



# Bharat Heavy Electricals Limited

(A Govt. Of India Undertaking)

Power Sector, Eastern Region BHEL BHAWAN,  
PLOT NO. DJ-9/1 , SECOTR II , SALT LAKE CITY , KOLKATA  
WEST BENGAL, INDIA

Phone : 033-23216130-31,033-23216130 FAX : 033-23211960

Sub	<b>TENDER CHANGE NOTICE TCN-07 DATED: 25/01/13</b>
Job	<b>SUPPLY, INSTALLATION AND COMMISSIONING OF SURVEILLANCE CAMERA SYSTEM FOR BHEL PSER WBPDCI-SAGARDIGHI, BSEB BARAUNI AND SINGARENI SITES INCLUDING ONE YEAR SERVICE WARRANTY AND OPTIONAL ANNUAL MAINTENANCE FOR SUBSEQUENT <u>YEAR (2 ND + 3 RD) AFTER COMPLETION OF SERVICE WARRANTY</u></b>
Ref	<b>1.PSER:PUR:MSX: 223:127 Dtd.19/12/12 2.TCN-01 dated 22/12/12 , TCN-02 dated 1/1/13,TCN-03 dated: 8/1/13, TCN-04 DATED: 15/1/13 ,TCN-05 DATED: 17/1/13 &amp; TCN 06 dated 21/01/13</b>

WITH REFERENCE TO ABOVE, FOLLOWING POINT, RELEVANT TO TENDER, MAY PLEASE BE NOTED AND COMPLIED WITH WHILE SUBMITTING OFFER

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### (k) RF Device : Technical Specification for RF devices

#### OFDM based Point to Multipoint radio spec

1.1.5 "System should employ bandwidth per channel that is **5, 10 or 20 MHz.**"

**Shall be read as:**

1.1.5 System should employ bandwidth per channel that is , **10 or 20 MHz. or better**

1.1.9 **The Line** "The equipment shall support upto 45 mbps at Central site with an scalability in the network where remote site can be upgraded from 4 mbps to 10, 20 and 40 Mbps with software license."

**Shall be read as:**

1.1.9 "The equipment shall support upto 45 mbps or better at Central site with an scalability in the network where remote site can be upgraded from 10, 20 and 40 Mbps with software license."

#### Interference Mitigation Capability

**The Line** "System should have capability to employed with GPS synchronization that reduces self-interference and the QoS features that manage the burst and sustained link rates while new subscribers are added to the network."

**Shall be read as:**

"System should have suitable mechanism for reduction of self-interference and the QoS features that manage the burst and sustained link rates while new subscribers are added to the network."

1.3.1 "System shall have OFDM technologies with no less than 256 sub-tones."

**Shall be read as:**

"System shall have OFDM technologies."

1.3.2 **The Line** "Modulation level shall be dynamically adaptive as QPSK, 16 QAM, 64 QAM."

**Shall be read as:**

"Modulation level shall be dynamically adaptive as QPSK, 16 QAM, 64 QAM. Or better."

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### 2. Ethernet

3.2 "Maximum aggregate throughput should be up to 10.5 Mbps at 5 MHz, 24.5 Mbps at 10 MHz and 45 Mbps at 20 MHz as per solution requirements."

**Shall be read as :**

"Base station to each CP station aggregate throughput should be above 10MBPS."

3.2 "The system MUST provide alarm and control capabilities via Simple Network Management Protocol (SNMP) and Simple Mail Transport Protocol (SMTP) with WIMAX MIB support"

**Shall be read as:**

"The system MUST provide alarm and control capabilities via Simple Network Management Protocol (SNMP) and Simple Mail Transport Protocol (SMTP)."

### Environmental requirements

4.1 b. "Relative Humidity greater than 80%, non-condensing at all operating temperatures."

**Shall be read as:**

"Relative Humidity greater than 90%, non-condensing at all operating temperatures."

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### Wireless CPE Module @ 5.7/2.4 GHz for Point to Multi Point connectivity

**Encryption** "DES Capable (Optional AES)"  
**Shall be read as:**  
"AES Capable (Optional DES)"

**Should support** "NAT, Packet / Port filter"  
**Shall be read as:**  
"Packet / Port filter"

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**Sr. No. 3** "The system shall support Forward Error Correction using  $\frac{3}{4}$  Reed Solomon Block coding."  
**Shall be read as:**  
"The system shall support some error correction mechanism."

**Sr. No. 7** "The system shall have an inbuilt spectrum analyzer function."  
**Shall be read as:**  
"The system shall have an inbuilt analysis mechanism for avoid interference with other channel."

**Sr. No. 13 is added in specification:** "Device shall be free license band and WPC approved."

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### Mandatory Requirements for PMP Wireless Equipments

#### Specifications of Wireless Module for Point to Multipoint connectivity:

<b>Synchronization</b>	“Support GPS base Synchronization” <b>Shall be read as:</b> “Channel interference reduction mechanism”
<b>Encryption</b>	“DES Capable (Optional AES)” <b>Shall be read as:</b> “AES Capable (Optional DES)”
<b>QoS support</b>	“DiffServ QoS, able to do bandwidth management on per CPE basis.” <b>Shall be read as:</b> “QOS support for video packet transmission.”

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### **Access Method**

“Time Division Duplexing/ Time Division Multiple Access (TDD/TDMA)”

**Shall be read as:**

“Time Division Duplexing/ Time Division Multiple Access (TDD/TDMA) along with WPC specified mechanism.”

### **Should support**

“NAT, Packet/ Port filter”

**Shall be read as:**

“Packet/ Port filter”

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**Point No. 3.** The line “Details of devices (Make, Model Number, Warranty etc.) with brochures. **Approved Makes: Motorola, Aperto, Radwin, Sloka , Xtreme”**

**Shall be read as:**

“Details of devices (Make, Model Number, Warranty etc.) with brochures.

***Approved Makes: Motorola, Aperto, Radwin, Sloka ,Wavesight”***

**DUE DATE OF SUBMISSION OF OFFER AGAINST THE SUBJECT TENDER IS EXTENDED UP TO 30/01/2013 (11:00 HRS.). TECHNO-COMMERCIAL BID SHALL **BE OPENED ON THE SAME DAY AT 12:00 NOON.****

**BIDDERS ARE REQUESTED TO ACKNOWLEDGE TCN 01, TCN 02, TCN 03, TCN-04, TCN-05 , TCN-06 & THIS TCN-07 IN THEIR TECHNO-COMMERCIAL OFFER.**

**ALL OTHER TERMS AND CONDITIONS OF THE SUBJECT TENDER SHALL REMAIN UNCHANGED.**

Thanking you,

Yours faithfully,  
for BHARAT HEAVY ELECTRICALS LTD

Engineer (Purchase)

PART-F

**FORMAT FOR NO DEVIATION CERTIFICATE**  
**(To be submitted in the bidder's letter head)**

To,  
Bharat Heavy Electricals Limited,  
POWER SECTOR – EASTERN REGION  
2<sup>nd</sup> FLOOR, Block-DJ, Plot- 9/1, SECTOR  
SALT LAKE CITY, KOLKATA – 700 091  
FAX – 033-2321-1960

**Sub: NO DEVIATION CERTIFICATE FOR SUPPLY, INSTALLATION AND COMMISSIONING OF SURVEILLANCE CAMERA SYSTEM FOR BHEL PSER WBPDCCL-SAGARDIGHI, BSEB BARAUNI AND SINGARENI SITES INCLUDING ONE YEAR SERVICE WARRANTY AND OPTIONAL ANNUAL MAINTENANCE FOR SUBSEQUENT YEAR (2 ND + 3 RD) AFTER COMPLETION OF SERVICE WARRANTY**

**Tender specification no. PSER:PUR:MSX: 223:127 Dtd.19/12/12 ALONG WITH TCN-01 dated 22/12/12 , TCN-02 dated 1/1/13,TCN-03 dated: 8/1/13, TCN-04 dated: 15/1/13 ,TCN-05 dated: 17/1/13 , TCN-06 dated 21/01/13 & TCN-07 dated 25/01/13.**

Dear Sirs,

**With** reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/modified the tender documents as appeared in the website/newspapers and in case of observance at any stage, it shall be treated as null and void.

**We** hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT and confirm our acceptance to **reverse auctioning process** and we hereby convey our unqualified acceptance to all terms and conditions as stipulated in the tender and NIT.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer strictly in accordance with tender instructions.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized  
representative of the contractor)