

Consolidated revised specifications of items with respect to Microwave RF links mentioned in Bill of Material w.r.t - Tender No: EI-D-Tech/55/0002/2013-PD&OA-Part (1)-RF as per clarification/ response to the queries and amendments published by ERNET India

1. Point to Point equipment for backhaul specification	
Sl. No	Specification
1.1	Each set supplied is to comprise of two independent Radios with antenna, cables, IDU,ODU
1.2	The individual system should comprise of outdoor & indoor equipment, antenna, cables (RF/IF) with connectors, system software required for operation, monitoring & configuration of the link.
1.3	It shall be a carrier type Point-to-Point Broadband Wireless Access radio system, with 99.9% reliability Attach certificate from Govt. authorized agency.
1.4	The system should be of reliable and field proven design and suitable for harsh environmental conditions. Outdoor Radio equipment must be IP-67 compliant & certified
1.5	The system shall support Flexible Quality of Services and concurrent use of IP, VoIP & Video.
1.6	Should work in ISM unlicensed frequently Band 2.4 or 5.8 Ghz unlicensed band. 2.4 or 5.8 GHz may be reserved for backhaul { Please refer 8.18 (c) }
1.7	Pl read Channel Bandwidth selection of 5MHz, 10 MHz, 20MHz and/ or 30MHz and/or 40MHz/ with 5 MHz steps.
1.8	EIRP as per WPC norms (36 dBm)
1.9	Should have a support for dual pole (MIMO) External Antenna to provide higher capacity. Should support Antenna diversity. in order to Run the link under frequency interference environment
1.1	Flexible symmetric link supporting up to 50:50% UL/DL in either direction for enabling different applications like voice, video and data
1.11	LAN Data entry compliance: IEEE 802.3
1.12	Modulation: 2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM) with forward error correction (FEC)
1.13	Transmit power control- within allowable EIRP as per WPC regulations
1.14	Built in spectrum analyzer. Radio unit must have in-built software GUI based spectrum analyzer for RF spectrum analysis to determine noise level existing at a site for ease of installation.

	Radio should capable to capture both side (local and remote) spectrum view.
1.15	Radio equipment should have site management and link management facility (software) for initial configuration. Installation and maintenance using single computer /LCT for a complete link.
1.16	Radio technology-TDD OFDM
1.17	Should support TELNET/SNMP based / NMS with SNMP Agent: SNMP VI/V2/V3 client, MIB II/ Bridge MIB
1.18	VLAN Support: Based on IEEE 802.1Q, 802.1P and QinQ Tagging/un-tagging Must submit proof
1.19	QoS- IP DSCP/DiffServ. Classification based on services/VLAN (2 Queue) Self declaration by OEM shall be accepted and same may be verified and demonstrated during bench test
1.20	Security: AES-128-bit authentication. The radios should have the capability for locking MAC address. System should be FIPS -197 certified or equivalent (National or International)
1.21	Should support AC/ DC/ solar power supply source
1.22	Should have facility to upgrade Software/firmware over the air.
1.23	Maximum distance upto 70 Km & Radio should support 200Mbps (aggregate)usable throughput up to 5 Km 90 Mbps (full duplex) up to 25 Kms 70Mbps (full duplex) up to 40 Kms 34 Mbps (full duplex) up to 70 Kms
1.24	Radio should support and store performance logs for and up one month.
1.25	Regulation Standards- WPC (India)/FCC
1.26	Latency <5mSec
1.27	Safety: UL 60950-1,EN 60950-1 Attach certificates from Internationally accredited lab
1.28	EMC FCC part 15 class B Also certificates from Authorized agencies.
1.29	Operating Temperature : (a) Outdoor Unit- -10 to 55 degree. (b) Indoor Unit- 0° to 40°C However wider range will also be acceptable
1.3	Audible Buzzer/ LED for Antenna alignment
1.31	Collocation Synchronization support.
1.32	Equipment should support protected Ethernet ring topology

1.33	Offered system should be supported with RF planning tool for ease of RF planning
1.34	Outdoor Radio equipment should be coated with special anti-corrosion paint for deployment in coastal areas
1.35	Proposed radio system should support PPS of 250000 bytes or higher
1.36	Jumbo frame as 1500 bytes or higher

2. Specification for Base Stations (BS)

Sl. No	
2.1	Net Aggregate usable capacity per base station sectors: upto 250 Mbps Bidders may propose more than one sector to meet the capacity requirement alongside as well as providing connections to the number of schools falling in coverage of 90 degree meeting the stipulate requirement per schools.
2.2	Frequency band: 5.8 GHz unlicensed – WPC { Please refer 8.18 (c) }
2.3	Power – Power over Ethernet
2.4	Range: Minimum 30 Km
2.5	Pl read Channel Bandwidth selection of 5MHz, 10 MHz, 20MHz and/ or 30MHz and/or 40MHz/ with 5 MHz steps.
2.6	Modulation: 2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM) with forward error correction (FEC)
2.7	Adaptive Modulation & Coding
2.8	Sector Bandwidth Allocation Configurable: Symmetric or Asymmetric
2.9	System should support Smart bandwidth management allocating unused bandwidth dynamically to other users to enjoy capacity enhancement
2.1	Regulation compliance : As per WPC
2.11	Inbuilt software base Spectrum Supported at BS & CPE both
2.12	Max Tx Power 23 dBm or higher at Base Station & Subscriber Unit (CPE)
2.13	Duplex Technology : TDD
2.14	TDD Synchronization Inter & Intra site synchronization
2.15	Security: AES-128-bit authentication. The radios should have the capability for locking MAC address. System should be FIPS -197 certified or equivalent (National or International)
2.16	Ethernet Interface: 100/1000BaseT

2.17	QoS: Packet classification to 2 queues according to 802.1p and Diffserv will also be accepted
2.18	VLAN: 802.1Q, 802.1P, QinQ
2.19	Management : SNMP, Telnet, HTTP
2.2	NMS support
2.21	Power over Ethernet (POE)
2.22	Operating Temperature as -10 to 55 degree. However wider range will also be acceptable
2.23	Humidity:95% condensing, IP67 attach certificate
2.24	Radio regulations: Submit documents
	FCC , WPC
	Safety: FCC/IC,
	EMC: FCC
2.25	Offered system should be supported with RF planning tool for ease of RF planning
2.26	Outdoor Radio equipment should be coated with special anti-corrosion paint for deployment in coastal areas
2.27	Latency – Should be below 30 mSec
2.28	Proposed BS radio system will support PPS of 250000 bytes or higher
2.29	Jumbo frame as 1500 bytes or higher

3.0 Specification for Subscriber Premises Equipment (CPE)

SNo.	Specification
	CPE:
3.1	Aggregate Bandwidth: Assured dedicated bandwidth of 8Mbps (4 Mbps full duplex) to be delivered at last mile
3.2	Frequency band: 5.8 GHz unlicensed - WPC
3.4	Range: Min 30 Km
3.5	Pl read Channel Bandwidth selection of 5MHz, 10 MHz, 20MHz and/ or 30MHz and/or 40MHz/ with 5 MHz steps.
3.6	Modulation: 2x2 MIMO-OFDM (BPSK/QPSK/16QAM/64QAM) with forward error correction (FEC)
3.7	Adaptive Modulation & Coding
3.8	Sector Bandwidth Allocation Configurable: Symmetric or Asymmetric

3.9	System should support dynamic bandwidth management allocating unused bandwidth dynamically to other users to enjoy capacity enhancement
3.1	WPC compliance
3.11	Inbuilt software base Spectrum analyzer Supported at BS & CPE both
3.12	Max Tx Power 23 dBm or higher at Base Station & Subscriber Unit (CPE)
3.13	Duplex Technology : TDD
3.15	Security: AES-128-bit authentication. The radios should have the capability for locking MAC address. System should be FIPS -197 certified or equivalent (National or International)
3.16	Ethernet Interface: 10/100 BaseT
3.17	QoS: Packet classification to 2 queues according to 802.1p and Diffserv will also be accepted
3.18	VLAN: 802.1Q, 802.1P, QinQ
3.19	Management : SNMP, Telnet, HTTP
3.2	NMS support
3.21	Power over Ethernet (POE)
3.22	Operating Temperature as -10 to 55 degree. However wider range will also be acceptable
3.23	Humidity:95% condensing, IP67 attach certificate
3.24	Radio regulations: Submit documents
	FCC , WPC
	Safety: FCC/IC,
	EMC: FCC
3.25	Outdoor Radio equipment should be coated with special anti-corrosion paint for deployment in coastal areas Undertaking must be provided
3.26	Latency – Should be below 30 MSec
3.27	PPS for CPE 50000 Bytes or higher
3.28	Jumbo frame as 1500 bytes or higher
3.29	Audible Buzzer/LED for Antenna alignment

4 24 Port Ethernet Layer 3 Rack Mountable Switch

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No	
1	80 Gbps or higher Backplane capacity and minimum 60 Mpps of forwarding rate
2	Minimum 24 ports 10/100/1000
3	Minimum 8 switches should be stackable and managed through single IP address.
4	Non-blocking and distributed forwarding hardware architecture
5	Switch should be configured with redundant power supply
6	Switch should support high availability features like GRE, graceful restart of protocols, hot swappable uplink modules
7	All interfaces should provide wire speed forwarding for both Fiber and copper modules.
8	Support for AC power- supplies
9	Switch should support minimum 2000 active VLAN's./ VLAN translation
10	Switch should support minimum 12 k Mac address.
11	Switch should support Layer-2 protocols like 802.1p,802.1s, 802.1Q tunnelling, 802.1w, 802.3ad
12	Switch should support DHCP server and relay capabilities
13	Switch should support 802.1x based authentication
14	Switch should support IP source guard & dynamic arp inspection,
15	All the routing protocols like Static, OSPF, RIP, Policy based routing should be provided from day-1 & multicast protocols like PIM-SM, SSM, IGMP V1,V2,V3,
16	Switch should support hardware based QOS mechanisms like 802.1p, DSCP, auto VLAN, and traffic shaping
17	Switch should support IPv6 from day one
18	Switch should support SNMPv3, ACL's based IP address , protocol, port number etc
19	Should support port mirroring based on VLAN's or multiple ports to one port
20	Switch should have GUI based management.
21	Ethernet over MPLS (EoMPLS), and Hierarchical Virtual Private LAN Service (H-VPLS) support and redundant AC or DC power.
22	Layer 3 VPN Using Multi-VRF CE
23	Layer 3 VPN Using MPLS VPN
24	Layer 2 VPN Using VLAN Translation
25	Layer 2 VPN Using EoMPLS and Layer 2 VPN with H-VPLS Architecture

5. Network management System to manage RF links

S No	Specifications
5.1	NMS to manage RF links
5.2	Automatic & Manual device discovery of all network elements such as Base Station, CPEs etc. System shall keep details of all the network elements.
5.3	Ease of Use : It shall provide intuitive GUI interface and a comprehensive, context sensitive user guide/ help system
5.4	Filters & Searching : Shall be possible to use pre-defined custom filters for searching entities such as alarms, Base Stations, CPEs etc through NMS
5.5	Security: Support for both user based and role based authorisation to limit and control access to NMS
5.6	DEVICE MANAGEMENT
	<p>a) Automatic & Manual device discovery of all network elements such as Base Station, CPEs etc. System shall keep details of all the network elements.</p> <p>b) Fault Management: Alarms to be collected from the entire network and stored within the database and displayed using filters in the alarm view. It shall be possible to view alarm history database Performance management of network elements</p> <p>c) NMS shall be capable of mapping PTP & PTMP radios in the same single NMS</p>
5.7	SYSTEM ADMINISTRATION
	<p>a) Addition/change/configuration/ verification/removal/ management of end user and role based accounts (username, password, etc) into the database.</p> <p>b) Addition/change/configuration/ verification /removal/ management of network elements into the database.</p> <p>c) Shall be able to control and limit operators' authorization, rights and privileges. Administrator is an account with full control, rights and privileges.</p> <p>d) Access control procedures shall allow classification of operators groups with common access rights characteristics with possibilities to restrict and extend the common access rights for single user.</p> <p>e) Restriction of access to specific Group of network elements shall be possible.</p> <p>f) Log shall be available for all traps between NMS and the Network Elements.</p>
5.8	SYSTEM MANAGEMENT
	a) It shall be possible to install, upgrade and correct the software centrally for all network elements i.e Base station, CPEs etc

	<ul style="list-style-type: none"> b) Performance management of interfaces on all the network elements c) System shall have centralized bandwidth management. d) NMS system should be capable of generating trend reports, on Air/ Ethernet interfaces
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6. Chemical Earthing for Mast (RF links)

Sl. No	
6	Normal Earthing shall be provided by vendor at all schools for RF connectivity as per following specs:
6.1	Base chamber 4*10 ft
6.2	Metal strip with copper plate, charcol and salt at depth of 7 feet.
6.3	GI Pipe: 7 feet
6.4	Earthing Resistance: 2 Ohm,
	Note: After earthing, the separate sheet with earthing resistance reading of respective schools, must be provided by bidders with bills submitted for payments. In case of any false claim found/observed after verification at any stage, the vendor may be penalized by deducting the equivalent amount of respective sites.

7 **Guy Mast for RF Links**

Sl. No	Specification
i)	Appropriate Guy wire Mast ((1.0" B Grade GI Pipe, 6mm Guy Wire, 8mm Bracing Rod, 40/4 mm Flench, including Copper Lightning Arrestor, LED Aviation Light, 6 MM Copper Earthing Wire from Lightning Arrestor to Earthing Pit) for various Mast heights
ii)	Wind velocity : Support 160 KM per hour wind velocity
iii)	Aviation Light : Each tower will have a aviation light with wiring properly fixed to sustain wind velocity.
iv)	Grounding : Each tower to have a copper lightening arrestor on top properly grounded using metallic strip/wire from top to bottom.
v)	Mast should be provisioned with climbing arrangement. Corrosion free paint must be applied on the whole mast

8. **Router**

SL. No.	The Router shall meet the following general specifications
1	Specifications:

i)	The router shall have 1+1 redundant power supply. One power supply should be able to support a fully loaded router chassis.
ii)	The line cards of the router shall be full online insertion and removal capable. Online insertion, removal and failure of a line card shall not affect any unicast and multicast traffic passing through the other line cards in any way.
iii)	The router shall support software upgrades and software downgrades for minor patches and upgrade .The bidder should explain the architecture of ISSU process
iv)	The router shall facilitate all applications like voice, video and data to run over a converged IP infrastructure.
2	Performance & Interface Specifications: The router shall meet the following performance and interface requirement-
i.	Fast Ethernet (Copper) & Gigabit Ethernet (both Copper and Fiber)
ii.	Channelized STM-1.
iii.	Gigabit Ethernet
iv.	The router shall have at least 1 free slot for further expansion.
v.	The router shall have at least 4 GigE interface of Line rate populated
3	Layer 2 Protocols: The router shall meet the following requirements for Layer 2 protocols:
i)	Shall support Frame Relay, PPP, HDLC and Ethernet Encapsulation.
ii)	Shall support Multilink PPP (MLPPP).
iii)	Shall support PAP & CHAP authentication.
iv)	Shall support IEEE 802.1Q VLAN
v)	Shall support IGMPv2, IGMPv3 and IGMP Snooping.
vi)	The router should have support for at least 100 tunnels of GRE
vii)	The router should support at least 100K IPv4 and 50 k IPv6 routes
viii)	The router should support up to 4k queues and three levels of hierarchy QoS
ix)	The router should support 4000 unique ACLs
x)	The router should support 4,000 multicast routes & 1000 multicast /IGMP Group
4	Layer 3 Protocols: The router shall meet the following requirements for Layer 3 protocols:
i)	The router shall support the following IPv4 Interior Gateway Protocols (IGP) – Static Route, Default Route, RIPv2, OSPFv2.

ii)	The router shall support BGP4 protocol along with all advanced features such as route reflector. All necessary licenses if any, to be provided to enable full suite of IGP and BGP.
iii)	The router shall support route redistribution between protocols and route filtering.
iv)	The router shall support the following IP Multicast Routing Protocols to facilitate applications such as streaming, webcast, command & control etc – PIM SM, PIM SSM.
v)	The router shall support Policy Based Routing (PBR) to route specific traffic towards a specific network path as determined by the administrator.
vi)	The router shall support GRE (Generic Routing Encapsulation) Tunneling.
vii)	The router shall support following MPLS features – LDP, Layer 2 VPN such as EoMPLS with LDP signaling, Traffic Engineering with RSVP-TE, Fast Reroute Link Node & Path protection.
5	IPv6: The router shall meet the following requirements for Ipv6
i)	The router shall support dual stack Ipv6 on all interfaces and Ipv6 over Ipv4 tunneling.
ii)	The router shall support the following Ipv6 Routing Protocols – RIPng, OSPFv3, Ipv6 IS-IS and Ipv6 BGP.
iii)	The router shall support Ipv6 Neighbor Discovery, Stateless Auto-configuration and Neighbor Discovery Duplicate Address Deletion.
iv)	The router shall support following Ipv6 Multicast protocols – Ipv6 MLD, PIM-Sparse Mode, PIM – SSM.
v)	The router shall support Ipv6 QoS.
vi)	The router shall support Ipv6 Security Functions – ACL, Ipv6 Firewall, SSH over Ipv6.
6	Fast Convergence & High Availability: The router shall meet the following requirements for Fast Convergence and High Availability
i)	The router shall support BFD (Bidirectional Forwarding Detection) protocol.
ii)	The router shall support notification of interface down/up event to the routing protocol instantaneously after the event has occurred.
iii)	The router shall support Non-Stop Forwarding for following protocols – OSPF,BGP.
7	Quality of Service: The router shall meet the following requirements for QoS –

i)	The router shall provide up to 4k queues for deployment of per-user per-application per-port QoS.
ii)	The router shall perform traffic Classification using various parameters like source physical interfaces, source/destination IP subnet, protocol types (IP/TCP/UDP), source/destination ports, IP Precedence, 802.1p, MPLS EXP, DSCP and by some well known application types through Application Recognition techniques.
iii)	The router shall be able to mark traffic using IP Precedence, DSCP and MPLS EXP.
iv)	The router shall support following standards for DSCP and related QoS architecture – RFC 3246, RFC 2597, RFC 2475 and RFC 2474.
v)	The router shall support Strict Priority Queuing or Low Latency Queuing to support real time application like Voice and Video with minimum delay and jitter.
vi)	The QoS policy in the router shall support dual Strict Priority Queue or Low Latency Queue per policy so that voice and video traffic can be put in different queue.
vii)	The route shall support class based traffic shaping.
viii)	The router shall support traffic policing
ix)	The router shall support congestion avoidance through WRED and selective packet discard using WRED through IP Precedence and DSCP.
x)	The router should have support for minimum 8 queues per port
8	Integrated Security: The router shall meet the following requirements for security –
i)	The router shall support Access Control List to filter traffic based on Source & Destination IP Subnet, Source & Destination Port, Protocol Type (IP, UDP, TCP, ICMP etc) and Port Range etc.
ii)	The router shall support ACL logging feature for auditing.
iii)	The router shall support time based ACL to reflect time based security and QoS policy.
iv)	The router shall support unicast RPF (uRPF) feature to block any communications and attacks that are being sourced from Randomly generated IP addresses.

v)	The router should have support for Network Address Translation (NAT) and Port Address Translation (PAT) to hide internal IP addresses while connecting to external networks .The router should have support for hardware enabled Network Address Translation (NAT) and Port Address Translation (PAT) . The router shall support NAT6to4 function. The router shall support vrf-aware NAT function.
vi)	The router shall support AAA features through RADIUS or TACACS.
vii)	The router shall support Control Plane Policing to protect the router CPU from attacks.
viii)	The router shall provide MD5 hash authentication mechanism for RIPv2, OSPF, BGP and MPLS routing protocols.
ix)	Router should support NAT
9	Management: The router shall meet the following management features –
i)	The router shall be manageable through Local Console & Aux Port, Telnet and SSHv2.
ii)	The router shall be manageable through Web.
iii)	The router shall have IP OAM tools like ping, traceroute.
iv)	The router shall support online reconfiguration and configuration rollback feature.
v)	The router shall support SNMP v1, v2 and v3 features.
vi)	The router shall have SLA/NQA/Equivalent monitoring tools to measure state of the network in real time. The SLA/NQA/Equivalent operations shall provide information on TCP/UDP delay, jitter, application response time, VoIP MOS score, Packet Loss etc
vii)	The router shall provide multiple levels of role based access control for administration.
viii)	Router should have support to accurately classify applications, provide monitoring capabilities on an ongoing basis and also be able to provide end user response time metrics on a GUI. The router should have the capability of classifying well known as well as custom applications. If any of the features can't be provided within the Router, additional hardware needs to be quoted.
ix)	The router shall support controlled SNMP access through SNMP ACL so that only the designated NMS stations can have access to the router.
	Interface Requirements:
	4 x 1 Gigabit Ethernet Interfaces

**Consolidated changes in conditions w.r.t -Tender No: EI-D-Tech/55/0002/2013-PD&OA-
Part(1)-RF as per clarification/ response to the queries and amendments published by
ERNET India**

1. Preferential Market Access (Sl. No. 42 of tender)

The existing Govt. notifications and orders will be applicable

2. Payment Terms (Sl. No. 46 of tender)

Payment shall be made by ERNET India to the selected Bidder as per the following schedule. The payment shall be made by cheque to the Suppliers. The payment shall be released as under on the satisfactory completion and performance certification issued by the concerned ERNET authorities. However, payment shall be made only after the successful execution and acceptance of all the equipments, software/ application:

- i.** 80% of material (H/W, S/W, etc) cost shall be paid after Supply, Installation, Integration, commissioning and Acceptance Testing of the equipments as per scope of work. The connectivity to schools must be in working condition and it should be visible on NMS. Pro-rata payment will be made or considered after Supply, Installation, Integration, commissioning and Acceptance Testing of ALL THE EQUIPMENTS as per scope of work in a group of 41 locations.
- a.** 10% of remaining 20% will be released, if the successful bidder submits the Bank Guarantee of the amount equivalent to 10%, which should be valid for the period of one year as well as receipt of pre-receipted bill in triplicate.
- b.** The remaining 10% will be released, if the successful bidder submits the Bank Guarantee of the amount equivalent to 10%, which should be valid for the period of two years as well as receipt of pre-receipted bill in triplicate.
- c.** The above BGs are in addition to Performance Security valid for 3 years (Mentioned at SNo. 36 of tender)

I.e., Two Bank Guarantee each of 10% of the cost of purchase order will be required to be submitted at ERNET India for release of 100% payment having validity of Two year and One year respectively from the date of acceptance of equipments/materials

- Any deduction from the payment due to non-compliance of the SLA parameters will be adjusted from the next payment due or Performance security based on the ERNET decision.
- All the payment will be credited into firm's/ bidder's account electronically (NEFT). Hence, bidders may provide bank details like branch, account number, IFSC code etc. No payment will be made through cheque.

3. SCOPE OF THE WORK (Sl. No. 8.3 of tender)

Bidder will be responsible for SACFA clearance. The bidder has to co-ordinate all the activities for SACFA clearance. ERNET will pay fees and ERNET will facilitate necessary coordination with schools for clearance and erection of mast in the schools.

The SACFA clearance shall be taken and submitted to ERNET within 6 months after the issuance of PO. In case of any further delay the penalty of Rs. 1000 per week or part thereof will be imposed on bidder

4. Specifically for Radio equipments (Sl. No. 9 of tender)

ERNET India will take up the insurance of equipments in his name. As the insurance of equipments delivered in parts would not be feasible. Thus, the insurance of all the equipments will be done, once the bidder provides the details of all the assets i.e. qty, serial no etc w.r.t. each location.

5. Pre-qualifying Requirement (PQR) - Additional general conditions (Point no. 11 of Sl. 47 of tender)

Certification should be signed by OEM justifying the capability of engineers of the successful bidder for design, testing, configuration, diagnose faults, maintenance, etc of the supplied equipment

6. Reduce/increase the quantity of the items (Sl. No. 6 of the tender)

Reduction in BoM will be informed at the time of placing PO and any increase in BoM or ordering any item in future will be informed as and when required

7. Field testing (Stage-2: Technical Evaluation of Bids Section- B)

This may be read in addition to existing clause of tender; The suitable locations will be informed later for PoC. ERNET engineers will be present during PoC

ERNET will provide the location for field testing, however other arrangement required for field testing should be borne by bidder.

8. Guarantee/Warranty (Sl. No. 37 of tender)

Bidder has to submit undertaking from OEM stating that warranty of the supplied item will be valid for 3 years in technical bid.

9. AMC (Sl. No. 38 of tender)

With the existing clause of the tender; “the offered AMC shall be with comprehensive maintenance including link maintenance, maintenance of equipments including all accessories”

10. Turnover (Sl. No. 15 of tender)

The annual turnover of the bidder over the last three financial years should not be less than Rs. 20 corers (i.e. total in three years). The bidder should be profit making company in last financial years i.e. 2010-11, 2011-12 & 2012-2013. Documentary proof duly certified by chartered accountant must be enclosed reflecting figures for each individual financial year turnover and profit.

11. The following para may be treated as added at Serial no 48 in the tender:

The bidder will be responsible for safety of his field engineers and technicians who will be involved in installation and maintenance of links against any mis-happening like accidents etc. The field engineers and technicians will be provided with all the safety tools like full safety belts, helmets (yellow colored as per industry standard) etc for their day to day activities.

12. The following para may be treated as added at Serial no 49 in the tender:

The bidder has to offer products which adhere to the DOT/WPC mandatory regulations and compliance, if any. Also the offered product should adhere to Government orders issued time to time, if any.

13. In the annexure III at page 29, the rates asked for insurance may be considered deleted. i.e. 10.1, 10.2, 10.3 considered deleted.

NOTE: All other terms and conditions of the published tender will remain same.