

Corrigendum - I

Tender No. WTL/KP/SWAN/17-18/016 dated 03/08/2017

Sl. No.	Section	Clause No	Page No.	Present Entry	Replace with
1.	A	-	5	<p>SCOPE OF WORK Bidder has to undertake necessary LAN cabling for up linking the WBSWAN switch to the existing office switch as per industry standard practices for installing, implementing & commissioning of WAN connectivity under existing WBSWAN backbone.</p>	<p>SCOPE OF WORK Bidder has to undertake necessary LAN cabling for up linking the WBSWAN switch to the existing office switch as per industry standard practices for installing, implementing & commissioning of WAN connectivity under existing WBSWAN backbone. In the absence of office switch, max of 5-6 PCs may be connected to the Router Ethernet ports (L2) directly through cat 6 cable(without I/O box). Billing for supply and laying of cat 6 cables shall be done on actual.</p>
2.	D	19	12	<p>TERMS OF PAYMENT Payment terms will be on back-to-back basis, i.e., payment will be made only on receipt of payment from relevant customer.</p>	<p>TERMS OF PAYMENT Payment terms will be on back-to-back basis, i.e., payment will be made only on receipt of payment from relevant customer. However, on realization of payment from customer, milestone based payments shall be released as follows :</p> <ul style="list-style-type: none"> a) 50% of the payment shall be released on completion of successful delivery of materials at all sites (to be supported by receipted challans, duly signed by end customer) b) 30% of the payment shall be released on successful installation of materials and link commissioning at sites (to be supported by receipted Installation certificates, duly signed by end customer) c) 10 % of the payment shall be released at the beginning of 2nd year , on completion of providing successful support for the 1st year d) Balance 10 % of the payment

					<p>shall be released at the beginning of 3rd year , on completion of providing successful support for the 1st and 2nd year.</p> <p>e) For ease of payment processing bills may be raised in batches of 20 sites completed.”</p>
3.	D	59	18	<p>LOCATION DETAILS As per Proposed list enclosed.</p>	<p>LOCATION DETAILS Delivery of materials to be done first at a central location, designated by end customer. Site wise materials to be mobilized by the bidder at their own cost, as per the site readiness communicated by the end customer. The bidder has to liaison with the remote offices and the central authority for materials delivery and receipt. Proposed list enclosed</p>
4.	D	64	-	-	<p>New Clause to be added SLA – service calls must be attended within 24 hours and closed within 48 hours, failing which 0.5% of the respective hardware cost per day for any delay in restoration will be charged and adjusted with balance payment / PBG held with WTL.</p>
5.	Bill of Material (Section – H) has been revised. Revised Bill of Material is enclosed.				
6.	Technical Specification with Compliance Statement (Section – I) has been revised. Revised Technical Specification with Compliance Statement is enclosed.				
7.	BOQ has been revised. Revised BOQ uploaded.				

SECTION – H

BILL OF MATERIAL

Sl. No.	Description of material	Total Qty.	Unit
1	Core Router	1	No.
2	8x5xNBDx36 Months on-site comprehensive warranty for the Router Chassis	1	No.
3	8x5xNBDx36 Months on-site comprehensive warranty for processor	1	No.
4	8x5xNBDx36 Months on-site comprehensive warranty for route processor	1	No.
5	8x5xNBDx36 Months on-site comprehensive warranty for advanced software	1	No.
6	8x5xNBDx36 Months on-site comprehensive warranty for 40G interface slot	1	No.
7	8x5xNBDx36 Months on-site comprehensive warranty for 5 port Gig Interface Slot	2	Nos.
8	8x5xNBDx36 Months on-site comprehensive warranty for Channelized STM slot	3	Nos.
9	Core L3 Switch	1	No.
10	8x5xNBD on-site comprehensive warranty for Core L3 switch with accessories for 36 Months	1	No.
11	Branch Router	168	Nos.
12	8x5xNBD on-site comprehensive warranty for Branch router with accessories for 36 Months	168	Nos.
13	2 Mbps Leased Line Modem Pair (V.35 + Ethernet) interface & G.703 interface both DC and AC power supply) for 2 Mbps Leased line connectivity between two points) including all types of cable with 3 years on-site comprehensive warranty, Make: MROTEK / RAD or equivalent (Optional)	168	Pair
14	9U 19" Wall mount Rack (VAL Rack / D-Link / APW or equivalent) with fan, tray, power strip, cables and accessories.	30	nos
15	Battery: 60 mins backup require 26 nos 42AH-12V SMF Battery with each UPS System. Make : Quanta / Rocket or equivalent (3 years on-site comprehensive warranty)	26	Nos.
16	Rack for Batteries	1	No.
17	Interlink Cable	1	Set
18	TVSS 25kA 3P (3 years on-site comprehensive warranty)	1	No.
19	1 KVA Online UPS with 30 Minutes Battery Backup (3 year on-site comprehensive warranty)	168	Nos.
20	UPS Battery: 26 AH-12 V, battery for running above UPS for 30 minutes on full load. (3 years on-site comprehensive warranty) 3 Nos. Battery per site	504	Nos.
21	Rack for Batteries	168	No.
22	Interlink Cable	168	Sets
23	42U Floor Mount Network Rack 1000 mm depth (Make: VAL Rack / NET Rack / APW or equivalent	1	No.
24	6U 19" Wall mount Rack (VAL Rack / D-Link / APW or equivalent)) with fan, tray, power strip, cables and accessories	138	Nos.
25	24 port CAT-6 patch panel / jack panel with cable manager	1	No.
26	Supply of CAT-6 UTP Cable (1 Box = 305 Mtr.)	5185	Mtr.
27	Laying of CAT-6 Cable with PVC Casing, RJ-45 connector, Flexible pipe and other accessories	5185	Mtr.

Bill of quantity may change at the time of ordering/execution of work. Final bill will be raised on actual consumption of all materials.

Detailed Technical Specifications are given in Section – I

Note :

1. All active Networking components : Preferred make : Cisco
2. All passive components: Preferred make: Tyco/ Systimax.
3. 10 KVA online UPS is not required at central location
4. 30 nos. 9U ,19" Network Racks are required in lieu similar number of 6 U racks

SECTION - I

TECHNICAL SPECIFICATION WITH COMPLIANCE STATEMENT

(Tender No. WTL/KP/SWAN/17-18/016)

- Bidder should submit all relevant data sheet/brochure of all quoted items and should also available in respective OEM's official website.
- Bidder should indicate items mentioned in the OEM data sheet / brochure by marketing the serial no. as mentioned in minimum specification in the RFP.

1. Minimum Specification of Core Router

Qty.	01 (One) No.
Make	
Model	
Part No.	

Minimum Specification		Line item Qty.	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Part No	Description			
	Router Chassis with Dual Power Supply and at least 8 interface Slot	1		
	WAN Aggregation with or without	1		
	20G Service Processor for Router chassis	1		
	Blank cover for Router	1		
	Router processor for router chassis	1		
	Universal image for RP2 w/o LI	1		
	Minimum 8 GB memory for the router chassis to be shipped from Day 1	1		
	Advance grade license for the router software	1		
	Minimum 80GB storage for the route processor for storing logs and other messages	1		
	40G interface slot for the router chassis	1		
	SFP based 5-port Gigabit Ethernet Port Adapter for router chassis to be supplied from Day 1	2		
	3*1000BASE-T SFP transceiver module for Category 5 copper wire for the 5*1G port adaptor to be supplied from Day 1	6		
	2*1000BASE-SX SFP transceiver module MMF, 850nm, DOM to be supplied with router from Day 1	4		
	SPA for router, No physical part, for tracking only	1		
	3*1-port Channelized STM-1/OC-3c to DS0 SPA, Version 2 port adaptor to be supplied with router from Day 1	3		
	Long Reach OC3/STM1 SFP, Single-mode fiber, Long Reach (40 Km min.) transceiver for the Channelized STM interfaces to be provided with router from Day 1	3		
	SPA for router, No physical part, Tracking only	3		
	Dual 1004W AC Power Supply to be supplied with the router from Day 1	2		
	Power Cord India, for the power supply unit to be supplied with the router from Day 1	2		
	Router fixing accessories (Rack Mount Kit)	1		
	8x5xNBDx36 Months on-site comprehensive	1		

	warranty for the Router Chassis		
	8x5xNBDx36 Months on-site comprehensive warranty for processor	1	
	8x5xNBDx36 Months on-site comprehensive warranty for route processor	1	
	8x5xNBDx36 Months on-site comprehensive warranty for advanced software	1	
	8x5xNBDx36 Months on-site comprehensive warranty for 40G interface slot	1	
	8x5xNBDx36 Months on-site comprehensive warranty for 5 port Gig Interface Slot	2	
	8x5xNBDx36 Months on-site comprehensive warranty for Channelized STM slot	3	
ROUTER FEATURES			
The router should have the capability to support multi category based content / URL filtering			
The router should support zone-based firewall			
The router should have at least 2 GB of flash memory			
The router should support at least 4M IPv4 and IPv6 routes			
The router should have the scalability to support at least 90K multicast routes from Day1 and should also support atleast 4K IGPM groups			

2. Minimum Specification of Branch Router

Qty.	168 (One hundred Sixty eight) Nos.
Make	
Model	
Part No.	

Minimum Specification		Line item Qty.	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Part No	Description			
	Router with 8 Port GE LAN, 2 port GE WAN, 2 WAN Slots	168		
	Power supply 30 Watt AC	168		
	Config Pro Express on Router Flash	168		
	Default Advanced IP Services License for router	168		
	Multi-Band Swivel mount Dipole Antenna – Faceplate Mount	168		
	Blank faceplate for Wan Interface Module slot on router	168		
	Router 1-port Serial WAN interface Module	168		
	Straight Serial cable – RJ45 to DB25 Male console & Aux cable	168		
	V.35 cable, DTE Male to Smart Serial, 10 Feet	168		
	Power Cord, 10A, 250 VAC, India (SABS 164-1 TO IEC-C15 India	168		
	UNIVERSAL image for the router	168		
	Router Rackmount Kit	168		
	8x5xNBDx36 months onsite comprehensive support for router 8-port GE LAN, 2 port GE WAN, 2 WIM	168		

3. Minimum Specification of Core L3 Switch

Qty.	1 (One) No.
-------------	--------------------

Make	
Model	
Part No.	

Minimum Specification		Line item Qty.	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Part No	Description			
	24 X 1 GE SFP based L3 Switch	1		
	Universal software with security services image for L3 switch	1		
	India AC Type A Power Cable to be supplied with the router from Day 1 and should be equivalent to the number of power supply in the switch	1		
	50CM Type 1 Stacking Cable to be supplied with the switch from Day 1	1		
	Catalyst Stack Power Cable 30CM to be supplied with the switch from Day 1	1		
	Config 1 Power Supply Blank	1		
	350 W AC Config 1 Power Supply to be supplied with switch from Day 1	1		
	Network Module Blank for L3 Switch	1		
	4 * 1000BASE-T SFP transceiver module for Category 5 Copper wire to be supplied on the switch form Day 1	4		
	4 * 1000BASE-SX SFP transceiver module, MMF, 850nm, DOM to be supplied on the switch from Day 1	4		
	8x5xNBDx36 Months on-site comprehensive warranty for L3 Switch	1		

4. Minimum Specification of 19” 9U Wall Mounting Rack

Qty.	30 (Thirty only) Nos.
Make	
Model	
Part No.	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)	Remarks
19" 9U wall mounting rack with all cables & tray, Power Strip, Cooling Fan & accessories input power strip & chassis ground. All equipments housed properly, air circulation & properly locking system with key. (Make: VALRACK / D-Link / APW or Equivalent)			

5. Minimum Specification of 1 KVA ON Line UPS System

Qty.	168 (One Hundred Sixty Eight only) No.
Make	
Model	
Part No.	

Sl. No.	Parameter	Requirement	Offered Specification	Complied (Yes / No.)	Remarks
1	UPS Rating	1kVA / 800W			
	UPS Type	IGBT Based True On Line Double Conversation UPS System			
	Input Voltage	UPS having Single Phase input with the voltage Range 160VA To 300VAC			
	Input Power Factor	>0.95 for both single phase			
	Input Frequency	50Hz / 60Hz			
	Output Voltage	230V Single Phase			
	Output Frequency	50Hz±0.5Hz			
	Output vTHD	<=3% for Linear Load, <=6% for non linear load			
	LCD Display	UPS Should be LCD Status Display			
	Special Protection	a 10kA Surge Protective Device with response time of < 0.5 nano seconds UL listed will have to provided at the Input of the UPS System			
	Battery Bank	Battery bank will be suitable for 30 mins battery backup minimum 936 VAH. Battery type will be SMF VRLA only. Battery make Exide / Quanta equivalent.			
	Certificate Required	UPS Manufacturer's ISO 9001: 2008 certificate. UPS Manufacturer's ISO 14001 certificate. NABL accredited Test Laboratory certificate for the offered UPS system, same model and rating			

6. Minimum Specification of 42U Floor Mount RACK

Qty.	01 (One) No.
Make	
Model	
Part No.	

Sl. No.	Minimum Specification	Specification (Quoted / Applicable - by the bidder)	Complied (Yes / No)	Remarks
1	19", 42Ux800x1000mm Floor Standing Networking Rack			
2	DIN 41494 or equivalent ISO standard			
3	Welled Construction with steel frame			
4	Lockable double 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	4 sets of casters wheel			

9	4 sets of adjustable levelers			
10	Vertical Power Distribution Unit with 2 x12nos. Of 5/15Amp round pin Indian style sockets			
11	Vertical & Horizontal Cable Manager Minimum 10 Nos.			
12	Mounting Hardware set			
13	Minimum 4nos. Of FANs for cooling			

7. Minimum Specification of 19" 6U Wall Mounting Rack

Qty.	138 (One Hundred Thirty Eight only) Nos.
Make	
Model	
Part No.	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)	Remarks
19" 6U wall mounting rack with all cables & tray, Power Strip, Cooling Fan & accessories input power strip & chassis ground. All equipments housed properly, air circulation & properly locking system with key. (Make: VALRACK / D-Link / APW or Equivalent)			

8. Minimum Specification of CAT 6 24 Port Loaded JACK / PATCH PANEL

Qty.	1 (One) No.
Make	
Model	
Part No.	

Sl. No.	Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)	Remarks
1	Powder coated steel, in 24 port configurations.			
2	Port identification numbers on the front of the panel.			
3	IDC: Suitable for 22-24 AWG stranded and solid wire compatible with both 110 & Krone punch down tools			
4	Each port / jack on the panel should be individually removable on field from the panel.			
5	The Cat-6 transmission performance is in compliance with the ANSI/TIA/EIA 568C.2 standard			
	Jack Connector Specification:			
6	Plastic Housing: ABS , UL94V-0 rated			
7	Contact Material: Copper Alloy			
8	Contact Plating: 50µ" Gold plated on plug contact area			
9	Plug Retention Force: 15 lb.			
	IDC Connector Specification:			
10	Plastic Housing: Polycarbonate, UL94V-0 rated or equivalent			
11	IDC cap : ABS, UL 94V -0			

12	Contact Material: Copper Alloy			
13	Wire Accommodation: 22-24 AWG solid			
14	OEM should be ISO9001 and ISO14001 certified for design, development for LAN & WAN products.			
15	Brand and company together presence in India should be for last 10 years.			
16	OEM should have own service centre/Replacement Center in the state of installation			

9. Minimum Specification of 2 Mbps Leased Line Modem pair

Qty.	168 (One thousand Six Hundred Eight only) Pair
Make	
Model	
Part No.	

Minimum Specification	Qty.	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
2 Mbps Leased Line Modem Pair (V.35+Ethernet interface & G.703 interface both DC and AC power supply for 2 Mbps Leased line connectivity between two points) including all types of cable with 3 years on-site comprehensive warranty, Make: MROTEK / RAD / CTC or equivalent	168 pair		

10. Minimum Specification of CAT 6 UTP Cable

Qty.	5185 (Five Thousand One Hundred Eighty Five only) Mtr. (17 Box)
Make	
Model	
Part No.	

Sl. No.	Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)	Remarks
1	Category 6 Unshielded Twisted Pair 4 pair 100W cable shall be compliant with ANSI/TIA/EIA-568-C.2-1 Additional Transmission Performance Specifications for 4-pair 100W Category 6Cabling. Cat 6 cable should be tested up to 600MHz. ETL report to be submitted.			
2	Category 6 UTP cables shall extend between the work area location and its associated telecommunications closet and consist of 4 pair, 23 AWG, Cat 6 LSZH jacket complying to fire rating IEC 60332-1 .			
3	The 4 pair Unshielded Twisted Pair cable shall be UL Listed			
4	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half shall not be accepted.			
5	Conductor Solid bare Copper 23 AWG minimum			
6	Insulation :High Density Polyethylene/PVC			
7	Jacket PVC			

8	OEM should be ISO9001 and ISO14001 certified for design, development for LAN & WAN products.			
9	Brand and company together presence in India should be for last 10 years.			
10	OEM should have own service centre/Replacement Center in the state of installation			

Authorized Signatory (Signature In full): _____

Name and title of Signatory: _____

Stamp of the Company: _____