DEPARMENT OF COMPUTER SCIENCE AND ENGINEERING

Indian Institute of Technology

Hauz Khas, New Delhi-110 016

NOTICE INVITING QUOTATIONS

Dated : **14-05-2015**

Subject : Purchase ofIEEE 802.22 compliant TVWS Base Station and Customer Premises Equipment

Invitation for Tender Offers

Sealed Quotations are invited from reputed manufacturer/Bidder for purchase of TVWS Base Station and Customer Premises Equipment. Tender offers in two bid format Technical bid and Commercial bid. Technical bid should not contain any commercial information, else will be rejected. The financial bid will be opened only if technical bid functionally meet the following tender specification. Before submitting the tender, read the tender terms & conditions carefully.

Sealed quotations must be marked "Dept. of CS&E", and should reach the Room No.437, 3rd Floor, Bharti Building, IIT, Hauz Khas, New Delhi-110016" latest 12:00 P.M by **2ndJune,2015.**

TECHNICAL SPECIFICATION:

Sl. No.	Technical Specifications	Remarks
1	**TVWS Base Station Based compliant to IEEE standard 802.22 and to the Wi-FAR Specifications published by White Space Alliance(WSA).TV white spaces are unused channels of 6/7/8-MHz in TV spectrum in VHF and UHF range that spans from 300 to 800MHz.** **a) Should achieve long range up to 30 Km in rural areas.** **b) Should support non-Line of Sight (non-LOS) operation.** **c) Should support scalable number of simultaneous users from 15 to 512.** **d) Should enable Point to Multi-point network topology.** **e) Fixed broadband with portability** **f) Should support for TDD (Time Division Duplex) or FDD (Frequency Division Duplex) modes** **g) Should have Maximum Link rate: 30Mbps per 8-MHz channel.**	**Quantity 1**

	h) Ethernet 100Mbps back-haul. **i) Should have option to mount modem near Antenna using Power-over-Ethernet.** **j) Should support Geo-location based database query for TV White Space availability at installation.** **k) Centralized network management with Linux SNMP based AAA and Radius for OSS with the ability to port to other NM platforms.**	
2	**Customer Premises Equipment (CPE)compliant to IEEE standard 802.22 and to the Wi-FAR Specifications published by White Space Alliance(WSA).TV white spaces are unused channels of 6/7/8-MHz in TV spectrum in VHF and UHF range that spans from 300 to 800MHz.** **a) Should achieve long range up to 30 Km in rural areas.** **b) Should support non-Line of Sight (non-LOS) operation.** **c) Should support scalable number of simultaneous users from 15 to 512.** **d) Should enable Point to Multi-point network topology.** **e) Fixed broadband with portability** **f) Should support for TDD (Time Division Duplex) or FDD (Frequency Division Duplex) modes** **g) Should have Maximum Link rate: 30Mbps per 8-MHz channel.** **h) Ethernet 100Mbps back-haul.** **i) Should have option to mount modem near Antenna using Power-over-Ethernet.** **j) Should support Geo-location based database query for TV White Space availability at installation.** **k) Centralized network management with Linux SNMP based AAA and Radius for OSS with the ability to port to other NM platforms.**	**Quantity 1**

Terms & Conditions:

1. Separate Technical and commercial bids are required to be submitted in separate sealed envelope, otherwise the quotation will be rejected.

2. Validity of the quotation should be at least 90 days from the date of submission.

3. Quotation must indicate a delivery schedule.

4. Quotation must include the applicable taxes and duties, if any.

5. Only INR quotes will be accepted. Dollar quotes will be rejected.(No CDEC will be issued by the Institute against INR Quote).

6. No Queries regarding change in specifications will be entertained.

7. Institute reserve the right to accept or reject any or all quotation without assigning a reason thereof.

8. Minimum warranty of 1 year from date of delivery of equipment should be provided.

9. Free firmware upgrades for 1 year from date of delivery of equipment should be provided.

(Dr. Vinay J. Ribeiro)