Clarification No. – II dated 10.05.2023 to the Bidding Documents for Package- Implementation of Wi-Fi and LAN services inside Farakka Barrage Campus (ER2/NT/W-TELE/DOM/ZA4/23/01245)-Rfx No.5002002668

Sl. No.	Section No.	Clause No.	Page No.	Sub-clause /Heading	Tender Clause	Query and change requested	Justification	Clarification-II
1	2	2.3.1	2	Stackable 12 Nos SFP Ethernet Port Distribution Switch	Non-Blocking architecture and Stackable	Please specify the minimum stacking bandwidth required, which is missing.		Provisions of bidding document remains unchanged
2	2	2.3.1	2		Ports: 12 Nos – 01/10G SFP+ ports, 4 x 10G SFP	**QUERY**: Can we offer with 24 x 1G SFP Ports, 4 x 10G SFP configuration? **CHANGE:** 12 nos 01/10G SFP+ port is an OEM specific config, thus Restrictive. The standard config from majority OEMs is 24 nos 01/10G SFP+ Ports. Unless the spec is amended, it will block entry of other brands, even MII	As per the design of the network, traffic requirement is not high, hence a switch with 24 x 1G + 4 x 10G interface can easily meet the requirement	The provisions of **Amendment-I dated 05.05.2023 (Sr. No.-1)** remains unchanged
3	2	2.3.1	2		Switching Capacity: 320 Gbps without Stacking BW	Change is requested in line with allowing 24 x 1G SFP Port config as above	Total bandwidth requirement of network is not so high.	Provisions of bidding document remains unchanged
4	2	2.3.1	3		Security features:, Port security, DHCP snooping, Dynamic ARP inspection (DAI), IP source guard, The Unicast Reverse Path Forwarding (uRPF), Bidirectional data support on a SPAN, User authentication, Private VLAN , Router and VLAN ACLs , complete identity and security, Multidomain authentication, MAC address notification, IGMP filtering, Secure Shell (SSH) Protocol, Kerberos, and Simple Network Management Protocol Version 3 (SNMPv3), Port-based ACLs, IEEE 802.1ae, TACACS+ and RADIUS authentication, Bridge protocol data unit (BPDU) Guard, Spanning Tree Root Guard (STRG).	Request you to remove the following additional features: (i) Cisco security VLAN ACL (ii) TACACS+ as both are OEM Specific	Restrictive parameters removed to allow open participation to local brands	Please refer Amendment-II (Sr. No. 1)
5	2	2.3.1	3		Common Criteria Certificate: Product series or its' operating system series must have Common Criteria certification with EAL3/NDPP or better certification level.	To support MII Brands not having Common Criteria Certificate, please also accept past supply records (PO copies) to Govt / PSU companies in last 5 years.	Equivalent Indian certification isn't completed for majority of OEMs in the last 3 years since MII order was issued.	The provisions of **Amendment-I dated 05.05.2023 (Sr. No.-4)** remains unchanged
6	2	2.3.2	3	24 Port 10/100/1000 Mbps with 4 Nos SFP Ports Access Switch	Non-Blocking architecture and Stackable (Along with Stacking Cable and Separate Ports)	Once again would request to remove Stacking for Technical reasons stated earlier as it doesn't serve major interests in case of distributed network as in case of Farakka Barrage. Also, stacking feature supported **by use of Stacking cable & separate ports is RESTRICTIVE** & NOT SUPPORTED by majority of MII OEMs. So, please amend as "Stacking with Up-Link Port / Virtual Stacking" to allow wider participation	After creating stack the total depdency is on Master and Backup Switches. If they fail complete stack is down. Also stacking has a limitation that all the switches has to be in same rack, which may not be feasible as per site limitations. We would recommend to use as standalone switches so that failure of 2 devices doesn't affect Remaining switches	Please refer Amendment-II (Sr. No. 2)
7	2	2.3.2	4		Common Criteria Certificate: Product series or its' operating system series must have Common Criteria certification with EAL3/NDPP or better certification level.	To support MII Brands not having Common Criteria Certificate, please also accept past supply records (PO copies) to Govt / PSU companies in last 5 years. Necessary Self Declaration by the OEM may be accepted in lieu of the Certificate copy, as advised by MEITY vide their circular dated 6-12-2019 (copy enclosed)	Equivalent Indian certification isn't completed for majority of OEMs in the last 3 years since MII order was issued.	Provisions of **Amendment-I dated 05.05.2023 (Sr. No. -6)** remains unchanged

8	2	2.3.3	4	Next Generation Firewall	**Common Criteria Certificate:** Product series or its' operating system series must have Common Criteria certification with EAL4/NDPP or better certification level.	To support MII Brands not having Common Criteria Certificate, please also accept past supply records (PO copies) to Govt / PSU companies in last 5 years. Necessary Self Declaration by the OEM may be accepted in lieu of the Certificate copy, as advised by MEITY vide their circular dated 6-12-2019 (copy enclosed)	Equivalent Indian certification isn't completed for majority of OEMs in the last 3 years since MII order was issued.	Provisions of bidding document remains unchanged
9	2	2.3.5	5	Wi-Fi Solution: Wi-Fi AP with POE Injector with (3X3 MiMo) Radios for high density area and (2x2 MiMo) Radios for Low Density areas, Wireless Controller	3X3 MiMo or higher Radios for high density area (admin Block) and 2x2 MiMo Radios for Low Density areas as per BoQ	WiFi-5 is a backdated and almost obsolete technology as chipmakers have long stopped production of required chipsets. WiFi6 is the current standard or latest launch being WiFi7. Unless Minimum WiFi6 standard is specified, it leaves a gap allowing obsolete WiFi5 products, which would be a loss for Powergrid / Farrakka Barrage. Any WiFi6 2x2 MIMO Radio can support throughput of upto 1.7Gbps, WHICH IS MORE THAN ENOUGH FOR HIGH / LOW DENSITY AREA and keeps simple logistics for interchangeability.	Wi-Fi6 (2x2:2 MU-MIMO) based Access point can handle upto 1024 simultaneous client on 2.4 & 5.8GHz band and will suffice the requirement of high density area. So request to allow 2x2:2 for both High and low density areas	The mentioned specifications are 'minimum' and bidders may offer a higher version/model if the minimum specification as per tender document are complied.
10	2	2.3.5	6		Mobile OTP & Email based authentication for outsiders should be available with WiFi solution.	Kindly remove Email based authentication as it is not successful for remote sites as mobile data signal may be weak enough to support email delivery of OTP to the intending user. Instead, SMS based OTP delivery is best option.	Email based authentication isn't successful for remote sites as mobile data signal may be much weak to support email delivery of OTP. Instead, SMS based OTP delivery is best option. Very few OEM have in-built AAA function in their Wireless Controller which makes this specification as RESTRICTIVE	Provisions of bidding document remains unchanged
11	2	2.3.6	6	6 Core OFC Cable	OFC Certification: Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory to conformity of the Specification	Please substitute "Type test report" with "RoHS Test Report", which is more specific to Fiber cables / products. Alternatively, allow either of these two reports to support MII brand	Type Test refer to the type of component that is being recommended & RoHS test Report would be more specific to the composition of the supplied products.	Provisions of bidding document remains unchanged
12	2	2.3.7	7	Single Mode OFC Patch Cords	OFC Certification: Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory to conformity of the Specification	Please substitute "Type test report" with "RoHS Test Report", which is more specific to Fiber cables / products. Alternatively, allow either of these two reports to support MII brand	Type Test refer to the type of component that is being recommended & RoHS test Report would be more specific to the composition of the supplied products.	Provisions of bidding document remains unchanged
13	2	2.3.8	7	OFC 12 port Loaded LIU	OFC Certification: Availability of complete and satisfactory type test Report from Central Government / NABL/ ILAC accredited laboratory to conformity of the Specification: Available	Please substitute "Type test report" with "RoHS Test Report", which is more specific to Fiber cables / products. Alternatively, allow either of these two reports to support MII brand	Type Test refer to the type of component that is being recommended & RoHS test Report would be more specific to the composition of the supplied products.	Provisions of bidding document remains unchanged
14	2	2.3.19	12	3 KVA Isolation Transformer	Automatic Bypass: activates in case of a fault condition	Would once again request to remove "Automatic Bypass" since this feature is not standard for 3KVA design. Only higher capacity units have such automatic bypass feature. We have checked with all major MII OEMs.	In 3KVA Isolation Transformer Automatic Bypass feature is not available. Automatic bypass feature is costly and only available for higher capacity units	Provisions of bidding document remains unchanged

15	2	2.4	12	Technical Specification for earthing	Technical Specification for earthing	How can a bidder conduct site survey in such short time and in a restricted zone, unless facilitated by Powergrid? Please suggest break-up of two types of earthing for bidding purpose. Alternatively, 50% qty of both types would be offered for bid evaluation purposes while actual PO Qty would be fixed based on site survey done by the winning bidder, on the offered unit rates for each type.	As Maintenance Free Earthing is very expensive so actual count will be required for bidding purpose	Bidders may conduct a site survey for estimation of length of same . Survey can be faciliated by POWERGRID, if bidder requests for same.
16	2	2.4	12		**Pipe Type Earthing :** The Contractor shall provide the pipe type earthing along with the necessary hardware and accessories required. Minimum two earth pits shall be made at each location. However, if required resistivity is not met, then, sufficient nos. of pipe type earthing shall be provided by the Contractor. Two nos. of earth pits per location have been considered in BoQ, however, payment shall done for earth pits actually erected as per the requirements. The Contractor shall submit the earthing pit diagram for Employer's approval.	How can a bidder conduct site survey in such short time and in a restricted zone, unless facilitated by Powergrid? Powergrid needs to furnish estimated distance from earthing pit to Rack to assist bidders in bid submission stage		Bidders may conduct a site survey for estimation of length of same . Survey can be faciliated by POWERGRID, if bidder requests for same.
17	2	2.4	13		**Earth Electrode:** One high tensile low carbon steel core electrode of minimum 3000mm long and minimum 17mm diameter complying BS 4360 Grade 43A or EN10025:2-004 S275JR, molecularly bonded by 99.99% pure high conductivity copper on outer surface with thickness 250 micron (minimum) shall be provided in each pit. The design of earth electrode should be such as to have more than 25 kA current carrying capacity for 1 second. Test certificate for current carrying capacity shall be provided from CPRI or other NABL accredited lab. GI bus bar of size 250 mm x 50mm x 6 mm shall be exothermically welded to rod with 6 holes of 12 mm dia. (3 on each side) for connecting earthing conductor. Offered Earth Electrode should be UL approved (UL-467).	How can a bidder conduct site survey in such short time and in a restricted zone, unless facilitated by Powergrid? Powergrid needs to furnish estimated length from GI Bus Bar to Rack to assist bidders in bid submission stage		Bidders may conduct a site survey for estimation of length of same. Survey can be faciliated by POWERGRID, if bidder requests for same.

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1	1	2	2.3.1	3	Stackable 12 Nos SFP Ethernet Port Distribution Switch	Security features:, Port security, DHCP snooping, Dynamic ARP inspection (DAI), IP source guard, The Unicast Reverse Path Forwarding (uRPF), Bidirectional data support on a SPAN, User authentication, Private VLAN , Router and VLAN ACLs , complete identity and security, Multidomain authentication, MAC address notification, IGMP filtering, Secure Shell (SSH) Protocol, Kerberos, and Simple Network Management Protocol Version 3 (SNMPv3), Port-based ACLs, IEEE 802.1ae, TACACS+ and RADIUS authentication, Bridge protocol data unit (BPDU) Guard, Spanning Tree Root Guard (STRG).	Security features:, Port security, DHCP snooping, Dynamic ARP inspection (DAI), IPsource guard, The Unicast Reverse Path Forwarding (uRPF), User authentication, Private VLAN , Router and VLAN ACLs , complete identity and security, Multi domain authentication, MAC address notification, IGMP filtering, Secure Shell (SSH) Protocol, and Simple Network Management Protocol Version 3 (SNMPv3), Port-based ACLs, TACACS+ or RADIUS authentication, Bridge protocodata unit (BPDU) Guard, Spanning Tree Root Guard (STRG), Port Mirroring.
2	2	2	2.3.2	3	24 Port 10/100/1000 Mbps with 4 Nos SFP Ports Access Switch	Non-Blocking architecture and Stackable (Along with Stacking Cable and Separate Ports)	Non-Blocking architecture and Stackable (Along with Stacking Cable and Separate Ports) This stacking connectivity between switches should be redundant. Aggregated stacking bandwidth should be minimum 20 Gbps Full Duplex. (i.e. Having 02 stacking Ports of atleast 10G on each Swich). The stacking connectivity should be in addition to the other ports mentioned in the specifications. Stacking cable should be supplied along with each switch.) This Stacking may be provided either through dedicated stacking ports or throigh separate Uplink Ports (Virtual Stacking)