

Clarifications of and Amendment / Corrigendum to Tender no. NITRR/LAN/7567 /2013, dated 01.10.2013

No. 7828

Dated: 28/10/2013

In point no. 56 of Chapter-I “Instructions to Bidders” on Page No. 5 of the Detailed Tender Document in place of 19th November 2013 read as 27th November 2013

In point no. 58, point no. a of Chapter-I “Instructions to Bidders” on Page No. 5 of the Detailed Tender Document in place of 19th November 2013 read as 27th November 2013

This document contains clarifications and amendments made to various clauses in the above cited tender. These clarifications and amendments must be read-with the above cited tender documents. The amendments mentioned here shall be superseding the similar clause/s wherever appearing in the original (cited) tender document.

Amendments in Chapter I & II of the Detailed Tender Document

In the tender document, please read “Nationalized/Commercial Bank” in place of “Nationalized Bank” wherever mentioned.

In Chapter II on Page No. 10, under 4. EARNEST MONEY DEPOSIT (BID SECURITY), point no. (c) which is

“EMD may be in the form of Account Payee Demand Draft / Fixed Deposit Receipt issued by any nationalised bank drawn in favour of “Director, NIT Raipur” payable at Raipur and valid for a period of forty-five days beyond the final bid validity period. The EMD shall be submitted in its original form. Copies will not be accepted.”

is revised as follows

“EMD may be in the form of Account Payee Demand Draft / Fixed Deposit Receipt / Bank Guarantee issued by any nationalised /commercial bank drawn in favour of “Director, NIT Raipur” payable at Raipur The EMD shall be submitted in its original form. Copies

will not be accepted. In case, the EMD is submitted in form of FDR or BG its validity must be 240 days from the last date of submission of this tender. The format of Bank Guarantee for EMD is given in Annexure –C-I of this corrigendum.”

In Chapter II on Page No. 17, under 25. LIQUIDATED DAMAGES FOR DELAY IN DELIVERY, the following clause is appended.

- (e) NIT Raipur shall be responsible to make the site available to the contractor within the agreed time-line and the contractor shall not be taken responsible for delays arising out of failure of NIT Raipur to make the site available.

Amendments in Chapter IV & V of the Detailed Tender Document

- (a) In “Chapter IV: Specification and Allied Technical Details” under “DETAILED TECHNICAL SPECIFICATIONS” in SN. E “Managed Access Switch” at point 7, “10G” should be read as “1G”
- (b) In “Chapter IV: Specification and Allied Technical Details” under the table “Detailed Technical Scope” point no. ix) is revised as follows:
“Access switches shall preferably be configured in 1G resilient ring in accordance with the technical specifications of the Managed Access Switch. They may also be stacked on normal standards based 1G Ethernet ports and there is no requirement of dedicated stacking ports on the access switches.”
- (c) In “Chapter IV: Specification and Allied Technical Details” under the table “Detailed Technical Scope” point no. x) is revised as follows:
“Daisy chaining of access switches is not allowed and access switch rings / stacks shall be directly terminated from the distribution switch on Copper or Fiber based on the distance requirement.”
- (d) In “Chapter IV: Specification and Allied Technical Details” under Detailed Technical Scope point no. (xxv) should be read as
“Central dual high availability wireless controller shall support at least 45 access points initially with up gradation in future for minimum of 140 APs for controller pair”
- (e) All Network Switches and related Active Hardware (Core, Distribution, Access Switches, Transceiver Modules) shall be from same OEM. NMS shall preferably be from the OEM of Network Switches.

In Chapter IV: “Specification and Allied Technical Details” under “Detailed Technical Scope” point no. (xvii) may be read as

The Data sheets / Cross reference documents and technical documents of Network Switches, Firewall, IPPBX, NMS, RADIUS should be available on the global websites of the respective switching manufacturer and the URL links to the respective documentation should be provided in the compliance statement. Any document which is not available on the Global website of the OEM may be treated as invalid document submitted and noncompliance against the technical specification asked in the tender. Also in case of password protected section/s, it would be bidder's responsibility to make it available duly signed and stamped by the OEM/bidder to NIT Raipur, if so demanded.

Network Switches:

(i) General Clarification:-

VSS

The technology asked is VSS or equivalent technology. Functional requirement is to eliminate single points of failure and enable rapid failover upon failure. Minimum feature set required has been mentioned. NIT Raipur has mentioned VSS or equivalent technology only to refer to the features supported by VSS technology or equivalent technologies of other OEMs. In our knowledge multiple OEMs support such technologies. OEMs/Bidders are free to offer their implementations which comply with our requirement. NIT Raipur reserves the right to verify the same during proof of concept (PoC).

SDN Concept

SDN is a networking concept which has evolved out of work done at UC Berkeley and Stanford University and is not proprietary to a particular OEM though SDN implementations may vary across OEMs. In page no. 34, NIT Raipur has asked for SDN in its HA core switches in points A1 H,I,J, and K specifying the minimum feature set required. SDN is asked on the HA core switches because it shall be possible to enhance features and functionality of the campus network in future by centrally deploying new SDN services and applications.

Functionality required from day 1 is further elaborated as follows:

It should be possible to deploy a new switch by placing it in the network and powering it on with no configuration required on the device, i.e., a replaced network switch should be able to take configuration automatically or in plug and play fashion. It should have a centralized controller on the core switches as a single point of management from where different network switch

configurations and switch firmware upgrades should be able to be pushed out to any network switch. For this functionality it is mandatory for all the network switches to be seamlessly integrated with the centralized controller.

It is a herculean task to upgrade switch configurations and firmware individually and do the associated book keeping. This useful feature is essential for ease in network maintenance. This shall reduce the operational expenditure and the requirement of highly skilled manpower to manage and maintain the network.

In our knowledge multiple OEMs support this and similar concepts. OEMs/Bidders are free to offer their implementations which comply with our requirement. NIT Raipur reserves the right to verify the same during Proof of Concept (PoC).

Following clauses are appended to the section – Detailed Technical Scope (page no. 31) in Chapter_IV “Specification and Allied Technical Details”

- xxxvi) MD5 authentication is required for all switches on the core transport ring, that is the core switch, the distribution switch type 1, and the server farm switch.
- xxxvii) In the tender document, NTPv6 is asked for managed access switch only. NTPv6 shall now be required on all switches – core switch, distribution switches, server farm switch, and managed access switches.
- xxxviii) The supplied UPS systems shall be of rack type or floor mounted. All online UPS systems should have provision for bypass facility.

Passive:

Path redundancy shall be required at the physical (cabling) level for the rings.

On page no. 60 of the “Detailed Tender Document” under “**SPECIFICATION FOR STRUCTURE CABLING SYSTEM**” the following paragraph

“The complete cabling system offered shall be upgradeable to the intelligent system if required in future by retrofitting of sensors. The OEM of the cabling system should have its own intelligent solution, not should have any tie-up with third party. OEM Shall Give Written declaration for same”

is revised as follows:

“The supplied patch panels shall be upgradeable to intelligent patch panels if required in future by retrofitting of sensors or by any other technology. All the necessary accessories (hardware/software/firmware/combo) required for such upgrade shall be from the same OEM (of the passive components). OEM shall give written declaration for same. The performance warranty & onsite defect liability period shall remain unchanged post up-gradation & handover. The supplied accessories shall have a warranty of 3 years post up-gradation & handover.”

The other point-wise amendments to Technical specification mentioned in the Chapter-IV are now given as follows:-

S.N	Chapter No.	Section No.	Page No.	Existing Clause	Revised Clause
1	IV	6(B)	37	Authentication fail VLAN	Authentication fail VLAN or Guest VLAN
2	IV	9(C)	38	A USB or External memory card socket, allowing software release files, configuration and other files to be stored for backup and distribution to other switches	Should support software release files, configuration and other files to be stored for backup and distribution to other switches
3	IV	5(B)	41	Authentication fail VLAN	Authentication fail VLAN or Guest VLAN
4	IV	9(C)	42	A USB or External memory card socket, allowing software release files, configuration and other files to be stored for backup and distribution to other switches	Should support software release files, configuration and other files to be stored for backup and distribution to other switches
5	IV	1(A)	42	Switch should have 24 X10/100/1000 T Ports and 4 Nos. 1G SFP Combo Ports	Should be read as 24 * 10/100/1000T Ports with 4 * 1G SFP combo slots and the proposed switch should be non blocking wire-speed for the specified port density

6	IV	11	53	Modulation: Orthogonal Frequency Division Multiplexing (OFDM) / 802.11n draft 2.0	Modulation: OFDM/SDM/MRC or equivalent/802.11n
S.N	Chapter No.	Section No.	Page No.	Existing Clause	Revised Clause
7	IV	7	54	Modulation: Orthogonal Frequency Division Multiplexing (OFDM) / 802.11 n draft 2.0	Modulation: OFDM/SDM/MRC or equivalent/802.11n
8	IV	16	54	802.11 a/b/g/n functionality certified by the WiFi alliance Draft 2.0	802.11 a/b/g/n functionality certified by the WiFi alliance for 802.11n
9	IV	E --> 10 a	44	10 Electrical Approvals and Compliances a. Certification: UL, cUL, TUV or Equivalent and RoHS compliant	10 Electrical Approvals and Compliances a. Certification: UL, cUL, TUV or Equivalent and RoHS compliant b. EEE compliance / other eco-friendly low power consumption technology
10	IV	F --> j	44	Switch should be RoHS and WEEE Compliant	Switch should be RoHS and WEEE Compliant EEE compliance / other eco-friendly low power consumption technology
11	IV	(a)	60	Category 6 Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/TIA/EIA-568-B.2-1 Additional Transmission Performance Specifications for 4-pair Category 6 Cabling.	Category 6 Unshielded Twisted Pair 4 pair cable shall be compliant with ANSI/TIA/EIA-568-C.2 Transmission Performance Specifications for 4-pair Category 6 Cabling
12	IV	(d)	60	The cable jacket shall be FR PVC	The cable jacket shall be FR PVC or LSZH
13	IV	(b)	60	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP with FR PVC jacket.	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, UTP with FR PVC jacket or LSZH

14	IV	(d)	61	Contact Plating: 50μ” Gold/100μ” Nickel	50μ” Gold /100μ” Nickel or higher
S.N	Chapter No.	Section No.	Page No.	Existing Clause	Revised Clause
15	IV	(a)	63	Type of Cable: OS1 Single mode 6 Core, Armoured, Unitube, Gel filled cable complying to ISO.IEC 11801 - 2nd Edition, type OS1; AS/ACIF S008; AS/NZS 3080,ITU-T REC G 652D, IEC 60793/60794, TIA 568, EIA 455; suitable for use in direct burial, outdoor ducts and backbone cabling.	Type of Cable: OS2 Single mode 6 Core, Armoured, Unitube, Gel filled cable complying to ISO.IEC 11801 - 2nd Edition, ITU-T REC G 652D, suitable for use in direct burial, outdoor ducts and backbone cabling.
16	IV	(j)	63	Two Steel wires should be provided as strength members	(Two Steel wires) or (FRP rod) or (Aramid yarns beneath corrugated steel tape) may be provided as strength members
17	IV	(t)	63	ISO/IEC 11801 : 2002 -2nd Edition, Type OS1	ISO/IEC 11801 : 2002 - 2nd Edition, Type OS2
18	IV	H	50	The IPS capability shall minimally attain Internet Computer Security Association (ICSA) NIPS or NSS Certification	The IPS capability shall minimally attain Internet Computer Security Association (ICSA) NIPS or NSS Certification or West Cost Benchmark Certification.
19	IV	(UPS)1	28	On-Line UPS, 4800 Watts / 6000 VA, Input 230V / Output 230V , Interface Port DB-9 RS-232, SmartSlot, Extended runtime model , Rack Height 2 U	On-Line UPS, 4800 Watts / 6000 VA, Input 230V / Output 230V , Interface Port DB-9 RS-232, Smart Slot (or equivalent) or USB/RS485 card. Extended runtime model. Rack Height 2U or floorstanding model

20		(UPS)4	29	Online UPS will be offered, 2400 Watts / 3000 VA, Input 230V / Output 230V , Interface Port DB-9 RS-232, SmartSlot, USB. Battery required for 1 hour Back-up, Rack and Cable	Online UPS will be offered, 2400 Watts / 3000 VA, Input 230V / Output 230V, Interface Port DB-9 RS-232, Smart Slot (or equivalent) or USB/RS232. Battery required for 1 hour Back-up, Rack and Cable
S.N	Chapter No.	Section No.	Page No.	Existing Clause	Revised Clause
21		TECHNICAL SPECIFICATIONS FOR 10 KVA, 1+1 PARALLEL REDUNDANT UPS SYSTEM	66-68	10 KVA UPSSL No.2.3 -Input Frequency- 50 HZ $\pm 5\%$ SL No.4.7 -Max.Batt.Charging Current-7.5A or better SL No.5.3 -BackUp- 2 Hour SL No.5.5 -Total Battery VAH Required-2 Sets of Battery Banks of minimum 31200 VAH.Each Battery Bank has to be Provided for 60 minutes backup SL No.5.7 -7A or better SL No.6.2 -Frequency-50Hz $\pm 2.5\%$ or better SL No.8.1 -0°C to 45°C,continuous or better	10 KVA UPS SL No.2.3 -Input Frequency- 50 HZ $\pm 10\%$ or better SL No.4.7 -Max.Batt.Charging Current-4 A or better SL No.5.3 -BackUp-1 Hour each UPS SL No.5.5 -Total Battery VAH Required-2 Sets of Battery Banks of minimum 20280 VAH each .Each Battery Bank has to provide minimum 60 minutes backup SL No.5.7 - 4A or better SL No.6.2 -Frequency - 50Hz $\pm 0.25\text{Hz}$ or better SL No.8.1 -0°C to 40°C, continuous or better

22		TECHNICAL SPECIFICATIONS OF 6 KVA UPS SYSTEM	68-69	6 KVA UPS SL No.6 -Input Frequency Range-45~55 Hz or better SL No.9 -Battery Backup Time-30 minutes SL No.24 -Relative Humidity-0-95% without condensation or better	6 KVA UPS SL No.6 -Input Frequency Range-45~60 Hz or better SL No.9 -Battery Backup Time-60 minutes SL No.24 -Relative Humidity-10-90% without condensation or better
S.N	Chapter No.	Section No.	Page No.	Existing Clause	Revised Clause
23		TECHNICAL SPECIFICATIONS OF 3 KVA UPS SYSTEM	69-70	3 KVA UPS SL No.5 -Input Parameters-Frequency Range Hz-50Hz $\pm 5\%$ Hz SL No.2 -Battery Charger-Max Charging Current-1Amps SL No.2 -Battery Parameter- Backup Time-30 minutes SL No.3 -Environmental Parameter-Noise Level-<45db or better	3 KVA UPS SL No.5 -Input Parameters-Frequency Range: 50Hz $\pm 20\%$ Hz or better SL No.2 -Battery Charger-Max Charging Current-8A or better SL No.2 -Battery Parameter- Backup Time-60 minutes SL No.3 -Environmental Parameter-Noise Level-<60db or better Additional Features: 1. External Isolation Transformer at the input of the 3 KVA UPS system from day 1. 2. 10 kA TVSS of same make as UPS with response time of nano seconds at the input of the 3 KVA UPS system from day 1. Datasheet to be attached. Eligibility Criteria: Same as points no. 26 and 27 of 6 KVA UPS

In Annexure 1 and Annexure 2 of the “Detailed Tender Document”, IP PBX and IP Phones have been mentioned at points 4 and 5 separately. It is clarified that in both the Annexure 1 and 2 item at S. No. 4 should be read as IP PBX and IP Phones. Same is also clear from “Chapter IV: Specification and Allied Technical Details” in “**TECHNICAL SPECIFICATIONS OF IP PHONE**”. S. No. 5 of both In Annexure 1 and Annexure 2 stands deleted.

All the other points remain unmodified / unchanged. It is reiterated that in case of a remaining variation in the corrigendum and the original tender document, the information in the corrigendum shall be considered final.

The Proof of Concept (PoC) is a set of pre-award tests during the technical evaluation stage to ensure that desired functional and performance requirements are being met. Additional tests may be added to the PoC at the time of technical evaluation of the bids. Information in this regard shall be given in advance to the bidders through the Institute website <http://www.nitr.ac.in>

Bidders are advised to keep checking the institute website periodically for updates.

Bidders and manufacturers are hereby informed that NIT Raipur has conducted a detailed requirement analysis (including projected future scalability), comparative analysis of competing state-of-art networking paradigms and technologies, cost-benefit and cost-performance analyses. Concerns of rapid technology obsolescence and integration concerns have also been addressed. The terms and conditions and the technical specifications, functional requirements etc. are the outcome of an extensive rational exercise.

Bidders and manufacturers are generally advised to refrain from attempting to influence (e.g., through canvassing), manipulate, or disrupt the bidding process in any manner. NIT Raipur reserves the right to reject the bids from bidders / manufacturers indulging in unethical and unfair practices, and to prevent them from participating in future projects of the institute.

NIT Raipur reserves the right to call for any additional technical or commercial documents or tests at any stage of the tender process.

If a certification such as ICSA / UL / ISO etc. has been mentioned in the specifications, soft copy of the same should be provided.

This corrigendum is also a part of the tender documents. Hence bidders are required to attach copies of all tender documents including this corrigendum duly signed and sealed by their authorized signatory along with the other tender documents as required under Chapter – I, point no. 50 d.

THE TENDER IS NOW OPEN FOR BIDDING.

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BANK GUARANTEE FORMAT FOR EARNEST MONEY DEPOSIT

To

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WHEREAS _____ (Name of Bidder) (hereinafter called "the Bidder" has submitted its Bid dated _____ (Date) for the execution of contract "Campus Wide Extension of Institute Building LAN (Wired and Wireless) and IP Telephony at NIT Raipur (hereinafter called "the Bid") in favour of **National Institute of Technology Raipur** hereinafter called the "Employer";

KNOW ALL MEN by these presents that we, _____ (name of the issuing Bank), a body corporate constituted under the _____ having its Head Office at _____ amongst others a branch/office at _____ (hereinafter called "the Bank" are bound unto the employer for the sum of Rs. 15,00,000/- (Rupees Fifteen lacs only) for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors and assigns by these presents;

THE CONDITION of this obligation is:

If the bidder withdraws or amends their quotation before the issue of work-order to the successful bidder by the employer, or fails to submit PBG within stipulated time, (in case he becomes the successful Bidder),

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of any of the above conditions. Notwithstanding anything contained herein

i) Our liability under this Bank Guarantee shall not exceed Rs **15,00,000/-** (Rupees **Fifteen lacs** only)

ii) This Bank Guarantee is valid up to _____ (date) and

iii) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand On or before _____ (mention period of guarantee as found under clause (ii) above plus claim period)

Dated _____ day of _____ 20____

SIGNATURE OF THE BANK

Clarification of and amendment to Tender No./NITRR/LAN/7567/2013 dated 01.10.2013
 Read, understood & Complied with

Signature of the bidder.