years Comprehensive warranty for all items from the date of commissioning. b. 2 Years SLA (without parts) from end date of warranty period. C. A Warranty sticker is to be pasted on each item by the supplier/ OEM highlighting name of Firm, Contract No and Date, Description of Store and warranty validity.						
Training Notes. Supplier will provide a set of handouts for training on operation and maintenance of the software						
Physical Inspection Criteria <ul style="list-style-type: none"> • 100% Physical inspection of store will be carried out before commissioning of the equipment for following details <ol style="list-style-type: none"> a. For physical damage, scratches and deformity. b. Accessories/ Components as per contractual Specifications c. Technical manuals (Operation manual, user guide). d. OEM certificate and verifiable documents by the supplier that store has been procured from the certified source and is factory new and from latest production. e. Brand name and country origin. 						
Liability of Supplier a. OEM certificate of authorized dealership. Supplier is to provide original						

<p>OEM certificate of subject equipment bought directly from the manufacturer and being an authorized dealer.</p> <p>b. In Case the equipment supplied is not compatible with specifications, the supplier will be obliged to call his representatives at his own cost for consultation and corrective action</p>						
<p>Special Notes</p> <p>a. Additional requirements for the maintenance of equipment (if any) must be intimated by the supplier in technical offer.</p> <p>b. Supplier must provide the list of organizations using same equipment in Pakistan (if any).</p> <p>c. Equipment must be a standard product of OEM available at web Address of OEM.</p> <p>d. In case of premature failure of the equipment, OEM has to replace / rectify the item free of cost. Required transportation charges would be borne by the supplier.</p> <p>e. Manufacturer Authorization Form (MAF) in the name of NUTECH University by the Principal / OEM must be provided (Mandatory).</p> <p>f. Contract will be awarded on Package deal basis.</p> <p>g. In technical proposal, all items must have the brand names, model number, manufacturer name, country of origin, manufacturer's warranty including parts and labor with complete specs and brochures. Re-conditioned and re-furbished equipment shall not be acceptable</p>						
<p>Publications. Operational/ Maintenance manual Qty 01 with Equipment and additional Qty 02 for record purpose and should consist of following sections</p> <p>a. Equipment Description/ Operation</p> <p>(1) Specifications</p> <p>(2) Description</p> <p>(3) Operation</p> <p>b. Servicing</p> <p>(1) Maintenance Schedule</p> <p>(2) Removal/ Installation procedure</p> <p>c. Trouble Shooting guide</p>						

Improvement and Safety Measures. Any improvement and safety measures suggested by NUTECH during commissioning are to be resolved by the supplier manufacturer at no extra cost.						
--	--	--	--	--	--	--

Firm Name _____ Signature _____ Name _____ Designation _____



NATIONAL UNIVERSITY OF TECHNOLOGY
SUPPLY CHAIN MANAGEMENT OFFICE

TECHNICAL OFFER

Annex B

User Reference No **NUTECH/SCM/ Infrastructure Equipment for Establishment of Data Centre - 2019/TD-042** Date: **12-02-2019**

Please fill in the following essential parameters:

1. Validity of Offer: _____ Days (Should not be less than 90 days)
2. Delivery Period: _____ Days (After Placement of order)
3. Country of Origin: _____
4. Warranty/Guarantee: _____ Months from the date of final acceptance of the stores.

General

GST No: _____ (Please enclose copy)

NTN/CNIC: _____ (if exempted, please provide valid exemption certificate)

Payment Terms:

1. 50 % advance payment (Against valid bank Guarantee)
2. 50% Payment after delivery, installation /commissioning, user satisfaction certificate

Details of Payment Recipient

(1) Name/Title: _____

(2) Address: _____

Signature: _____

Official Seal: _____

Name: _____

Designation: _____



NATIONAL UNIVERSITY OF TECHNOLOGY
SUPPLY CHAIN MANAGEMENT OFFICE

FINANCIAL OFFER

Annex C

User Reference No **SCM/ Infrastructure Equipment for Establishment of Data Centre-2019/TD-042** Date: **12-02-2019**

Ser	Items	Description	A/U	Qty Req	Unit Price (Rs) (excluding GST)	GST (Rs) (If applicable)	Total Unit Price (Rs)	Total Amount of total Qty (Rs)
1	Racks Overhead Cable Management	Cable Ladder 6" (15cm) Wide w/Ladder Attachment Kit, Cable Ladder 12" (30cm) Wide w/Ladder Attachment Kit, 2 x Cable Trough, Open Bottom, 800mm, 6 x Cable Trough 800mm, 6 x Data Cable Partition, 6 x Data Cable pass-through and 2 x InRow Bridge Partition Data Cable 800 MM.	Job	01				
2	InRow Cooling System	InRow (APC or equivalent), 40kW, 600mm Air Cooled, 380-415V, 50/60Hz, with humidifier, Leak Sensor Extension Cable - 20 ft (6.1 m), Condenser 46kw 230V/1 50H, Flooded Receiver, 20Litre 219mm diameter and 5x8 Start-Up Service.	No's	02				
3	UPS with Hot Swappable Battery Modules	32kW (APC or equivalent), All-In-One, Scalable to 48kW, 400V, with Additional High-Performance Hot Swappable Battery Module, 4 x IT Power Distribution Module 3x1 Pole 3 Wire 32A 3xIEC309 300cm, 360cm, 420cm, 2 x Modular IT Power Distribution Cable Extender 3 Wire 32A IEC309 120cm, Including Network Management Card, 5x8 Start-Up Service, backup time (10-15 Minutes at full load).	No's	02				
4	Hot-Aisle Containment	Ceiling Panel Mounting Rail - 1800mm (70.9in), Ceiling Panel Mounting Rail -	Job					

	Solution	600mm (23.6in), 5 x Ceiling Panel - 900mm (36in), Aisle Containment Door x 2 – Sliding, Door Post, 900 - 1200mm (36 - 48in) Aisle Width, Door Header - 42U.		01				
5	Environmental Monitoring System	Rack Monitor 570 x 01, Temperature & Humidity Sensor x 3, Camera Pod 160 x 4, USB Latching Repeater Cable, LSZH - 5m, 1 x 24 Port 10/100 Ethernet Switch for cooling, UPS, T&H rack sensors monitoring.	Job	01				
6	DCIM	Data Center Infrastructure Management Expert Software 250Nodes with 5years license. Including installation and integration.	No's	01				
7	Fire Detection and Suppression System and VESDA	FM 200/ECARO-25 agent, Extinguishing Fire Control Panel , Optical Smoke Detector, Fire Alarm Bell, Fire Alarm Sounder, Abort Switch, Gas Cylinder, actuator & accessories with Installation open PVC Conduit (3/29)Cable, Sch. 40 pipe, Testing & Commissioning (Complete Job).	Job	400 sqft				
8	Electrical Panel, Power Distribution Boxes	a. Prisma Plus – DC Main Panel (Including UPS's & Cooling Input and Lighting, Fire Panel etc) as per equipment load.	No's	01				
		b. Prisma Plus - Auto Phase Sequence Correction Panel with Surge Protection. As per DC load. Note: NUTECH will provide IESCO/Generator supply upto data center with ATS/Panel.	No's	01				
9	Power Cabling	a. Input cable for UPS's, 1 X 4C X 50mm2 PVC/PVC Cable + E on Cable Tray.	MTR	40				
		b. Input cable for InRow Cooling Unit, 1 X 4C X 16mm2 PVC/PVC Cable + E on Cable Tray.	MTR	40				

		c. Input cable for outer unit, 1 x 4C x 10mm ² PVC/PVC cable +E on cable tray.	MTR	100				
		d. Output 1 x 4C x 95mm ² PVC/PVC Cable + E on cable tray from ATS to Main DB	MTR	15				
10	Anti-Static Flooring	Antistatic Vinyl Flooring, 600mm x 600mm tile, 2mm thickness with copper mesh, inside Data Center	Sqft	400				
11	Rodent Repellent	Ultrasonic Rodent Repellent Rechargeable batteries and AC Plugin Option Safe for Humans.	No's	04				
12	Tool Kits	Crimping Tool, fluke tester, Cabling Service Kit, DSX Cable Analyzer, Set of Screw Drivers, Cable Cutter Plier, Nose Plier, Paper Cutter, Measuring tape (30ft). Measuring tape(120ft), Ladder (10ft) Hammer Digital Multimeter, RJ45 Connectors Box, Tagging Machine (Easy to use Label Maker, Cartridge: 12mm Qty=15 and 9mm Qty=15, Soldering Station).	No's	02				
13	Vacuum Cleaner	Heavy Duty Vacuum Cleaner	No's	01				
14	Blower	Fair line pressure gun	No's	01				
15	Drill Machine	Heavy duty Bosch Hilti dry drill machine with rotary hammer and all kind / size bits	No's	01				
16	Anti-Dust Dispenser	Automatic Shoe Dispenser with accessories and 5 x plastic sheet rolls	No's	01				
17	Mobile Workstation	Mobile workstation with chair (as per approved sample)	No's	01				
18	Paint and Civil works	a. Fire resistant Paint Works, Dampa False Ceiling including 2x2 anti-glare (500Lux) lights Inside Data Centre.	Sqft	400				
		b. Earth pit for Data Center including digging, boring, earthing material, main hole, earth bar (Separate Earth	Job	01				

		Pit for DC & equipment/metal object). c. 10mm tempered glass partition b/w DC and NOC including 1x Fire rated Door with complete installation and fitting.	Sqft	155				
19	Passive Cabling Cat-6A	a. Brand Cat 6A Net 10G Individually FTPair Solid Cable 500M Coil.	No's	01				
		b. 10G Unloaded 1u Keystone Patch Panel Black24 x RJ45 Ports Including Rear Cable Management Bar.	No's	02				
		c. 10G Cat 6A S-FTP RJ45 Patch Cord Grey 2m	No's	20				
		d. 10G Cat 6A S-FTP RJ45 Patch Cord Grey 3m	No's	25				
		e. Laying, Termination & Tagging with color coding.	Job	01				
20	Copper Piping InRow Cooling	Installation of Cooling Indoor/Outdoor Units covered with Liquid and Hot gas hard copper piping in powder coated trays c/w, nitrogen, refrigerant charging, water tank etc all accessories and fittings.	Job	02				
21	Operational Training	Local Training / certification (CDFOM) of NUTECH DC Support Staff.	Job	02				
				Total				

Bid Bond Ref_____

Total Gross Value_____

*Custom duty is to be quoted separately.

**Bid Bond to be attached with Annex C. Copy of Bid Bond be attached with

Technical offer without showing its value. Exposure of Bid Bond value on Tech Offer may result in offer being rejected

Firm Name_____
Signature_____
Name_____
Designation_____