



# ORISSA POWER TRANSMISSION CORPORATION LTD.

REGD. OFFICE: JANPATH: BHUBANESWAR-751 022.

...

No.TW-IT-336/2008(Vol-II)

Dated.

From

The Chief General Manager (IT),  
OPTCL, Bhubaneswar.

To

.....  
.....  
.....

## LIMITED TENDER CALL NOTICE NO. TW-IT-LT-01/2010-11

Sub: - Limited Tender Call Notice for point to point Radio Connectivity between SLDC Mancheswar & OPTCL Hqrs., BBSR

Dear Sirs,

Quotations in a sealed cover super scribed as “for point to point Radio Connectivity between SLDC Mancheswar & OPTCL Hqrs. BBSR” due on **dt 20.12.2010** ” are invited by IT Dept., OPTCL, Bhubaneswar from interested vendors for items conforming to the specification and quantity mentioned below.

Sl. No.	Name of Items	Specification	Qty required.
01	Wireless Ethernet Bridge	<b>5.7 GHz 4 Mbps Canopy Back Haul Module, Power Supply &amp; Surge Suppressor</b>	02 nos
02	Tower	<b>Tower mast 7mtr at SLDC Building(End B)</b>	01 no.
03	GI Pipe	<b>GI pipe 5 ft at OPTCL Building (End A)</b>	01 no.

The price bid as per Annexure-A , the Technical Bid as per Annexure-B and the Checklist as per Annexure-D are to be duly filled in by the Tenderer and submitted along with E.M.D. in the sealed cover. Incomplete document submission is liable for cancellation.

The quotations should reach this office by **1.30 P.M. on dt 20.12.2010** and shall be opened on the same day at **3.30 PM** in presence of the tenderer or their authorized representatives.

The undersigned reserves the right to accept/reject any or all tenders without assigning any reason thereof.

## **TERMS AND CONDITIONS:**

1. **Scope of work:** -

The **Scope of work** includes the Supply, Installation, Integration, Testing, Commissioning of the above-mentioned items and integrating the same with that of the existing OPTCL Hqrs LAN at End A & SLDC Data Center LAN at End B. **on turn key basis.**

2. **EMD:** - EMD amounting to Rs.1200.00 either in cash to be deposited with D.D.O. Headqrs. office at OPTCL cash counter or in shape of D.D issued by any nationalized Bank in favour of the DDO, Headqrs. office, OPTCL, Bhubaneswar payable at Bhubaneswar is to be submitted with the tender. If the EMD is submitted by cash, the original Money Receipt is to be attached with the tender. Tenders without EMD shall not be accepted.

3. **Price:** - Price quoted by the tenderer at Annexure-A must be inclusive of all taxes, duties and transportation charges, installation and commissioning charges etc. FOR destination basis i.e. OPTCL, Bhubaneswar basis. Taxes and duties if any, should be mentioned in clear terms separately.

4. **Documentation to be submitted**

- GPS Site survey report
- Specification sheet of all wireless radio equipments proposed (with make,model)
- Warranty up-gradation procedure;

5. **Eligibility Conditions:**

- The vendor should be the authorized dealer/Channel partner/Gold partner of OEM
- OEM authorization letter for this particular tender shall be submitted by the vendor.
- The vendor should have registered office at Bhubaneswar with OEM trained Engineers to provide prompt service support.
- The vendor should have annual turnover of not less than 10 Lakhs.
- The vendor executed similar work i.e wireless networking (Point to Point) of proposed product for Government/ Private agency during last 1 year shall be an added advantage, if so they have to submit the Order Copy.
- Should have upto date Sales Tax/VAT Clearance certificate
- Should have PAN

6. **Validity:** - The offer should remain valid for a period of 180 days from the date of opening.

7. **Delivery:** - The delivery, installation and commissioning of the equipments by the Vendor at Consignee's premises shall be completed within 30 days from the date of issue of the order.

8. **Penalty:** -

i) In case the supplier fails to deliver the equipment within the stipulated delivery period, liquidated damage @ 0.5% per each calendar week or part thereof subject to maximum of 5% of the cost of materials shall be imposed on the vender. However, imposition of liquidated damage is subject to force majeure conditions.

ii) If the Supplier fails to rectify /replace the equipment/material within 24 Hrs. from the time of intimation of the defect, so noticed by the purchaser within the guarantee period then the penalty for sum of 0.5% of the total Purchase order amount for each day of delay shall be recovered by the Purchaser within the warrantee period. For this purpose, penalty date will start from the date & time of reporting on defectiveness of equipment/material, so supplied, by the purchaser. The total amount of penalty in this case shall not exceed 10% (TEN PERCENT) of the purchase order amount. If the defects so intimated will not be rectified by the Supplier within the warrantee period, then whole of the B.G. will be forfeited by the Purchaser, without any intimation to the Supplier.

9. **Payment:** - (a)90% value of the equipment with 100% taxes and duties shall be paid within 30 days after delivery of materials against proof of consignee's receipt certificate issued by OPTCL for having received the stores in full and good conditions and submission of warranty certificate & installation certificate confirming satisfactory installation and operation of the equipment.

(b)The balance 10% payment shall be made after submission of the Performance Bank Guarantee for 10% value of the equipment valid for 15 (Fifteen) months from the date of commissioning of the last equipment indemnifying OPTCL against all losses incurred during the guarantee/warranty period.

OR

Balance 10% value of the equipment shall be released after expiry of the warranty period of the commissioning of the last equipment covered under this contract.

(c) The composite Bank Guarantee shall be valid for a period of 15 (fifteen) months from the date of commissioning of all equipment. The original Bank Guarantee accompanied with a confirmation letter from the concerned bank shall be submitted in this office.

(d) The submission of following documents shall enable OPTCL to honour your claim raised through Bill against the supply of the consignment covered under this contract for 90% & 10% payment respectively.

**FOR 90% PAYMENT**

- (i) Bills (in triplicate)
- (ii) Delivery challan
- (iii) Warranty certificate
- (iv) Installation certificate.

**FOR 10% PAYMENT**

- I) Bills in triplicate
- II) Performance B.G.

10. **WARRANTY:**

The equipment should be warranted for 12 (twelve) months from the date of commissioning , which ever is earlier. The vendor shall warrantee that, the equipment supplied under this contract are new, unused, and confirm to the specification mentioned in Guaranteed Technical Particular for the equipment under this contract.

11. **INSPECTION:** -

All materials shall be inspected for physical & operational status by the Inspecting Officer(s) at your office/Ware House at Bhubaneswar. You are to give clear three days notice to the Undersigned after your materials are ready for inspection.

12. **CONSIGNEE:** -

Junior Manager(IT), IT Stores, OPTCL, Bhubaneswar shall be the consignee of this order.

13. **VAT, PAN & Authorisation Certificates:** - Clear Photocopy of VAT & PAN registration and Authorised Dealership Certificates should be submitted along with Tender papers.

14. **POST WARRANTY MAINTENANCE:**

- (i) The firm shall provide post warranty maintenance soon after the warranty period is over for a period of three years.
- (ii) A Bank Guarantee of 2% of the cost of the total project (excluding Annual Maintenance Charges) shall be furnished from any Nationalised/ Scheduled Bank to Chief.General Manager (I.T), OPTCL, Bhubaneswar before completion of the warranty period executed in a non-judicial stamp paper worth of Rs. 50/- (Rupees fifty) only subject to change as per Orissa Stamp Duty Act. Valid for a period of 25 (Twenty Five) months from the date of commencement of AMC period.  
No interest will be payable on the Bank Guarantee.
- (iii) The annual maintenance charges shall be paid in quarterly installments at the end of each quarter.
- (iv) The firm has to conduct quarterly preventive maintenance of each equipment/component of the project.  
In case of the firm fails to conduct the quarterly preventive maintenance of any equipment /component of the project, a penalty of 10% of the AMC charges of the equipment for the quarter shall be deducted from the AMC charges.
- (v) The compressive warranty support & penalties on downtime thereof shall be applicable as specified under the Clause: 8 “Penalty” mentioned above.
- (vi) The Purchaser reserves the right to terminate the maintenance and repairs contract, after the warranty period, at any time without assigning any reasons and the Supplier cannot claim any compensation in this respect.

**15.0 FORCE MAJEURE:-**

If at any time, during the continuance of this contract, the performance in whole or in part is delayed by reason of:

- Any war or hostility
- Act of public enemy, civil commotion, sabotage, explosions
- Effect of flood, epidemics, quarantine restrictions, freight embargoes
- General strikes, Bandhs
- Acts of God

herein after referred to as EVENT, neither party shall, by reason of such EVENT, be entitled to terminate this Contract, nor shall any party have any claim to the damages against the other in respect of such non-performance or delay in performance – provided that notice of happening, of any such EVENT is given by either party to the other within seven days from date of occurrence of the EVENT.

Expected Services and goods deliverable under this Contract shall resume as soon as practicable after such an EVENT comes to an end or ceases to exist. The decision of the Purchaser as to whether the situation has become normal or not, shall be final and conclusive.

If the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any such EVENT for a period exceeding 60 days, either party may, at their option, terminate this contract.

**16.0 PAYMENT DUE FROM THE FIRM:-** All costs or damages for which the firm is liable to the purchaser will be deducted by the purchaser from any money due to the firm under the contract.

**17.0 JURISDICTION OF THE HIGH COURT OF ORISSA:-** Suits, if any, arising out of this contract shall be filed by either party in a Court of Law to which the jurisdiction of the High Court of Orissa extends.

**18.0 Breach of Contract:**

The breach of any of those terms and conditions shall lead to the encashment of the Composite B.G and any other remedies, to which the purchaser may be entitled under this contract.

Yours faithfully,

Encl: - 1) Price Bid (Annexure- A)  
(2) Technical Bid (Annexure-B)  
(3) Performance Bank Guarantee (Annexure-C)

**Chief General Manager (IT)**

**PRICE BID**

Sl. No.	DESCRIPTION OF MATERIALS.	MAKE/MODEL	QTY.	UNIT RATE INCLUDING ALL TAXES, INSTALLATION AND COMMISSIONING CHARGES (IN RS.) #	TOTAL AMOUNT (In Rs)	REMARKS.
1	5.7 GHz 4 Mbps Canopy Back Haul Module, Power Supply & Surge Suppressor		2 nos			
2	Tower mast 7mtr at SLDC Building(End B)	NA	7 mtr			
3	GI pipe 5 ft at OPTCL Building (End A)	NA	2 mtr			
<b>TOTAL (A)(IN Rs.)</b>						

**B.Post Warranty Annual Maintenance Charges for Three (3) Years**

Sl. No	Description Of Materials	Make/Model	AMC Charge For 1 <sup>st</sup> Year Including All Taxes (In Rs.)	AMC Charge For 2 <sup>nd</sup> Year Including All Taxes (In Rs.)	Total AMC Amount For Two Years (In Rs)
1					
<b>TOTAL (B)(in Rs.)</b>					
<b>TOTAL COST (A+B)(in Rs.)</b>					

SIGNATURE OF TENDERER WITH SEAL &amp; DATE

# N.B.: -The detail price breakup indicating Excise duty, Sales tax, Entry tax and other taxes, if any, etc is to be furnished in a separate sheet.

## **TECHNICAL BID**

The wire less Ethernet Bridges shall have following specifications / features:

### **Mandatory Requirements for PTP Wireless Equipments**

Sr. No.	Description	Compliance (Y/N)	Deviation(s), if any
1	The wireless Network should be operating in License free radio spectrum.		
2	Wireless systems shall be capable of easy, rapid deployment and stability is required to be highest.		
3	The proposed wireless Radios should have GPS based synchronization for interference mitigation.		
4	Wireless Radios should have Carrier to Interference ratio (C/I) ~3dB @ 10 Mbps, ~10dB @ 20Mbps		
5	Wireless frequency and site planning for a reliable and interference free connectivity is to be done by the Integrator.		
6	System shall have a 3dB antenna beam width 17 degrees with passive signal gain device / 60 degrees without passive signal gain device, Azimuth and Elevation		
7	The system shall support remote maintenance of radio units.		
8	The system shall have the capabilities of upgrading the Software without interrupting the normal system service.		
9	The system shall allow enabling prioritization of VOIP and Video over data traffic.		
10	The system shall have Self-Interference prevention with synchronization, between different base stations and between co-locating sectors within a base station using GPS based synchronization system.		
11	The system shall support extensive networking modes including switching, VLAN tagging and classifications etc.		
12	All necessary accessories, equipments, Power cables, cat5e Ethernet cables & Cable conduit pvc pipe (rate per meter basis) shall be included in the cost of wireless set.		

**Required Specification for Wireless Point to Point Equipment:**

<b>Description</b>	<b>Wireless Backhaul PTP module</b>	<b>Compliance Yes/ No</b>
Frequency Range	ISM 5725 – 5850 MHz	
Signalling Rate	4 Mbps ( upgradeable up to 20 Mbps )	
Typical Aggregate useful Throughput	Should support ~7.5 ( upgradeable up to 14 Mbps )	
Typical LOS Range	>50 Kms with Passive Antenna	
Non-overlapping Channels	6 for 5.7Ghz	
Channel Width	20 MHz	
Channel Spacing	5 MHz	
Synchronization Support	Should support GPS base Synchronization	
Carrier to Interference ratio (C/I)	Equal to or better than ~ 3dB @ 10 Mbps and ~10 dB @ 20 Mbps	
Modulation Type	2/4 level FSK, Optimized for interference Rejection	
Latency	<3 ms	
Encryption	DES Capable (Optional AES)	
QoS support	Should support friendly QoS with bandwidth management	
Typical Receiver Sensitivity	Equal to or better than -86 dBm @ 10 Mbps-79 dBm @ 20Mbps -86 dBm @ 10Mbps	
Antenna Gain	>=7 dBi	
Optional External Antenna	Should support	
Antenna Beam Width	60 Degree @ 3dB	
EIRP (dB)	30 dBm- 1 Watt	
Built-In spectrum Analyzer	Should be Available	
Mean Time Between Failure (MTBF)	>35 Yr	
Temperature	-20°C to +55°C	
Wind Survival	190 Km/Hr or better	
Access Method	Time Division Duplexing (TDD)	
Interface	10/100 Base T, Half/ Full duplex Rate auto negotiated (802.3 compliant)	
Protocol Used	IPV4, UDP,TCP,ICMP, Telnet, HTTP, FTP, SNMP etc.	
Network Management	Web Server, SNMP V2c, TELNET	
Firmware Upgrade Support Over Air	Should support	
Simultaneously Firmware Upgrade of multiple units, Over Air	Should support	
Provision for Surge Protection	Should support	
Built-In system Diagnostic tools	Should be Available	
Certification	FCC and CE	
Power Supply	PoE - 0.3 A @ 24 VDC ~ 7.2 W	
Weight	< or equal to 500 Grams	
Volume	< or equal to 0. 1 Cubic Feet	

SIGNATURE OF TENDERER WITH SEAL & DATE



**PROFORMA FOR COMPOSITE BANK GUARANTEE FOR  
SECURITY DEPOSIT, PAYMENT AND PERFORMANCE**

This Guarantee Bond is executed this .....day of ..... 201\_ by us the .....  
(Bank) at ..... P.O. .... P.S..... Dist..... State.--  
.....

WHEREAS THE ORISSA POWER TRANSMISSION CORPORATION LTD., a corporate body constituted under the Company Act, 1956 (herein after called “the OPTCL”) has placed orders No.....Dt.....(hereinafter called “The Contract) on M/s..... (hereinafter called “The Contractor”) for supply, install, testing and commissioning of the ..... AND

WHEREAS the Contractor has agreed to supply, install, testing and commissioning of .....  
..... at the OPTCL in terms of the said contract, AND

WHEREAS the OPTCL has agreed (1) to exempt the contractor from making payment of security, (2) to release 100% payment of the cost of materials as per the said agreement and (3) to exempt from performance guarantee on furnishing by the Contractor to the OPTCL a Composite Bank Guarantee of 10% (ten percent) of the contract value in force of the said contract.

NOW THEREFORE in consideration of the OPTCL having agreed (1) to exempt the contractor from making payment of security (2) releasing 100% payment to the contractor and (3) to exempt from furnishing performance guarantee in terms of the said contract as aforesaid, we, the .....(Bank) (hereinafter referred to as ‘the Bank’) do hereby undertake to pay to the OPTCL an amount not exceeding Rs.....(Rupees .....) against any loss or damage caused to or suffered by or would be caused to or suffered by the OPTCL by reason of any breach by the said contractor of any of the terms and conditions contained in the said contract.

(2) We (the Bank.....) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the OPTCL stating that the amount claimed is due by way of loss or damage caused to or suffered by the OPTCL by reason of any breach by the said Contractor of any of the terms or conditions contained in the said contract or by reason of the Contractor’s failure to perform the said contract. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....(Rupees..... ....).

(3) We (the Bank.....) also undertake to pay to the OPTCL any money so demanded not withstanding any dispute or disputes raised by the Contractor in any suit or proceeding instituted / pending before any court or tribunal relating thereto our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor (s) shall have no claim against us for making such payment.

(4) We (the Bank.....) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said contract and that it shall continue to be so enforceable till all the dues of the OPTCL under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till Managing Director, Orissa Power Transmission Corporation Limited or his nominee certifies that the terms and conditions of the said contract have been fully and properly carried out by the said Contractor and accordingly discharges this guarantee.

Unless a demand or claim under this guarantee is made on us in writing on or before the \_\_\_\_\_ we shall be discharged from all liability under this guarantee thereafter.

(5) We (the Bank.....) further agree that the OPTCL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) and we shall not be relieved from our liability by reason of any such variations or extension being granted to the said Contractor or for any forbearance, act or omission on the part of the OPTCL or any indulgence by the OPTCL to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this provisions have effect of so relieving us.

(6) This guarantee will not be discharged due to the change in the name, style and constitution of the Bank and the contractor.

(7) We (the Bank.....) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the OPTCL in writing.

(8) We (the Bank.....) further agree that this guarantee shall also be invocable at our place of business at Bhubaneswar in the state of Orissa.

Dated at ..... the ..... day of ..... Two thousand .....

For .....  
(indicate the name of the Bank)

Witness:

- 1.
- 2.

**NOTE FOR TENDERERS** : The B.G. is to be furnished in Non-judicial Stamp paper of Rs.50/- as applicable as per Orissa Stamp Duty Act. from any Nationalized Bank.

**Check List:**

- The vendor should be the authorized dealer/Channel partner/Gold partner of OEM
- OEM authorization letter for this particular tender shall be submitted by the vendor.
- The vendor should have registered office at Bhubaneswar with OEM trained Engineers to provide prompt service support.
- The vendor should have annual turnover of not less than 10 Lakhs.
- The vendor executed similar work i.e wireless networking (Point to Point) of proposed product for Government/ Private agency during last 1 year shall be an added advantage, if so they have to submit the Order Copy.
- Should have upto date Sales Tax/VAT Clearance certificate
- Should have PAN & Service Tax Registration.
- EMD
- GPS site survey report
- Specification sheet of all equipment
- Warranty up-gradation procedure
- Price bid as per Annexure- A
- Technical bid as per Annexure -B

For the above said points necessary supporting document to be furnished.