

निविदा दस्तावेज
BID DOCUMENTS

**e-TENDER FOR PLANNING, ENGINEERING,
SUPPLY, INSTALLATION, TESTING,
COMMISSIONING AND ANNUAL MAINTENANCE
OF INTELLIGENT NETWORK AND VOMS
OF WEST ZONE.**

~~इ-निविदा दस्तावेज~~ / T.E. NO.CGM-MHTC/CPC/e-TENDER/IN VOMS/2015-16/03 DATED: 12/05/2015.

~~इ-निविदा दस्तावेज~~ / DUE TO OPEN ON: **09 / 06 / 2015.**

प्रस्ताव की मान्यता - १५० दिन
VALIDITY OF THE OFFER – 150 DAYS



भारत संचार निगम लिमिटेड
(भारत सरकार का एक उद्यम)
BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)

BSNL 3G
A generation ahead

Central Procurement Cell
Asstt. General Manager (CPC-I)
Office of the Chief General Manager, MH Telecom Circle,
1st floor, D wing, BSNL Admin Building,
Juhu Road, Santacruz (W)
Mumbai- 400 054.
Tel no.: 022-26467761, Fax: 022-26608149
E-mail: agmmht_cpc1@bsnl.co.in Website: www.maharashtra.bsnl.co.in

Signature of the Bidder.

O/o The Chief General Manager Telecom
Juhu Road, Santacruz(W), Mumbai – 400054
Tel: 022 – 26467761 Fax: 022-26608149
E-mail: agmmht_cpc1@bsnl.co.in
Website: www.maharashtra.bsnl.co.in



BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)
Maharashtra Telecom Circle.

NO. CGM-MHTC/CPC/e-TENDER/IN VOMS/2015-16/03

Date : 12/05/2015

From
A.G.M. (CPC – I)
O/o CGM,MHTC, Admin. Bldg 1st floor D wing,
Juhu Road, Santacruz (W)
Mumbai 400054
E-mail: agmmht_cpc1@bsnl.co.in

To,

Sub: - TENDER DOCUMENT FOR PLANNING, ENGINEERING, SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND ANNUAL MAINTENANCE OF INTELLIGENT NETWORK AND VOMS OF WEST ZONE.

Tender No.: CGM-MHTC/CPC/e-TENDER/IN VOMS/2015-16/ 03

Date : 12/05/2015

Please find enclosed the revised tender document in respect of above mentioned tender which contains the following sections:

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If interested, kindly submit your offers online (on or before date and time specified in column No. 6 of Section-1 (DNIT).)

A.G.M. (CPC-I)

Tel no.: 022-26467761, Fax: 022-26608149,

E-mail: agmmht_cpc1@bsnl.co.in.

SECTION-1
Detailed NOTICE INVITING TENDER (DNIT)

O/o The Chief General Manager Telecom
Juhu Road, Santacruz(W), Mumbai – 400054
Tel: 022 – 26467761 Fax: 022-26608149



BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)
Maharashtra Telecom Circle.

E-mail: agmmht_cpc1@bsnl.co.in

Website: www.maharashtra.bsnl.co.in

T.E.NO. CGM-MHTC/CPC/e-TENDER/ IN VOMS/2015-16/03

DATED 12/05/2015

1. PURPOSE:-

Digitally Sealed e-tender is invited by the Chief General Manager, MH Telecom Circle, BSNL, Mumbai-400 054 for Planning, Engineering, Supply, Installation, Testing, Commissioning and Annual Maintenance of Phase VII Expansion of IN and VOMS of West Zone, through the e-Tendering Process. The details furnished below.

Sl. No.	Item / Work	Estimated Quantity	Tender fee with break up (in Rs.)	Amount of Bid Security (Rs.) valid for 180 days from the date of opening of the tender	Last Date & Time for submission of bid	Date & Time of Opening of Tender Offer	(TECGR no.) Latest Specification
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Planning, Engineering, Supply, Installation, Testing, Commissioning and annual maintenance of Phase VII expansion of Intelligent Network and VOMS of West Zone	ONE SYSTEM	8000+5% Tax =8000+400 =Rs. 8400/-	Rs. 1,70,00,000/-	09/06/2015 up to 11:00 hrs.	09/06/2015 at 11:30 hrs.	As per Section-7

Note 1 : The Tender is a turnkey implementation of the IN and VOMS in the West zone comprising of (a) planning, engineering, supply, installation, testing, commissioning and annual maintenance of IN and VOMS together with 3GPP R10 Core and support all 3GPP subsequent releases,

Note 2 : The quantity stated in bid document are estimated and BSNL reserves the right to vary the quantity to the extent of -25 % to +25 % of specified quantity at the time of award of the contract i.e. PO without any change in unit price or other terms & conditions.(Pl. refer Clause 26 of Section-4 Part-A)

Note 3: 20 % of the Estimated Quantity/requirement in this tender Enquiry is earmarked for procurement from the eligible Micro & Small Enterprises (MSEs). However, in case eligible Micro & Small Enterprises (MSEs) bidder(s) are not available then this quantity would be de-reserved & procured from participating bidders.

2. 1 (i) SALE OF TENDER DOCUMENT:

e-Tender document can be collected from AGM (CPC-I), Mumbai by submitting the Mutual Non-Disclosure Agreement (NDA) (as per Format kept at 9(K) & (L) of Section-9 and original Cash receipt/DD for tender document fee.

(ii)MODE OF PAYMENT : The Tender fee should be paid in the form of Crossed Demand Draft / Bankers Cheque issued by any Nationalised /Scheduled Bank in favour of **"The AO(F&A),BSNL MH Telecom Circle, Mumbai-400054"**.

OR

Tender fee can also be paid in cash to the Accounts Officer(F&A), O/o CGM, MH Telecom Circle, BSNL Admin Building, 6th floor D wing, Juhu Road, Santacruz(W), Mumbai-54. Cash payment will however be accepted up to 04-00 PM only.

(iii) The tender documents shall be issued free of cost to MSE bidders on production of requisite proof in respect of valid certification from MSME for the tendered item along with Mutual Non-Disclosure Agreement (NDA) (as per Format kept at 9(K) & (L) of Section-9 .

(iv) The Tender fee is non-refundable & non-transferable.

3. e-TENDERING PROCESS:-

BSNL has decided to use the e-Tendering Process for inviting Bids for this Tender. The special instructions to Bidders for e-Tendering is provided in Section 4-Part B of this Tender.

4. ELIGIBILITY CRITERIA:

4.1 In order to qualify as a Bidder, a prospective Bidder shall fulfill the following eligibility criteria:

- (i) The Bidder shall be a company registered in India and incorporated under the Indian Companies Act, 1956 and amendments thereof.
- (ii) The Bidder and their collaborators shall not have any equity stake or operating partnership in mobile segment with any other cellular operators except MTNL in India. The Successful Bidder shall not acquire equity share/enter into partnership with any other cellular mobile operator except MTNL in India for a period of 2 years from the date of the Detailed NIT. The Bidder shall furnish a certificate in this regard, which shall form the part of the Bid.
- (iii) The Bidder or its parent company shall be manufacturer of INTELLIGENT NETWORK for GSM/3G/LTE mobile networks. Such Bidder shall also be registered in India to carry out telecom related activity.
- (iv) The Bidder or its collaborators/parent company shall possess experience of planning, engineering, supply, installation, commissioning of at least a total of 50 million lines of, IN,. The experience sought can be from single or multiple networks. Only successfully completed contracts of the Bidder or its collaborators/parent company shall be counted towards such experience.
- (v) The Bidder or its parent company shall have the experience of rolling out the network of the size of minimum 50 million lines of IN,. The experience shall include migration of at least 10 million customers from existing platform to the new one satisfactorily. Only successfully completed contracts of the Bidder or its parent company shall be counted towards such experience.

The Bidder or their collaborators should have successfully completed IOT test of their Intelligent Network equipment with all the network elements of various vendors existing in the BSNL network and other established suppliers of network elements called for in this Tender Document. .

- (vi) The Bidder shall provide an undertaking to undertake the annual maintenance as per the provisions of Annexure II, Part B of Section 5 in this Tender Document.
- (vii) The experience of the Bidder can include the experience of its parent company or holding company of the parent company. Multiple bids, if any, received from same Bidder under this arrangement shall be rejected.

4.2 The Bidder shall submit references of experiences in 2G 3G and LTE wrt IN equipment/networks , as referred to above, in the form of an original certificate from the relevant network operator signed by the senior official of the relevant network operator (including name, designation, telephone number, fax numbers and e-mail id of the signatory and that of the network operator) along with the seal of the relevant network operator of all such existing networks in operation. References shall be considered valid provided that the networks mentioned thereof exist and are in operation for the period as mentioned above. References shall also mention performance of network equipment supplied and installed. BSNL reserves the right to verify such references by visiting directly or through Indian consulate or through any other means for which necessary arrangements are to be made by the Bidder. However, the cost of travel allowance/dearness allowance of BSNL officers/executives shall be borne by BSNL. Only certificates issued by the relevant network operator in the manner prescribed in this Clause 4.2 shall be considered valid and no self certification from either the Bidder or their collaborators shall be accepted.

4.3 The Bidders participating in the Tender shall give an undertaking for network elements to support both 2G , 3G and LTE technologies for next 7 years with a product portfolio and roadmap till 3GPP R10 for committed deliveries and its implementation in the entire network.

4.4 The Bidders participating in the Tender shall also submit an undertaking to set up necessary infrastructure in all the concerned Circles for project implementation, O&M support and annual maintenance contract within one month of issue of Purchase Order.

4.5 The Bidder shall be a company having a minimum turnover of Rs. 1000 crores each in the last two years (i.e. 2012-13 and 2013-14). In case the audited report for FY 13-14 is not available, the audited reports of the two earlier financial years namely FY 11-12 and FY 12-13 may be submitted. Such audited reports shall be substantiated by the audited profit and loss account. In case of an Indian subsidiary, the turnover of the parent company may also be taken into consideration for determining the fulfilment of this condition under Clause 4.5.

4.6 Provenness of the Equipment being offered

4.6.1 The Equipment being offered shall have adequate deployment and proven performance. The deployment required for the respective Equipments to be considered for this Tender is stated below:

No.	Network Element	Deployment Required
1.	IN	<ul style="list-style-type: none"> Minimum 5 working installations excluding DR Minimum two out of the 5 shall be with DR Working for a total subscriber base of minimum 50 million.

4.7 Necessary certificate from the relevant network operator as specified in clause-4.2 above shall be submitted by the Bidder as part of the technical and commercial Bid to establish the provenness of the Equipment offered.

4.8 All documents submitted in the Bid should be in English. In case the certificate viz experience, registration etc. is issued in any other language other than English, the Bidder shall attach an English translation of the same duly attested by the Bidder & the translator to be true copy in addition to the relevant certificate. All computer generated documents should be duly attested/ signed by the Bidder.

4.9 The Bidder shall submit an irrevocable undertaking duly signed by it and its collaborator (if applicable) stating that both of them i.e. the Bidder and its collaborator shall be liable for due performance of the Contract jointly and severally, failing which both of them shall be liable to be barred from having any business dealing with BSNL for a period of three years. This shall be applicable to the network elements mentioned in Clause 4.6 of Section 1.

5. BID SECURITY : (Please refer clause 12.2 of Section-4 Part-A)

The bidder shall furnish the bid Security / EMD in a following way:-

a) Demand Draft/ Banker's cheque issued by any Nationalised /Scheduled Bank drawn in favour of **"The AO(F&A), BSNL MH Telecom Circle, Mumbai-400054"** and payable at **"Mumbai"**. Or

b) Bank Guarantee from a scheduled bank drawn in favour of **"The A.G.M.(CPC-I), O/o the CGM, BSNL, MH Telecom Circle, Mumbai-400054"** which should be valid for 180 days (i.e. one month above the offer validity period subject to maximum of 210 days) from the tender opening date.

c) The MSE units shall be exempted from submission of Bid Security deposit on production of requisite proof in respect of valid certification from MSME for the tendered item. ***(Pl. refer clause 12.2(ii) of Section-4 Part-A.)***

6. LAST DATE AND TIME OF SUBMISSION OF BID :-

6.1 The date and time for submission of the Bid is mentioned at clause 1 column 6 of table at Clause-1 above.

6.2 In case the Bid Closing Date is declared to be a holiday, the Bid Closing Date will automatically get shifted to next working day at the same scheduled time. Any change in Bid Opening Date due to any other unavoidable reason will be intimated to all the Bidders separately.

7. BID OPENING DATE :-

The date and time for the on line opening of the Bids is mentioned column 7 of table at Clause-1 above.

8. PLACE OF OPENING OF BIDS :-

- 8.1 The e-Tender will be opened online in the chamber of **AGM (CPC – I), O/o the Chief General Manager, Maharashtra Telecom Circle, 1st Floor, D wing, BSNL Admin Building, Juhu Road, Santacruz (W), Mumbai-400054** on date & time specified in NIT.

If due to administrative reasons, the venue of Bid opening is changed, it will be displayed prominently at venue and notice board on **1st Floor, D wing, BSNL Admin Building, Juhu Road, Santacruz (W), Mumbai-400054** and also on web site www.eprocure.gov.in

- 8.2 However, if necessary, the authorized representatives of Bidders (Only one authorised representative per bidder is allowed) can attend the TOE physically at the address mentioned at clause 8.1 above where BSNL's tender opening officers shall be conducting the TOE.

9. NON-ACCEPTANCE OF BIDS [TEST]:-

Except as otherwise provided in the Tender, Bids received after the Bid Closing Date & Time will not be accepted.

10. REJECTION OF BIDS :

- 10.1 Incomplete, ambiguous, conditional, unsealed Bids are liable to be rejected.
10.2 Purchaser reserves the right to accept or reject any or all Bids without assigning any reason and is not bound to accept the lowest tender.

11. SUBMISSION OF SIGNED TENDER:-

- 11.1** The Bidder shall furnish a declaration under his digital signature that no addition / deletion / corrections have been made in the Tender being submitted as a part of submission of Bid and it is identical to the Tender appearing on the e-Tendering Portal.

- 11.2** 11.2 In case of any correction/ addition/ alteration/ omission in the Tender submitted as a part of the submission of Bid, the Bid shall be treated as non-responsive and shall be rejected summarily.

- 12. VENUE OF PRE-BID VENDORS CONFERENCE:** Vendors conference shall be held at the **Conference Hall : O/o the Chief General Manager, Maharashtra Telecom Circle, 2nd floor, C wing, BSNL Admin Building, Juhu Road, Santacruz (W), Mumbai-400054** at 11:00 hrs of 19/05/2015. Any change shall be communicated through e-tender portal www.eprocure.gov.in.

A.G.M. (CPC-I)

Tel no.: 022-26467761, Fax: 022-26608149,

E-mail: agmmht_cpc1@bsnl.co.in.

O/o The Chief General Manager Telecom
Juhu Road, Santacruz(W), Mumbai – 400054
Tel: 022 – 26467761 Fax: 022-26608149
E-mail: agmmht_cpc1@bsnl.co.in
Website: www.maharashtra.bsnl.co.in



BHARAT SANCHAR NIGAM LIMITED
(A Govt. of India Enterprise)
Maharashtra Telecom Circle.

NEWS PAPER N.I.T.

For procurement Intelligent Network System and VOMS for West Zone of BSNL

NOTICE INVITING TENDER

Tender Enquiry NO. CGM-MHTC/CPC/e-TENDER/IN VOMS/2015-16/03 Date:12/05/2015

	BHARAT SANCHAR NIGAM LIMITED (A Govt. of India Enterprise) O/o Chief General Manager , Maharashtra Telecom Circle,(BSNL) 1 st Floor, D Wing, Juhu Tara Road, BSNL Complex, Santacruz (W), Mumbai –54.							
	NO. BSNL/MHTC/CPC/NIT/2015-16/03	DATED : 12 / 05 / 2015						
NOTICE INVITING e-TENDER								
Digitally sealed e-tender is invited by CGM, BSNL, Maharashtra Telecom Circle, Mumbai-54 from the prospective bidders for the following Items:-								
<table border="1"> <thead> <tr> <th>Name of the Item/work</th> <th>Quantity (with Unit)</th> <th>Estimated cost in Rs</th> </tr> </thead> <tbody> <tr> <td>PLANNING,, ENGINEERING, SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND ANNUAL MAINTENANCE OF PHASE-VII EXPANSION OF INTELLIGENT NETWORK AND VOMS OF WEST ZONE</td> <td>ONE SYSTEM</td> <td>85,00,00,000/-</td> </tr> </tbody> </table>	Name of the Item/work	Quantity (with Unit)	Estimated cost in Rs	PLANNING,, ENGINEERING, SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND ANNUAL MAINTENANCE OF PHASE-VII EXPANSION OF INTELLIGENT NETWORK AND VOMS OF WEST ZONE	ONE SYSTEM	85,00,00,000/-		
Name of the Item/work	Quantity (with Unit)	Estimated cost in Rs						
PLANNING,, ENGINEERING, SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND ANNUAL MAINTENANCE OF PHASE-VII EXPANSION OF INTELLIGENT NETWORK AND VOMS OF WEST ZONE	ONE SYSTEM	85,00,00,000/-						
Last Date of receipt of tender is 09/06/2015 up to 11:00 hrs. (Tender ID _____) For further details please visit website: www.eprocure.gov.in or Contact AGM (CPC-I) on PH-022-26467761 Fax: 022-26608149.								

**Assistant General Manager (CPC-I),
O/O CGM MHTC Mumbai- 54,
PH-022-26467761 FAX-022-2660 8149.**

SECTION - 2
TENDER INFORMATION

1. Type of tender:

- a) No. of Bid Submission Stages for tender: **Single Stage.**
 - b) No. of electronic Envelopes for submission of Bids: **Two Nos.**
- The bidder shall submit Techno-commercial & Financial bid simultaneously.
 - The bids will be evaluated techno-commercially first and thereafter financial bids of techno-commercially compliant bidders only shall be opened.

2. Period of Validity of Bids / Validity of bid Offer:

- 2.1** Bids shall remain valid for 150 days from the Bid Opening Date prescribed by the Purchaser pursuant to Clause 13 of Section 4 Part A. Any Bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.
- 2.2** In exceptional circumstances, the Purchaser may request the consent of the Bidder for an extension to the Bid Validity Period. The request and the response thereto shall be made in writing. The Bid Security provided under Clause-12 of Section 4 Part A shall also be suitably extended. It is clarified that a Bidder accepting the request for extension of Bid Validity Period will not be permitted to modify its Bid.

3. Documents supporting the Bid :-

The e-Tenders invited under two envelopes system, the first electronic envelope will be named as **Techno-Commercial Envelope** & will contain documents of bidder's satisfying the eligibility / Technical & Commercial conditions and 2nd electronic envelope will be named as **Financial Envelope** containing financial quote. These envelopes shall contain one set of the following documents :-

- a) **Techno-Commercial Envelope** shall contain the documents maintained in the clause 10 of Section-4 Part-A & Section-12.
- b) **Financial envelope** shall contain Bid form- Price Schedule (Section-11 Part-II) BOQ .xls format file duly filled & & digitally signed. ***(Please refer Section-4 Part-B)***
- c) The following documents are required to be submitted offline to **"A.G.M.(CPC-I), 1st Floor, BSNL, Admin Building, Juhu Road, Santacruz (W), Mumbai- 400 054."** on or before the date & time of submission of bids in a sealed envelope
 - i) EMD – Bid security (original copy) as per Clause 5 of Section-1 of bid document.
 - ii) Copy of DD/ Banker's Cheque or Cash Receipt from AO(F&A) as per Clause 2 of Section-1 of bid document for Tender fee which is submitted at the time of collecting the Tender document.
 - iii) Power of Attorney in accordance with clause 15 of Section-4 Part-A and authorization for executing the power of Attorney.
 - iv) Attestation of Specimen Signature POA holder by Company's / Firm's Banker as per clause 15(d).
 - v) Mutual Non-Discloser Agreement (NDA) duly signed by the Bidder which is submitted at the time of collecting the Tender document to **"A.G.M.(CPC-I), 1st Floor, BSNL, Admin Building, Juhu Road, Santacruz (W), Mumbai- 400 054 "**
 - vi) Integrity Pact.
 - vii) Purchased Tender document copy duly signed at the end of each section.

(NOTE: All above offline documents are to be signed by the bidder.)

The envelope shall bear the tender number, name of work and the phrase: **"Do Not Open Before (due date & time of opening of tender)."**

The Bid shall be accompanied by documents as provided at Section 12.

4. Delivery Schedule

The delivery schedule has been provided at Clause 6 of Section 5 Part A.

5. Payment terms

The payment terms have been provided at Clause 10 of Section 5 Part B. All statutory taxes as applicable shall be deducted at source before payment.

SECTION- 3**SCOPE OF WORK****Scope of Work**

- 1.1 The scope of work to be performed is Planning, design, engineering, supply, installation, testing, commissioning and annual maintenance for INTELLIGENT NETWORK and VOMS of GSM/UMTS equipment and the associated infrastructure items for the BSNL Network of West Zone on turnkey basis.
- 1.2 Wherever new elements are being inducted in the network, the upgradation of the existing equipments to integrate with all the network elements being inducted in the network to ensure smooth interworking is the responsibility of the Successful Bidder. The readjustment of geographical boundary between the existing vendor's equipment, if required, and consequent decommissioning is also covered within the scope of this Tender.
- 1.3 While planning the supply and subsequent rollout of the network, the existing network elements of various technologies in the present GSM 2G/3G and upcoming LTE network of BSNL, for which Bidder shall have to confirm the compliance to IOT (Inter Operability Tests) requirement, should be taken into account for seamless inter-working of the Equipment procured against this Tender with the existing equipment.

SECTION-4 PART - A

GENERAL INSTRUCTIONS TO BIDDERS (GIB)

1. DEFINATIONS:-

In this Tender, unless defined elsewhere in the Tender and except where the context otherwise requires, the following words and expressions shall have the following meaning:

- ❖ **"Advance Purchase Order" or "APO"** shall mean the intention of the Purchaser to place the Purchase Order on the Successful Bidder and shall detail the terms and conditions for the same.
- ❖ **"Annual Maintenance Contract" or "AMC"** shall mean the written arrangement between the Purchaser and the Successful Bidder to be executed upon the expiry of the Warranty Period for the maintenance and/ or support of the relevant Equipment substantially in the form set forth in Annexure II of Part B of Section 5.
- ❖ **"Applicable Laws"** shall mean any law, statute, ordinance, rule, regulation, guideline, policy or other pronouncement having the effect of law of any Governmental Authority, as interpreted and administered including any modifications or amendments thereto.
- ❖ **"Bids"** shall mean the response to the Tender to be submitted by the Bidder to BSNL in accordance with the provisions of this Tender on or before the Bid Closing Date.
- ❖ **"Bidder"** shall mean a company incorporated under the Companies Act, 1956, who has complied with the eligibility criteria as stated in Clause 4 of Section 1.
- ❖ **"Bid Closing Date"** shall have the meaning assigned to it in Clause 6 of Section 1.
- ❖ **"Bid Form"** shall mean the form as prescribed in Part 1 of Section 11.
- ❖ **"Bid Opening Date"** shall have the meaning assigned to it in Clause 7 of Section 1.
- ❖ **"Bid Security"** shall mean the security to be provided by the Bidder to BSNL for a sum of Rs. 1,70,00,000 (Rupees One Crores Seventy Lakhs only), to be submitted along with the Bid as per the provisions of Clause 12, Part A, Section 4 and in the format provided at Part A, Section 9.
- ❖ **"Bid Validity Period"** is the duration during which BSNL will convey its intention to procure tendered material by way of issue of Advance Purchase Order.
- ❖ **"Circle"** shall mean a telecom circle within the Territory, as specified by the Department of Telecommunication, Government of India.
- ❖ **"Commissioning"** shall mean successful completion of all prescribed tests and integration of all the network elements including the fulfilment of the entire obligation except those relating to Warranty and AMC.
- ❖ **"Contract"** shall mean the Purchase Order along with supporting documentation to be placed upon the Supplier by the Purchaser after the Performance Security has been received by the Purchaser from the Supplier.
- ❖ **"Contract Price"** shall mean the price payable to the Supplier under the Purchase Order for the performance of its contractual obligations.
- ❖ **"Existing Vendor (s)"** shall mean vendors from whom GSM/UMTS based cellular mobile network equipment was purchased under previous contracts by BSNL and with whom AMC/CAMC contracts are subsisting.
- ❖ **E-Tendering Portal" or "Portal"** shall mean [(<https://www.eprocure.gov.in>)].
- ❖ **"Detailed NIT"** shall mean the Detailed Notice Inviting Tender and more particularly described in Section 1.
- ❖ **"DTR" or "Detailed Technical Specifications"** shall mean the specifications provided in Annexure 1 to Part B of Section 5.
- ❖ **"Documentation"** shall mean the system description documents, general instruction(s), drawings, diagrams and any other written material including electronic material (such as in the form of CD-ROM or other electronic media) and in the English language only, and in

Supplier's standard format that the Supplier has provided/ shall provide to BSNL in respect of the network equipment;

- ❖ **"DOT"** or **"DoT"** shall mean the Department of Telecommunications, Government of India.
- ❖ **"Event of Force Majeure"** shall have the meaning assigned to it in Clause 17.1, Section 5, Part A.
- ❖ **"e-Tendering Process"** shall mean the methodology for conducting the public procurement in a secured manner, more particularly provided in Part B of Section 4.
- ❖ **"General Conditions of Contract"** shall mean the conditions of contract as provided in Section 5, Part A.
- ❖ **"Goods"** or **"Equipment"** shall mean all equipment, machinery and/or other materials which the Supplier is required to supply to the Purchaser under the Contract.
- ❖ **"Governmental Authority"** shall mean any governmental authority, statutory authority, government department, ministry, secretariat, agency, commission, board, tribunal, court or other law, rule or regulation making body/ entity having or purporting to have jurisdiction on behalf of the Republic of India or any other government having or purporting to have jurisdiction over a Party, or any state or other subdivision thereof or any municipality, district or other subdivision thereof including, without limitation, the Chairman, Department of Telecommunications, Ministry of Communications, Government of India and/or any other telecom regulatory authority, including Telecom Engineering Center, having competent jurisdiction; and/or Chairman, Telecom Regulatory Authority of India, and includes any officer empowered by them to perform all or any of the functions of such a governmental authority.
- ❖ **"GSM"** shall mean the Global System for mobile communication and the family of technologies defined by 3GPP in various generations from time to time.
- ❖ **"IN Sub Package"** shall have the meaning assigned to it in Clause 70 of Section 5, Part B.
- ❖ **"Integrity Pact"** shall mean the agreement to be executed between the Bidder and BSNL as per the format provided in Part D, Section 9.
- ❖ **"LSA"** or **"Licensed Service Area"** shall mean the specified territorial telecom circle bounded by the geographical limits within which the BSNL is licensed to operate and offer the service within the Territory.
- ❖ **"Licenses"** shall mean the UASL License and the CMTS License of the Purchaser which has been granted by the DoT.
- ❖ **"NDA"** or **"Non-Disclosure Agreement"** shall mean the Non-Disclosure Agreement as per the format at 9(K) & 9(L) of Section-9 to be provided by BSNL pursuant to the provisions of Clause 2), Section- 1 to be executed between the Bidder and BSNL, prior to the downloading of the Tender Document.
- ❖ **"Parties"** shall refer to the Purchaser and the Supplier collectively and the term Party shall be construed in the singular.
- ❖ **"Performance Security"** shall mean the the security in the form of a bank guarantee to be submitted by the Supplier to the Purchaser for an amount equal to 5% of the value of the Advance Purchase Order within 14 days from the issue of the APO by the Purchaser and as per format provided at 9 (A) of Section 9.
- ❖ **"Purchaser"** or **"BSNL"** shall mean Bharat Sanchar Nigam Limited having registered and corporate office at Bharat Sanchar Bhavan, Harish Chandra Mathur Lane, Janpath Road, New Delhi-110 001.
- ❖ **"Purchase Order"** or **"PO"** shall mean the order placed by the Purchaser on the Supplier signed by the Purchaser including all attachments and appendices thereto and all documents incorporated by reference therein. The Purchase Order shall be deemed as "Contract".

- ❖ **"Price Schedule"** shall mean the schedule of prices provided in Part 2 of Section 11.
- ❖ **"QA"** shall mean the quality assurance tests which are carried out by the Quality Assurance Wing of BSNL as per the prescribed test schedule and tested successfully.
- ❖ **"SACFA"** shall mean the Standing Advisory Committee for Frequency Allocation, Ministry of Communications & Information Technology, Government of India.
- ❖ **"Schedule of Requirements"** or **"SoR"** shall mean the schedule of requirements provided in Section 6.
- ❖ **"Scheduled Delivery Period"** shall mean the period prescribed under the Tender within which the Goods are to be supplied and Services are to be provided by the Supplier to BSNL and as provided in Clause 9 of Section 5, Part B.
- ❖ **"Special Conditions of Contract"** shall mean the conditions of contract provided in Section 5, Part B.
- ❖ **"Services"** shall mean the services which the Supplier is required to provide to the Purchaser under the Contract.
- ❖ **"Successful Bidder"** or **"Supplier"** or **"Vendor"** shall mean the Bidder who has been declared successful by BSNL, has been awarded the work and to whom the APO is issued
- ❖ **"Support", "Capability", "Provision"** etc appearing in the Tender and in the TEC GRs shall mean that the support/capability/ provision etc for the referred functionality shall be provided in the network element(s) together with all the associated hardware, software licenses and all related databases for commercial exploitation by BSNL as part of the requirements under this Tender.
- ❖ **"Taking Over Certificate"** shall have the meaning assigned to it in clause 5.5 of Section 5 Part A.
- ❖ **"Territory"** shall mean the Republic of India.
- ❖ **"Tender Document"** or **"Tender"** shall mean this tender containing the terms and conditions for the planning, engineering, supply, installation, testing, commissioning and annual maintenance of IN of West Zone along with clarifications, addenda, amendments issued by the Purchaser from time to time.
- ❖ **"ToE"** shall mean the Public Online Tender Opening Event as per Cl. 8 of, Section 4 Part B
- ❖ **"Validation"** shall mean the process of testing the Equipment as per the generic requirements in the specifications including detailed requirements for use in BSNL network. Validation is carried out in simulated field environment and includes stability, reliability and environmental tests.
- ❖ **"Warranty Period"** shall have the meaning assigned to it in Clause 61 of Section 5, Part B.
- ❖ **"WPC"** shall mean the Wireless Planning & Co-ordination Wing, Ministry of Communications and Information Technology, Government of India;
- ❖ **"Zone"** shall mean a cluster of LSA(s) in a given area in the Territory.

2 ELIGIBILITY CRITERIA:

Each prospective Bidder shall meet the eligibility criteria as set out in Clause 4 of Section 1 of the Tender.

3. COST OF BIDDING:

The Bidder shall bear all costs associated with the preparation and submission of the Bid. The Purchaser will, in no case, be responsible or liable for these costs, regardless of the conduct or outcome of the e-Tendering process.

4. COMPOSITION OF TENDER DOCUMENT:

- 4.1** The Goods and Services required to be supplied, procedures and contract terms and conditions are prescribed in this Tender Document. The Tender Document is divided into the following sections:

Section No.	Particulars
1	Detailed NIT
2	Tender Information
3	Scope of work
4	Instructions to the Bidder
Part A	General Instructions to the Bidder
Part B	Special instructions to Bidders for E-tendering.
5	Conditions of Contract
Part A	General Commercial Conditions of Contract.
Part B	Special conditions of Contract including Detailed Technical Requirement at Annexure I
6	Schedule of Requirement
7	List of TEC GRs
8	Undertaking & declaration.
9	Proforma (s)
10	Bidders profile.
11	Tender / Bid form and price schedules (BOQ)
12	List of documents to be submitted along with the Bid
13	Draft Agreement with reference to Security Requirements
14	Consisting of Broad details regarding Existing Network Elements, Specifications of Existing OSS under Implementation, Tentative Circle wise Capacity Distribution, EI Pole design, Tentative zone wise quantities to be procured & Clarifications to the queries raised earlier.

- 4.2** The Bidder is expected to examine all instructions, forms, terms and specifications in the Tender Document. Failure to furnish all information required as per the Tender Document or submission of the Bid not substantively responsive Tender Document in every respect will be at Bidder's risk and may result in rejection of the Bid.

5. CLARIFICATION OF TENDER DOCUMENT:

- 5.1** A prospective bidder, requiring any clarification on the Bid Documents shall notify the Purchaser in writing by FAX or by Email of the Purchaser as indicated in the invitation of Bid. The Purchaser shall respond in writing to any request for the clarification of the Bid Documents, which it receives **14 days prior to the date of opening of the Tenders**. Copies of the query (without identifying the source) and clarifications by the Purchaser shall be posted on website www.eprocure.gov.in for information of bidders.

- 5.2** Any clarification issued by BSNL in response to query raised by prospective bidders shall form an integral part of bid documents and shall amount to an amendment of the relevant clauses of the bid documents.

6. AMENDMENT OF TENDER DOCUMENT:

- 6.1** At any time, prior to the Bid Closing Date, the Purchaser may, for any reason, at its sole discretion or in response to a query raised by a prospective Bidder modify the Tender by amendments.

6.2 All such amendments shall be notified through the e-tendering portal www.eprocure.gov.in to all prospective Bidders by means of addenda and these amendments shall form an integral part of the Tender Document.

6.3 In order to provide the prospective Bidders with a reasonable time to take the amendment(s) into account in the preparation of their Bids, the Purchaser may, at its discretion, extend the Bid Closing Date suitably.

6.4 The Bidders are required to keep a watch on the e-tendering portal as indicated in the Detailed NIT with reference to any amendment to the Tender Document or to clarification to the queries raised by the Bidders till a day prior to the Bid Opening Date. BSNL reserves the right to reject the Bid if the Bid is submitted without taking into account the amendments/clarifications to the Tender Document.

7. PREPARATION OF BID AND DOCUMENTS COMPRISING THE BID :

7.1 The Bid prepared by the Bidder shall comprise the following:

- (i) Documentary evidence in accordance with the clause-2 and 10 of this section that the Bidder is eligible to bid and is qualified to perform the Contract if his Bid is accepted.
- (ii) Bid Security furnished in accordance with clause-12.
- (iii) Deviation statement and dimensioning document as per Clause-11.2(c) of Section 4, Part A.
- (iv) Bid Form and Price Schedule completed in accordance with clause-8 and 9 of Section 4, Part A.

7.2 The Bid shall be in English language. All correspondence and documents relating to the Tender Document exchanged between the Bidder and the Purchaser shall also be in English language. However any technical document/ literature etc. printed in a language other than English shall be accompanied by its true English translation duly signed by the Bidder for its correctness. Any document submitted with the Bid but not in English language shall not be treated as part of the Bid. The responsibility for the correctness of the translations if any solely rests on the Bidder and the Purchaser shall not be responsible for any loss/likely loss arising out of error in translation whatsoever. In such cases, for the purpose of interpretation of the Bid, the English translation shall prevail.

8. BID FORM :

The Bidder shall complete the Bid Form and appropriate Price Schedules furnished in the Tender, indicating the Goods to be supplied and the Services to be provided. A detailed description of the Goods and Services, quantity and prices as per Clause-9.

9. BID PRICES :

9.1 The Bidder shall give the total composite price inclusive of all levies and taxes viz. excise duties, custom duty, VAT, sales tax, service tax, packing, forwarding, freight and insurance, etc, *but excluding octroi/entry tax which will be paid extra as per actual, wherever applicable as per the terms of payment specified in Section-5 Part B. .* For Service items, Service Tax shall be payable, as applicable. The basic unit price and all other components of the price need to be individually indicated against the Goods and Services it proposes to supply as per the Price Schedule given in Section 11 Part-II. Prices of incidental services should also be quoted. The offer shall be firm in Indian Rupees. No foreign exchange will be made available by the Purchaser.

9.2 (1) The Basic Unit price (Ex-Factory Price) of the goods/Items, Excise duty , Custom duty, Sales Tax, Freight, Forwarding, Packing, Insurance and any other Levies/ Charges already paid or payable by the supplier shall be quoted separately item wise excluding Octroi/LBT/Entry Tax/Way Bill/Consumption Tax which will be reimbursable on actual basis wherever applicable.

(2) The supplier shall quote as per price schedule given in Section-11 Part-II for tendered item given in schedule of requirement at Section-6. In case of imported item, the amount under column (5) of Price Schedule for imported item i.e. Per unit/CIF Price' would be taken as "Assessable Value" on which Custom Duty is payable. In case Bidders quoting for imported items, they should submit (upload along with BOQ) the additional details in the proforma kept at 9 (J) of Section-9.

9.3 A Bid submitted with an adjustable price quotation for items for which price variation is not applicable shall be treated as non-responsive and rejected.

- 9.4 The prices quoted by the Bidder shall be provided in sufficient detail to enable the Purchaser to arrive at the price of Equipment/system offered.
- 9.5 Discount, if any, offered by the Bidders shall not be considered unless specifically indicated in the Price Schedule. Bidders desiring to offer discount shall therefore modify their offers suitably while quoting and shall quote clearly net price of each item taking all such factors like discount, free supply, etc, into account.
- 9.6 The price approved by BSNL for procurement will be inclusive of levies and taxes, packing, forwarding, freight and insurance as mentioned in Clause-9.1 above subject to other terms and conditions as stipulated in Section-4 Part A, clause-23.2 and Section-5 Part A, clause-11. Break-up in various heads like customs duty, excise duty, sales tax and service tax as required under clauses above shall be mandatory and is required to compute the revised unit prices effected by duty/tax rate changes.
- 9.7 Unloading charge at the consignee end shall be borne by the Bidder and no separate charges are payable for transportation to individual sites for installation. The freight by sea for transportation of equipment / stores from the nearest port in the main land to Andaman and Nicobar islands will be reimbursed to the Bidder at the concessional rates levied by Ministry of Water and Surface Transport on production of proof.

10 DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATIONS :

- 10.1 In order to comply with the eligibility criteria as provided in this Tender Document, the Bidder, shall furnish, as part of his Bid, the following documents or *whichever is required* as per terms and conditions of Tender Document:

PDF FILE NO.	NAME OF DOCUMENT
(1)	DOC.(a) of (1) : Valid MSE Certificate/ Acknowledgement of Entrepreneur's Memorandum from Dist Industries Centers (State Director of Industries) if applicable. In case the ownership of such MSE Entrepreneurs happens to be from SC/ST category, proof in this regard also need to be submitted.
	OR
	Registration Certificate or Acknowledgement of IEM from Secretariat of Industrial Assistance (SIA) Ministry of Industries, Govt. of India , as applicable.
(2)	DOC.(b) of (1) : Undertaking duly signed by front bidder and its technology/ consortium partner stating that both of them shall be liable for due performance of the contract jointly and severally as per proforma given at 9 (H) & 9(I) of Section-9 (Refer Clause 12 of Section-5 Part-B).
	DOC.(c) of (1) : Certificate of incorporation.
	DOC.(a) of (2) : Type Approval Certificate given by Telecom Engineering Centre (TEC) / TSEC issued by the Quality Assurance Circle of BSNL .wherever applicable.
	DOC.(b) of (2) : (a) Inspection Certificate, issued by BSNL (QA) for execution of educational/ Commercial Orders wherever applicable.
(3)	DOC.(c) of (2) : Infrastructure Assessment Advise issued by QA / TEC as the case may be.
	DOC.(d) of (2) : Undertaking by the bidder to set up necessary infrastructure in all Circle as per Clause 4.4 of Section-1.
	DOC.(a) of 3 : Copy of DD/ Banker's Cheque or Cash Receipt from AO(F&A) as per Clause 2 of Section-1 of bid document for Tender fee which is submitted at the time of collecting the Tender document. (Online as well as Offline).
	DOC.(b) of (3) : Bank Guarantee towards Bid Security on Non-Judicial paper with proper Stamp value for the amount mentioned in DNIT or Demand Draft / Banker's Cheque. MSE bidders may refer to clause 12 of Section-4 Part-A for payment of bid security. (Online as well as Offline).
	DOC.(c) of (3) : Power of Attorney as per clause 15 of Section-4 Part-A in the format given at 9(D) of Section-9 and authorization for executing the power of Attorney as per clause 15 & clause 14.4.2 of section4-Part-A. (Online as well as Offline).
	DOC.(d) of (3) : Attestation of Specimen Signature POA holder by Company's / Firm's Banker as per clause 15.1 (d). (Online as well as Offline).
(4)	DOC.(e) of (3) : Integrity Pact.
	DOC.(F) of (3) : Copy of Non-Discloser Agreement (NDA)duly signed by the Bidder which is submitted at the time of collecting the Tender document to "A.G.M.(CPC-I), 1 st Floor, BSNL, Admin Building, Juhu Road, Santacruz (W), Mumbai-400 054 " (Online as well as Offline).
	DOC.(a) of (4) : The Bidders Valid PAN .
	DOC.(b) of (4) : Valid Sales Tax / VAT Registration Certificate or exemption certificate .
(4)	DOC.(c) of (4) : Valid Service Tax Registration Certificate or exemption certificate .
	DOC.(d) of (4) : Documentary proof of applicable rate of ED / CD / Sales Tax / VAT in case offer is submitted with concessional rate. If not applicable then an undertaking for same may be given.

(5)	DOC.(a) of (5): Bid form duly filled as per format at Section 11 .
	DOC.(b) of (5) : Bidder's Profile & Questionnaire duly filled & signed as per Section-10.
	DOC.(c) of (5) : Undertaking & declaration duly filled & signed as per Section-8 (Part-A) & (Part-C) of Section-8 (both).
	DOC.(d) of (5) : Certificate of non working of any relative in BSNL in accordance with clause 34 of Section-4 Part-A as per proforma given at Section-8 Part-B.
(6)	DOC.(a) of (6) : Deviation/Exception Statement clearly bringing out the extent its offer deviates/excludes from the requirements of the Purchaser's technical specifications and commercial terms and conditions as per clause 11.2(c)(ii) of Section-4 Part-A.
	DOC.(b) of (6) : Article or Memorandum of Association or partnership deed or proprietorship deed as the case may be
	DOC.(c) of (6) : List of spares and notification alongwith the details for arriving at the price as per clause 9.1 of Section-5 Part-A.
	DOC.(d) of (6) : Details of collaborator, technical literature, brand, model no. as per clause 23 of Section-5 Part-A.
(7)	DOC.(a) of (7) : Approval from Reserve Bank of India/ SIA in case of foreign collaboration (Refer Clause 12 of Section-5 Part-B).
	DOC.(b) of (7) : Memorandum of Association and Articles of Association of the Bidder;
	DOC.(c) of (7) : Certificate indicating no present partnership/equity stake with any cellular operator in mobile segment (except MTNL) and no intention for the same for 2 years from the Bid Opening Date;
	Doc.(d) of (7) : Security requirements to followed as per clause 26 of Section-5 Part-A.
(8)	DOC.(a) of (8) : The documentary evidence of the conformity of the Goods & Services to the Tender Document may be in the form of literature, drawing, data etc. shall furnish as per clause 11.2(a) & (b) of Section-4 Part-A.
	DOC.(b) of (8) : Certificate duly signed from authorized signatory as per clause 10.7 of Section-4 Part-A.
	DOC.(c) of (8) : Undertaking duly signed from authorised signatory as per clause 10.8 of Section-4 Part-A.
	DOC.(d) of (8) : Undertaking that equipment meets DoT emission norms as per clause 19 of Section-5 Part-B.
(9)	DOC.(a) of (9) : Copy of Quality Manual.
	DOC.(b) of (9) : Sequence of supplies to be indicated as per clause 58 of Section-5 Part-B.
	DOC.(c) of (9) : No. of resource Persons for O & M to be indicated as per clause 59 of Section-5 Part-B.
	DOC.(d) of (9) : AMC Fault control centers, Spares and various responses to the problems to be specified as per clause 62.5 of Section-5 Part-B.
(10)	DOC.(a) of (10) : Undertaking that equipment meets DoT emission norms as per clause 19 of Section-5 Part-B.
	DOC.(b) of (10) : Documentary evidence about the technical & Production Capacity necessary to provide the goods & Services envisaged under the Tender Document / Detailed description of goods with essential technical & performance characteristics as per clause 10.2(ii) & 11.2 (a) & (b) of Section-4 Part-A.
	DOC.(c) of (10) : Certificate stating references of experience in . IN Equipment as per clause 4.2 of Section-1
	DOC.(d) of (10) : Undertaking by bidders for the network elements to support both 2G, 3G & LTE Technology as per clause 4.3 of Section-1.
(11)	DOC.(a) of (11) : Audited Financial Reports of the Bidder for Financial Years (i) 2011-2012 and (ii) 2012-2013. This is to be substantiated by the Audited Profit and Loss Account as per clause 4.5 of Section-1.
	DOC.(b) of 11 : Latest Annual report of the bidder as per clause 10.2(i) of Section-4 Part-A
	DOC.(c) of 11 : Certificate from the bankers of the Bidder that it has the financial capability to provide the goods and services as envisaged under the Tender Document as per clause 10.2(i) of Section-4 Part-A.
(12)	DOC.(a) of 12 : Details of Software support Center as per clause 54.6 of Section-5 Part-B
	DOC.(b) of 12: At Test Schedule as per clause 56.2 of Section-5 Part-B
	DOC.(c) of 12 : Undertaking regarding Fraudulent representation during the bidding as per clause 53.2 of Section-5 Part-B.
(13)	DOC.(a) of 13 : Unpriced BOQ / BOM as per clause 28 of Section-5 Part-B

10.2 The Bidder shall furnish the following documents to establish his financial and technical capability:

- (i) The Bidder shall furnish latest Annual Report and a certificate from its bankers as evidence that he has financial capability to perform the Contract.
- (ii) The Bidder shall furnish documentary evidence about technical and production capability necessary to perform the Contract.

10.3 In order to enable the Purchaser to assess the provenness of the system offered, the Bidder shall provide documentary evidence regarding the system being offered by him.

10.4 If any type approved product exists, the same shall be offered.

10.5 In case goods offered have already been type approved/validated by the Purchaser, documentary evidence to this effect shall be submitted by the Bidder.

- 10.6 In case the offered product has not been type approved, the Supplier shall submit a product sample for evaluation. The sample would be evaluated for its ability to meet the technical specifications, manufacturability, reliability, testability, ease of installation, maintainability etc. Necessary documents to substantiate these attributes will have to be submitted at the time of application for approval by the supplier for obtaining type approval. All the test equipments for validation shall be provided by the Supplier without any financial liability to the Purchaser.
- 10.7 A signed undertaking from authorised signatory of the Bidder that shall certify that all components/parts/assembly/software used in the Desktops and Servers like Hard disk, Monitors, Memory etc. shall be original, new components/parts/assembly/software and that no refurbished/duplicate/second hand components/parts/assembly/ software are being used or shall be used.
- 10.8 For supply of any software i.e. operating system or any applications software the Bidder shall submit a Certificate of Authenticity (COA), signed by authorised signatory stating that all software supplied are authentic and legal copy is/are being supplied.

11 Documents Establishing Good's Conformity to Tender Documents

- 11.1 Pursuant to clause-7, the Bidder shall furnish, as part of his Bid, documents establishing the conformity of his Bid to the Tender of all Goods and Services which he proposes to supply under the Contract.
- 11.2 The documentary evidences of the conformity of the Goods and Services to the Tender, may be, in the form of literature, drawings, data etc. and the Bidder shall furnish :
- (a) Detailed description of goods with essential technical and performance characteristics;
 - (b) A list, giving full particulars including available sources and current prices of all spare parts, special tools, etc., necessary for the proper and continuous functioning of the goods for a period of eight years following commencement of use of the goods by the Purchaser.
 - (c) The compliance of techno-commercial eligibility of the terms, conditions and technical specification is sought through the following procedure:
 - (i) The Bidder shall demonstrate substantive responsiveness to the Purchaser's technical specifications and commercial terms and conditions through a process of establishing non-material deviation/exceptions, equipment dimensioning and solution and product documentation. The Bidder shall furnish an undertaking to the effect that it complies fully with requirements of the all the clauses, including those of the sub-clauses, if any, of the technical specifications and commercial terms and conditions of the Tender except those specifically listed in the deviation/exception statement.
 - (ii) The Bidder shall submit a deviation/exception statement clearly bringing out the extent its offer deviates/excludes from the requirements of the Purchaser's technical specifications and commercial terms and conditions. The deviations/exceptions shall be classified under three categories. A list of such clauses detailing the extent of deviation/exception shall be submitted as under:
 - (a) List-1: Clauses that are partially complied together with the extent of deviation. Timelines, if any, for full compliance may also be indicated.
 - (b) List-2: Clauses that are not complied presently, but are in the roadmap/under development and are proposed to be complied subsequently. Commitment by way of clear timelines shall be specified.
 - (c) List-3: Clauses that are not complied.
 - (iii) The deviations/exceptions indicated in the above lists shall be dealt as per the terms and conditions of the Tender.
 - (iv) The Bidder shall examine each and every clause including the sub-clauses, if any, of the technical specification and commercial terms and conditions of the Tender and shall evaluate its offer before reflecting the extent of non-compliance in the deviation/exception statement. The Bidder is required to comply with the technical specification, commercial terms and conditions of the Tender Document with out any material deviation/exception.

- (v) The Bidder shall also furnish a statement containing the clauses of the specifications against which specific value(s) for certain parameter(s) are to be furnished indicating the actual value(s) of the parameter(s).
- (vi) The Bidders shall furnish a detailed design and dimensioning document together with product documentation to enable the Purchaser to verify the solution and dimensioning of the various equipments as per DTR.

11.3 For the purpose of compliance to be furnished pursuant to the clause 11.2(c) above, the bidder shall note that the standards for the workmanship, material and equipment and reference to the brand names or catalogue number, designated by the Purchaser in its technical specifications are intended to be descriptive only and not restrictive.

12 Bid Security

12.1 i) The bidder shall furnish (*as per proforma given at Section-9(A)*) as part of its bid, a bid security as mentioned in Section-1 (DNIT).

ii) Pursuant to clause-7, the Bidder shall furnish, as part of its Bid, Bid Security. The Bid Security is required to protect the Purchaser against the risk from the Bidder's conduct, which may warrant the forfeiture of Bid Security pursuant to Clause 12.6.

12.2 i) The Bid Security shall be in the form of: The bid security shall be in the form of a Bank Guarantee issued by a Nationalised/scheduled Bank in favour of the Purchaser, **valid for a period of 180 days from the date of tender opening**. However, in cases where bidder is not in a position to submit the BG for whatever reason, Crossed Demand Draft / Pay Order drawn in favour of "**AO(F&A), BSNL, MH Telecom Circle, Mumbai – 400 054**" submitted shall also be acceptable, but no interest shall be payable.

ii) The MSE bidders are exempted from payment of bid security:

- a) A proof regarding valid registration with body specified by Ministry of Micro, Small & Medium Enterprise for the tendered items will have to be attached along with the bid.
- b) The enlistment certificate issued by MSME should be valid on the date of opening of tender.
- c) MSE unit is required to submit its monthly delivery schedule.
- d) If a vender registered with body specified by Ministry of Micro, Small & Medium Enterprise claiming concessional benefits is awarded work by BSNL and subsequently fails to obey any of the contractual obligations, he will be debarred from any further work/ contract by BSNL for one year from the date of issue of such order.
- e) Acknowledgement of Entrepreneur's Memorandum from Dist Industries Centers (State Director of Industries) shall be acceptable.

12.3 A bid not secured in accordance with Para 12.1 and / or 12.2 shall be rejected by the Purchaser being non-responsive at the bid opening stage and archived unopened on e-tender portal for e-tenders.

12.4 The Bid Security of the unsuccessful Bidders will be discharged/returned as promptly as possible, but not later than 30 days after the expiry of Bid Validity Period prescribed by the purchaser pursuant to clause 13 below.

12.5 The Bid Security of the Successful Bidder will be discharged upon the Bidder's acceptance of the Advance Purchase Order unconditionally in accordance with Clause-27 and furnishing the Performance Security.

12.6 THE BID SECURITY MAY BE FORFEITED:-

- a) If the bidder withdraws or amends its bid or impairs or derogates from the bid in any respect during the period of bid validity specified by the bidder in the bid form or extended subsequently; or
- b) If the bidder does not accept the APO/ AWO issued within bid validity period and/ or does not submit PBG & sign the contract/ agreement in accordance with clause 28.

Note: - The bidder shall mean individual company/ firm or the front bidder and its technology/ consortium partner, as applicable.

12.7 The bidder has to submit the bid security **as per DNIT** in Section-1.

13 BID VALIDITY PERIOD:

13.1 Bid shall remain valid for period specified in clause 2 of Section-2 (Tender Information). **A BID VALID FOR A SHORTER PERIOD SHALL BE REJECTED BY THE PURCHASER BEING NON-RESPONSIVE.**

Note: In case, the date of opening of the Tender is postponed due to any reason and the bidder has already prepared BG towards Bid Security, in such cases, BG validity as per earlier Tender opening date would be acceptable.

13.2 In exceptional circumstances, the Purchaser may request the consent of the Bidder for an extension to the Bid Validity Period. The request and the response thereto shall be made in writing. Where the extension request is accepted then the Bid Security provided under Clause-12 shall also be suitably extended. The Bidder may refuse the request without forfeiting its Bid Security. A Bidder accepting the request and granting extension will not be permitted to modify its Bid.

13.3 Placement of A.P.O. (Advance Purchase Order) within bid validity period shall constitute the intention of Purchaser to procure the tendered material. Regular P.O. (Purchase Order) will be issued after acceptance of A.P.O. by bidder along with submission of Performance Bank Guarantee. Purchase Order (P.O.) need not be issued within bid validity period.

14 FORMAT AND SIGNING OF BID :

14.2 The Bidder shall submit his Bid, online, complying all eligibility conditions, other terms and conditions of Tender to be read along with the clarifications and amendments issued in this respect. All the documents must be authenticated using Digital Signature by the authorized person. The letter of authorization shall be indicated by written power-of-attorney accompanying the bid. **(Ref: Section-4 Part-B for further instructions.)**

14.3 The Bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder in which case such corrected documents or revisions shall be authenticated by the authorised signatory of the Bidder using digital signature.

14.4 The Bidder shall submit its Bid electronically along with some submissions in physical form on or before the Bid Closing Date as specified below:

14.4.1 The electronic Bid shall be submitted online together in two envelopes viz. :

(i) Electronic Envelope 1: Technical and Commercial Bid along with the Bid security.

(ii) Electronic Envelope 2: Financial Bid.

14.4.2 Physical form(Offline submission):

The Bidder is requested to submit the documents as noted in Clause-3(c) of Section-2 offline to **"The A.G.M.(CPC-I), O/o the CGM, BSNL, MH Telecom Circle, Mumbai-400054"** on or before the Tender Closing Date in a Sealed Envelope.

(NOTE: All offline documents are to be signed by the bidder.)

The envelope shall bear the tender number, name of work and the phrase: **"Do Not Open Before (due date & time of opening of tender)."**

It is clarified that apart from submitting the aforementioned documents physically, the Bidder shall upload the scanned copy of all documents during Online Bid-Submission except Sl. No.(vii) of Clause-3(c) of Section-2 (Tender document).

15 POWER OF ATTORNEY

- 15.1 (a)** The power of Attorney should be submitted and executed on the non-judicial stamp paper (as per format at 9(G) of Section-9 of appropriate value as prevailing in the concerned states(s) and the same be **EITHER** attested by a Notary public **OR** registered before Sub-registrar of the state(s) concerned.
- (b)** The power of Attorney be executed by a person who has been authorized by the Board of Directors of the bidder in this regard, on behalf of the Company/ institution/ Body corporate. Copy of Board resolution / authorization shall also be submitted along with **POA**.
- (c)** In case of the bidder being a firm, the said Power of Attorney should be executed by all the partner(s) in favor of the said Attorney.
- (d)** Attestation of the specimen signatures of such authorized signatory of the bid by the Company's/ firm's bankers shall be furnished. Name, designation, Phone number, mobile number, email address and postal address of the authorized signatory shall be provided.
- (e)** In case the representative of bidder company, who uploads the documents on e-tender portal using his Digital Signature Certificate (DSC), is different from the authorized signatory for the bid (Power of Attorney holder) then the representative who uploads the documents on e-tender portal using DSC issued in his name, shall also be made as one of the Power of Attorney holder by the bidder Company, in addition to the authorized signatory for the bid.
- 15.2** In case of partnership firm considered for PO, prior approval in writing shall be obtained from the PO placing authority before making any changes in the constitution of the firm or transferring the business to another person or company.

16 SEALING AND MARKING OF BIDS:-

- 16.1** The bid may be called under :-
Single Stage Bidding & Two Electronic Envelope System.
The details of sealing & marking of bids in each case is given below:
The bidder shall submit his bid in two envelopes
- The First electronic envelope will be named as **Techno-commercial bid** . This envelopes will contain documents of bidders satisfying the eligibility / Technical & commercial conditions as per clause 2 & 10 with Bid security as per Clause 12 above.
 - The second electronic envelope will be named as **Financial bid** containing Price Schedules as per Section-11. (Ref: Section-4 Part-B)
- 16.2 (a)** The envelope, containing Offline documents mentioned in clause 4.2 of Section-4 Part-B shall be sealed properly by the bidder and addressed to:
- The Asstt. General Manager (CPC – I)***
O/o the Chief General Manager, Maharashtra Telecom Circle,
1st Floor, D wing, BSNL Admin Building, Juhu Road,
Santacruz (W), Mumbai-400054.
Fax: 022-26608149 E-mail: agmmht_cpc1@bsnl.co.in.
- (b)** The envelope shall bear the name of the tender, the tender Number, and the words '**DO NOT OPEN BEFORE** ' (due date & time).
- (c)** The envelope shall indicate the name and complete postal address of the bidder to enable the purchaser to returned the envelope unopened in case it is declared "LATE".
- (d)** The envelope containing all above offline documents shall be sealed properly by the bidder and shall be delivered on or before due Date & Time of submission of bid as specified in DNIT(Section-1 Part-A clause 1) to above said address mentioned in clause 16.2(a).
- (e)** The envelope should be deposited in the tender box available at the **O/o AGM(CPC-I), O/o the Chief General Manager, Maharashtra Telecom Circle, 1st Floor, D wing, BSNL Admin Building, Juhu Road, Santacruz (W), Mumbai-400054** or sent by Registered Post/Speed Post or delivered in person on the above mentioned address also mentioned in clause 16.2(a) above. The responsibility for ensuring that outstation envelope are delivered

in time shall rest with the bidder. The Purchaser shall not be responsible if the bids are delivered elsewhere.

(f) **Pre-bid Vendors conference** shall be held as per Clause-14 of Section-1.

(g) Venue of Tender Opening: The e-Tender will be opened online in the chamber of **AGM (CPC – I), O/o the Chief General Manager, Maharashtra Telecom Circle, 1st Floor, D wing, BSNL Admin Building, Juhu Road, Santacruz (W), Mumbai-400054** on date & time specified in NIT.

If due to administrative reasons, the venue of Bid opening is changed, it will be displayed prominently at venue and notice board on **1st Floor, D wing, BSNL Admin Building, Juhu Road, Santacruz (W), Mumbai-400054** and also on web site www.eprocure.gov.in

- 16.3 **If offline documents are not delivered up to date & time of submission of bid as specified in DNIT, the bid shall be rejected.**

17.0 SUBMISSION OF BIDS :

- 17.1. Bids must be submitted online on e-tender portal www.eprocure.gov.in and offline (Bid Cost, EMD, POA) by the bidders at the address specified under clause 16.2 not later than given date & time of submission as specified in DNIT Section-1 .
- 17.2 The Purchaser may, at its discretion, extend this deadline for the submission of bids by amending the Bid Documents in accordance with clause 6 of this section in which case all rights and obligations of the purchaser and bidders previously subject to the deadline will thereafter be subjected to the extended deadline.
- 17.3 The bidder shall submit his bid offer against a set of bid documents purchased by him for all or some of the systems/ equipment as per requirement of the Bid Documents. He may include alternate offer, if permissible as per the bid. However, not more than one independent and complete offer shall be permitted from the bidder.

18. LATE RECEIPT OF BIDS :

No bid shall be accepted online either by E-Tender Portal or offline document by the purchaser after the specified deadline for submission of bids prescribed by the purchaser pursuant to clause 17.

19. MODIFICATION AND WITHDRAWAL OF BIDS:-

- 19.1 The Bidder may modify, revise or withdraw his Bid after submission but prior to the Bid Closing Date.
- 19.2 The Bidder's modification, revision or withdrawal to the Bid shall have to be made online and digitally authenticated as per Clause 14.
- 19.3 Subject to Clause 22, no Bid shall be allowed for modification subsequent to the deadline for submission of Bids.

20. OPENING OF BIDS BY PURCHASER :

- 20.1 The Purchaser shall open Bids online in the presence of the authorized representatives of bidders **physically present** who chose to attend the TOE at time and date specified in DNIT on due date specified in clause 1, of column 7 of table of Section-1 (Detailed NIT). The Bidder's representatives, who are present, shall sign in an attendance register. Authority letter to this effect shall be submitted by the authorised representatives of the Bidders before they are allowed to participate in the TOE (The Format is given in section 9).
- 20.2 On the Bid Opening Date, the Purchaser shall first open the Offline received Envelope containing Bid Security. Upon being satisfied with the receipt of the Bid Security and Power of Attorney, then the online unpriced technical and commercial Bids shall be opened on satisfying the receipt of the requisite Bid Security. The second envelope- Financial part containing financial Bids of the Bidders, shall be opened only for those Bidders whose Bids are technically and commercially responsive., The Financial Bid shall be opened at a later date and time to be informed by the Purchaser online on e-tender portal www.eprocure.gov.in

- 20.3 Only one representative of any bidder shall be authorized and permitted to attend the bid opening.
- 20.4 For sequence & procedural details of opening of Bid, please refer Clause 6 of Section-4 Part-B.
- 20.5 The date fixed for opening of bids, if subsequently declared holiday by the BSNL/ submission of Bid is not possible due to unavoidable circumstances, the bid will be opened on the following working day, time and venue remaining unaltered unless the revised date of opening of bids is notified before opening of tender.
- 20.6 The Bids that are proposed for rejection outright during the TOE by the bid opening team shall be dealt with in the following manner:
- i) Though the Bidder is given an opportunity to explain its position to the bid opening team before the team decides to reject outright its Bid for non-compliance of any of the provisions mentioned in clause 12 and 31 of Section-4 Part A, if the person(s) representing the Bidder are not satisfied with the decision of the bid opening team, he/they can submit a representation to bid opening team immediately but in no case after the Bid Closing Date with full justification against rejection quoting specifically the violation of tender conditions, if any pointed out by the bid opening team.
 - ii) The bid opening team will not return the bids submitted by the Bidders on the same day of Bid Opening Date even if it is liable for rejection and will preserve the Bids as unopened bids on the Portal.
 - iii) The in-charge of the bid opening team shall mention the number of Bids with name of company found unsuitable for further processing on the Bid Opening Date and number of representations received in bid opening minutes. If bid opening team is satisfied with the explanation of the Bidder/company mentioned in their representation and feel that there is prima-facie case for consideration, the in-charge of the bid opening team will submit the case for review to competent authority as early as possible preferably on next working day and decision to this effect should be communicated to the bidder company with in a week positively. Bids found liable for rejection and kept preserved on the Bid Opening Date will be returned to the Bidders after issue of P.O. against the Tender.

21 CLARIFICATION OF BIDS :

- 21.1 To assist in the examination, evaluation and comparison of Bids, the Purchaser may, at its discretion ask the Bidder for the clarification of its Bid. The request for the clarification and the response shall be through Portal. However, no post bid clarification at the initiative of the Bidder shall be entertained.
- 21.2 If any of the documents, required to be submitted along with the technical bid is found wanting, the offer is liable to be rejected at that stage. However the purchaser at its discretion may call for any clarification regarding the bid document within a stipulated time period. In case of non compliance to such queries, the bid will be out rightly rejected without entertaining further correspondence in this regard.

22.1 TECHNICAL AND COMMERCIAL EVALUATION :

- 22.2 In the first stage of evaluation, the Purchaser shall evaluate the Bids to determine whether they are complete, whether required Bid Security has been furnished, whether the documents have been properly signed including digital signatures and whether the Bids are generally in order.
- 22.3 The Purchaser shall determine the substantive responsiveness of each of the technical and commercial Bids to the requirements of the Tender Document. A substantively responsive Bid is one which conforms to all technical specifications and commercial terms and conditions of the Tender Document without material deviation/exceptions. The Purchaser's determination of bid's responsiveness shall be based on the contents of the Bid itself without recourse to extrinsic evidence.

- 22.4 During the evaluation, BSNL at its discretion may call upon the Bidder to give a techno-commercial presentation of its offer, to explain the products offered, its capability to undertake the project and to respond to any question from BSNL.
- 22.5 A Bid, determined as substantively non-responsive will be rejected by the Purchaser and shall not subsequent to the bid opening be made responsive by the Bidder by correction of the non-conformity.
- 22.6 The Purchaser may waive any minor infirmity or non-conformity or irregularity in a Bid which doesn't constitute a material deviation, provided such waiver doesn't prejudice the establishment of techno-commercial parity among the Bids.
- 22.7 The financial Bids of only those technical and commercial Bids that are determined as substantively responsive shall be opened. The financial Bids of those technical and commercial Bids that are determined as substantively non-responsive shall be returned to the respective Bidders unopened.

23 FINANCIAL EVALUATION OF SUBSTANTIVELY RESPONSIVE BIDS AND COMPARISON.

- 23.1 The Purchaser shall evaluate and compare the financial Bids in detail of those technical and commercial Bids previously determined to be substantively responsive pursuant to clause-22.
- 23.2 The evaluation and comparison of responsive Bids shall be done on the basis of net cost to BSNL on the prices of the Goods offered inclusive of duties and taxes (but excluding CENVAT-able duties & taxes), sales tax, packing, forwarding, freight and insurance charges etc. as indicated in Col. 15 of the price schedule in the Section-11, Part-II of the Tender Document. As stipulated in Clause- 9.1, octroi/LBT/entry taxes are not to be included in the composite price and hence the same will not be considered for the purpose of evaluation and comparison of responsive Bids. However, octroi/LBT/entry taxes will be paid extra, as per actual wherever applicable on production of proof of payment / relevant invoices / documents.
- 23.3** Duties and taxes for which the firm has to furnish CENVAT-able challans / Invoices will be indicated separately in the PO/APO.
- 23.4 Supplier should furnish the correct excise duty/customs duty tariff head in the price schedule. If the credit for the duties and taxes under CENVAT Credit Rules, 2004 is found to be not admissible at any stage subsequently owing to wrong furnishing of tariff head, then the Suppliers shall be liable to refund such non-admissible amount, if already paid, along with penalty, if any, charged by the concerned authority.
- 23.5 In case the duties and taxes which are non CENVAT-able as per the quotes indicated in the price schedule by the Bidders and subsequently at any stage it is found that credit for such duties and taxes is admissible as per CENVAT Credit Rules, 2004, then the Supplier shall be liable to refund the amount equivalent to such duties and taxes, if any, already paid to them. However, the Purchaser may allow the Supplier to submit necessary documents in this regard which may enable the Purchaser to avail the CENVAT credit provided such credit is still available for the amount so paid as per CENVAT Credit Rules 2004.
- 23.6 The Purchaser reserves the right to ask the Bidders to submit documentary proof confirming the correct tariff head from the excise duty/customs authorities where the tariff head furnished against the particular tendered item by different Bidders differ from each other or the same is found apparently not furnished in accordance with E.D./Customs Tariff notifications.
- 23.7 If the Supplier fails to furnish necessary supporting documents i.e. Excise/Customs invoices etc. in respect of the duties/taxes which are cenvatable, the amount pertaining to such duties/taxes will be deducted from the payment due to the Supplier.
- 23.8 The responsibility for furnishing the correct taxes and duties along with the correct tariff heads shall rest with the Bidder.

- 23.9 The Purchaser shall evaluate the financial Bids to determine whether they are complete, whether any computational errors have been made, whether the duties and taxes have been applied as per actuals, whether the documents have been properly signed and whether the Bids are generally in order. The Bids are then evaluated in the following manner:
- (i) In the first stage, the arithmetic and the tax/duty related errors shall be rectified.
 - (ii) In the second stage, the Bids shall be loaded to reach the required level of techno-commercial compliance.
 - (iii) In the third stage, the Bids shall be evaluated as per the criteria set in clause-38 of section-5 Part B read with the related clarifications.
 - (iv) Arithmetical errors shall be rectified on the following basis. If there is a discrepancy between the unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected by the Purchaser. If there is a discrepancy between words and figures, the amount in words shall prevail. If the Supplier does not accept the correction of the errors, its Bid shall be rejected.
 - (v) In case items with same nomenclature for the same capacity is quoted with different price in the Price Schedule, the lowest among the items with same nomenclature shall be paid for all such items.
- 23.10 (i)** Vendor shall furnish the name & Quantity of any other item required for implementation of the work in Column no. 17 & 18 respectively for Sl. No. 24 to 33 of price schedule at Section-11 Part-II. If number of such items are more than 10, then vendor shall club the rates and taxes for different items in the respective columns and adjust in between Sl. No. 24 to 33 of price schedule at Section-11 Part-II, however names of different items may be mentioned in Column No.17 for such clubbed items.
- (ii)** Since the evaluation matrix specified above could not be implemented in the software of e-Tender. Vendors have to quote the unit rate at Column No. 5 of price schedule at Section-11 Part-II, the evaluation shall be done manually by TEC after Financial Bid opening as per above mentioned Clause, therefore kindly ignore the Ranking L1, L2, etc. given by the e-Tender software.

24 CONTACTING THE PURCHASER :

- 24.1 Subject to Clause-21, no Bidder shall try to influence the Purchaser on any matter relating to its Bid, from the Bid Opening Date till the time the Contract is awarded.
- 24.2 Any effort by a Bidder to modify his Bid or influence the Purchaser in the Purchaser's bid evaluation, bid comparison or Contract award decision shall result in the rejection of the Bid.

25. PLACEMENT OF ORDER :

- 1) The Purchaser shall consider placement of orders for commercial supplies and services only on those eligible Bidders whose offers have been found technically, commercially and financially acceptable and whose goods have been type approved/validated or to be validated by the Purchaser. The Purchaser reserves the right to counter offer price(s) against price(s) quoted by any Bidder.
- 2) The ordering price of any bidder shall not exceed the lowest evaluated package price. However, at a later stage if there is any increase in Govt. duties / taxes within Scheduled Delivery Date (SDD), the unit prices with applicable revised duties / taxes will be paid to suppliers irrespective of their ranking viz., L1/ L2/ L3/... etc. keeping other levies & charges unchanged.

26. PURCHASER'S RIGHT TO VARY QUANTITIES :

- a) BSNL reserves the right to increase or decrease up to 25% of the quantity of goods and services specified in the schedule of requirements without any change in the unit price or other terms and conditions at the time of award of contract.
- b) BSNL also reserves the right for placement of additional order or up to 50% of the additional quantities of goods and services contained in the running tender/ contract within a period of twelve months from the date of acceptance of first APO by L1 bidder

at the same rate or a rate negotiated (downwardly) with the existing vendors considering the reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc and supplies to be obtained within delivery period scheduled afresh.

c) In exceptional situation where the requirement is of an emergent nature and it is necessary to ensure continued supplies from the existing vendors, the purchaser reserves the right to place repeat order up to 100% of the quantities of goods and services contained in the running tender /contract within a period of twelve months from the date of acceptance of first APO by L1 bidder at the same rate or a rate negotiated (downwardly) with the existing vendors considering the reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc.

27. ISSUE OF ADVANCE PURCHASE ORDER :

- 1) The issue of Advance Purchase Order shall constitute the intention of the Purchaser to enter into Contract with the Successful Bidder.
- 2) The Successful Bidder shall within 14 days of issue of the Advance Purchase Order, give his unconditional acceptance along with Performance Security in conformity with section-9 of the Tender . The Successful Bidder shall ensure that Performance Security in the form of performance bank guarantee (PBG) is sent to the Purchaser directly by the issuing bank under Registered Post (A.D). In exceptional circumstances where the PBG is submitted by the Successful Bidder to the Purchaser, the Successful Bidder shall ensure that an unstamped duplicate copy of the PBG is send immediately by the bank direct to the Purchaser by Registered Post (A.D).
- 3) In case of non-acceptance of APO by L1 bidder, tender shall be cancelled. Action will be taken to forfeit the EMD of bidder as per clause 12.6 of Section-4 Part-A.

28. SIGNING OF CONTRACT :

- 1) The issue of Purchase Order shall constitute the award of Contract on the Successful Bidder.
- 2) Upon the Successful Bidder furnishing Performance Security in pursuance to Clause-27, the Purchaser shall discharge the Bid Security in pursuance to Clause-12.

29. ANNULMENT OF AWARD :

Failure of the Successful Bidder to comply with the requirement of Clause-28 shall constitute sufficient ground for the annulment of the award and the forfeiture of the Performance Security in which event the Purchaser may make the award to any other Bidder at the discretion of the Purchaser or call for new Bids.

30. QUALITY ASSURANCE REQUIREMENTS :

- 30.1 The Supplier shall have Quality Management System supported and evidenced by the following:
- a) A quality policy.
 - b) A management representative with authority and responsibility for fulfilling QA requirements and for interfacing with Purchaser in the matters of Quality.
 - c) Procedure for controlling design/production engineering, materials, choice of components/vendors, manufacturing and packaging process for supplying quality products.
 - d) System of inward good inspection.
 - e) System to calibrate and maintain required measuring and test equipment.
 - f) System for tracing the cause for non-conformance (traceability) and segregating product which don't conform to specifications.
 - g) Configuration management and change-control mechanism.
 - h) A quality plan for the product.
 - i) Periodical internal quality audits.
 - j) A 'Quality Manual' detailing the above or infrastructure assessment certificate and Type Approval Certificate issued by "TEC" shall be furnished.

31. COMPLIANCE WITH CONDITIONS :

31.1 While all the conditions specified in the Tender are critical and are to be complied, special attention of Bidder is invited to the following clauses of the Tender , non-compliance of any one of which shall result in out right rejection of the Bid:

- a) Clauses 12.1, 12.2 and 13.1 of Section-4 Part A: The Bids will be rejected at opening stage if Bid Security is not submitted as per Clauses-12.1 & 12.2 and bid validity is less than the period prescribed in Clause 13.1 mentioned above.
 - b) Clause 2 and 10 of Section-4 Part A : If the eligibility condition as per Clause-2 of Section-4 Part A is not met and documents prescribed to establish the eligibility as per Clause-10 of section-4 Part A are not enclosed, the Bids will be rejected without further evaluation.
 - c) Clause 11.2(c) of Section-4 Part A: If the compliance, deviation/ exception statement as prescribed are not given, the Bid will be rejected at the stage of techno-commercial evaluation. In case of no deviations, a statement to that effect must be given.
 - d) Section-11 Part-II Price Schedule: Prices are not filled in as prescribed in Price Schedule.
 - e) Section -4 Part A clause 9.5 on discount which is reproduced below:
 "Discount, if any, offered by the Bidder shall not be considered unless specifically indicated in the Price Schedule. Bidders desiring to offer discount shall therefore modify their offer suitably while quoting and shall quote clearly net price taking all such factors like Discount, free supply etc. into account".
 - f) Section-5 Part B clause28: Unpriced detailed bill of material with card level details as specified in clause 28 section – 5 Part B in the techno-commercial Bid .
- 31.2 Before outright rejection of the Bid by Bid-opening team for non-compliance of any of the provisions mentioned in clause 31.1` (a), 31.1(b) of Section-4 Part A, the bidder company is given opportunity to explain their position, however if the person representing the company is not satisfied with the decision of the Bid opening team, he/they can submit the representation to the Bid opening team immediately but in no case after closing of the tender process with full justification quoting specifically the violation of tender condition if any.
- 31.3 Bid opening team will not return the bids submitted by the bidders on the date of tender opening even if it is liable for rejection and will preserve the bids in sealed cover as submitted by taking the signatures of some of the desirous representatives of the participating bidder/companies present on the occasion.
- 31.4 The in-charge of Bid opening team will mention the number of bids with the name of the company found unsuitable for further processing on the date of tender opening and number of representations received in Bid opening Minutes and if Bid opening team is satisfied with the argument of the bidder/company mentioned in their representation and feel that there is prima-facie fact for consideration, the in-charge of the bid opening team will submit the case for review to Officer competent to approve the tender as early as possible preferably on next working day and decision to this effect should be communicated to the bidder company within a week positively. Bids found liable for rejection and kept preserved on the date of tender opening will be returned to the bidders after issue of P.O. against the instant tender.
- 31.5 If the reviewing officer finds it fit to open the bid of the petitioner, this should be done by giving three (working) days notice to all the participating bidders to give opportunity to participants desirous to be present on the occasion.

32. CLAUSE DELETED.**33. CLAUSE DELETED****34. NEAR-RELATIONSHIP CERTIFICATE :**

- 34.1. The bidder should give a certificate that none of his/ her near relative, as defined below, is working in the units where he is going to apply for the tender. In case of proprietorship firm certificate will be given by the proprietor. For partnership firm certificate will be given by all the partners and in case of limited company by all the Directors of the company

excluding Government of India/ Financial institution nominees and independent non-Official part time Directors appointed by Govt. of India or the Governor of the state and full time Directors of PSUs both state and central. Due to any breach of these conditions by the company or firm or any other person the tender will be cancelled and Bid Security will be forfeited at any stage whenever it is noticed and BSNL will not pay any damage to the company or firm or the concerned person.

- 34.2. The Company or firm or the person will also be debarred for further participation in the concerned unit.
- 34.3. The near relatives for this purpose are defined as:-
- (a) Members of a Hindu undivided family.
 - (b) They are husband and wife.
 - (c) The one is related to the other in the manner as father, mother, son(s) & Son's wife (daughter in law), Daughter(s) and daughter's husband (son in law), brother(s) and brother's wife, sister(s) and sister's husband (brother in law).
- 34.4. The format of the certificate is given in Section-9.

35. SECURITY REQUIREMENTS :

The Successful Bidder shall comply with the Security Requirements as prescribed in Clause 26 of Section 5 Part A.

36. VERIFICATION OF DOCUMENTS AND CERTIFICATES :

- a. The Bidder will verify the genuineness and correctness of all documents and certificates, including experience/performance certificates, issued either by the bidder or any other firm / associate before submitting them in the Bid. The onus of proving genuineness of the submitted documents would rest with the Bidder.
- b. As per requirement of the Tender , if any document / paper / certificate submitted by the prospective Bidder is found to be false / fabricated / tempered / manipulated at any stage during bid evaluation or award of Contract, then the Bid Security of the Bidder would be forfeited and the Bidder would be disqualified from participating in the Tender. In case Contract has already awarded to the Successful Bidder, then the Performance Security shall be forfeited and the Contract would be rescind / annulled and BSNL would be at liberty to procure the ordered Goods and Services from any other source at the risk and cost of the defaulting Bidder. Action would also be taken for banning business dealing with the defaulting Bidder.
- c. To obviate any possibility of doubt and dispute and maintain veracity of the documents / papers / certificates, the documents conforming to eligibility part will be submitted by the prospective Bidder duly authenticated digitally by the authorized signatory along with Bid Security which will be checked at the time of tender opening. The documents / papers to be submitted in respective Bid is explicitly mentioned in clause- 31 of Section-4 Part A. This bid part (already digitally signed by the authorized representative of the bidder company during bid submission) will be digitally signed by the in charge of the tender opening team and will be kept preserved along with the bid submitted online. In case of any dispute these papers will be treated as authentic one.

37. RESERVATION/ PROCUREMENT FROM MSE UNITS:

The guidelines / instructions / laws issued vide D.O. no 21(1) -2011-M.A..April 25th, 2012 from Ministry of Micro, Small & Medium Enterprise (MSME) with respect to provisions for Micro & Small Enterprises (MSEs) shall be followed.

Signature of the Bidder.

APPENDIX-1 TO SECTION-4 PART-A

S. No.	Defaults of the bidder / vendor.	Action to be taken
A	B	C
1(a)	Submitting fake / forged	i) Rejection of tender bid of respective Vendor. ii) Banning of business for 3 years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for 3 years from date of issue of banning order.
	a) Bank Instruments with the bid to meet terms & condition of tender in respect of tender fee and/ or EMD;	iii) Termination/ Short Closure of PO/WO, if issued. This implies non-acceptance of further supplies / work & services except to make the already received material work/ complete work in hand.
	b) Certificate for claiming exemption in respect of tender fee and/ or EMD;	
	and detection of default at any stage from receipt of bids till award of APO/ issue of PO/WO.	
	Note 1:- However, in this case the performance guarantee if alright will not be forfeited.	
Note 2:- Payment for already received supplies/ completed work shall be made as per terms & conditions of PO/ WO.		
1(b)	Submitting fake / forged documents towards meeting eligibility criteria such as experience capability, supply proof, registration with Sales Tax, Income Tax departments etc and as supporting documents towards other terms & conditions with the bid to meet terms & condition of tender :	
	(i) If detection of default is prior to award of APO	i) Rejection of Bid & ii) Forfeiture of EMD.
	(ii) If detection of default after issue of APO but before receipt of PG/ SD (DD,BG etc.)	i) Cancellation of APO , ii) Rejection of Bid & iii) Forfeiture of EMD.
	(iii) If detection of default after receipt of PG/ SD (DD,BG etc.) .	i) Cancellation of APO ii) Rejection of Bid & iii) Forfeiture of PG/ SD. However on realization of PG/ SD amount, EMD, if not already released shall be returned.
	(iv) If detection of default after issue of PO/ WO	i) Termination/ Short Closure of PO/WO and Cancellation of APO ii) Rejection of Bid & iii) Forfeiture of PG/ SD. However on realization of PG/ SD amount, EMD, if not released shall be returned.
	Note 3:- However, settle bills for the material received in correct quantity and quality if pending items do not affect working or use of supplied items.	
Note 4:- No further supplies are to be accepted except that required to make the already supplied items work.		

S.No.	Defaults of the bidder / vendor.	Action to be taken
A	B	C
2	<p>If vendor or his representative uses violent/ coercive means viz. Physical / Verbal means to threatens BSNL Executive / employees and/ or obstruct him from functioning in discharge of his duties & responsibilities for the following :</p> <p>a) Obstructing functioning of tender opening executives of BSNL in receipt/ opening of tender bids from prospective Bidders, suppliers/ Contractors.</p> <p>b) Obstructing/ Threatening other prospective bidders i.e. suppliers/ Contractors from entering the tender venue and/ or submitting their tender bid freely.</p>	<p>Banning of business for 3 years which implies Barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for 3 years from date of issue of banning</p>
3	Non-receipt of acceptance of APO/ AWO and SD/ PG by L-1 bidder within time period specified in APO/ AWO.	Forfeiture of EMD.
4.1	Failure to supply and/ or Commission the equipment and /or execution of the work at all even in extended delivery schedules, if granted against PO/ WO.	<p>i) Termination of PO/ WO.</p> <p>ii) Under take purchase/ work at the risk & cost of defaulting vendor.</p> <p>iii) Recover the excess charges if incurred from the PG/ SD and outstanding bills of the defaulting Vendor.</p>
4.2	Failure to supply and/ or Commission the equipment and /or execution of the Work in full even in extended delivery schedules, if granted against PO/ WO.	<p>i) Short Closure of PO/ WO to the quantity already received by and/ or commissioned in BSNL and/ or in pipeline provided the same is usable and/or the Vendor promises to make it usable.</p> <p>ii) Under take purchase/ work for balance quantity at the risk & cost of defaulting vendor.</p> <p>iii) Recover the excess charges if incurred from the PG/ SD and outstanding bills of the defaulting Vendor.</p>
5.1	The supplied equipment does not perform satisfactory in the field in accordance with the specifications mentioned in the PO/ WO/Contract.	<p>i) If the material is not at all acceptable, then return the non-acceptable material (or its part) & recover its cost, if paid, from the o/s bills/ PG/ SD.</p> <p>OR</p> <p>ii) If the material is inducted in network & it is not possible to return it and/ or material is acceptable with degraded performance, the purchaser may determine the price for degraded equipment (Financial penalty = Price – price determined for degraded equipment) himself and/ or through a committee.</p> <p>Undertake recovery of financial penalty from outstanding dues of vendor including PG/ SD.</p>

S. No.	Defaults of the bidder / vendor.	Action to be taken
A	B	C
5.2	Major quality problems (as established by a joint team / committee of User unit(s) and QA Circle) / performance problems and non-rectification of defects (based on reports of field units and QA circle).	<p>i) If the material is not at all acceptable, then return the non-acceptable material (or its part) & recover its cost, if paid, from the o/s bills/ PG/ SD; OR</p> <p>ii) If the material is inducted in network & it is not possible to return it and/ or material is acceptable with degraded performance, the purchaser may determine the price for degraded equipment (Financial penalty = Price – price determined for degraded equipment) himself and/ or through a committee. Undertake recovery of financial penalty from outstanding dues of vendor including PG/ SD; and</p> <p>iii) Withdrawal of TSEC/ IA issued by QA Circle.</p>
6	<p>Submission of claims to BSNL against a contract</p> <p>(a) for amount already paid by BSNL .</p> <p>(b) for Quantity in excess of that supplied by Vendor to BSNL.</p> <p>(c) for unit rate and/ or amount higher than that approved by BSNL for that purchase.</p> <p>Note 5:- The claims may be submitted with or without collusion of BSNL Executive/ employees.</p> <p>Note 6:- This penalty will be imposed irrespective of the fact that payment is disbursed by BSNL or not.</p>	<p>i) Recovery of over payment from the outstanding dues of Vendor including EMD/ PG & SD etc. and by invoking 'Set off' clause 21 of Section 5 Part A or by any other legal tenable manner.</p> <p>ii) Banning of Business for 3 years from date of issue of banning order or till the date of recovery of over payment in full, whichever is later.</p>
7	<p>Network Security/ Safety/ Privacy:- If the vendor tampers with the hardware, software/ firmware or in any other way that</p> <p>a) Adversely affects the normal working of BSNL equipment(s) and/ or any other TSP through BSNL.</p> <p>b) Disrupts/ Sabotages functioning of the BSNL network equipments such as exchanges, BTS, BSC/ MSC, Control equipment including IN etc., transmission equipments but not limited to these elements and/ or any other TSP through BSNL.</p> <p>c) tampers with the billing related data/ invoicing/ account of the Customer/ User(s) of BSNL and/ or any other TSP(s).</p> <p>d) hacks the account of BSNL Customer for unauthorized use i.e. to threaten others/ spread improper news etc.</p> <p>e) undertakes any action that affects/ endangers the security of India.</p>	<p>i) Termination of PO/ WO.</p> <p>ii) Banning of business for 3 years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for 3 years from date of issue of banning order.</p> <p>iii) Recovery of any loss incurred on this account from the Vendor from its PG/ SD/ O/s bills etc.</p> <p>iv) Legal action will be initiated by BSNL against the Vendor if required.</p>

S. No.	Defaults of the bidder / vendor.	Action to be taken
A	B	C
8	If the vendor is declared bankrupt or insolvent or its financial position has become unsound and in case of a limited company, if it is wound up or it is liquidated.	<p>i) Termination/ Short Closure of the PO/ WO.</p> <p>ii) Settle bills for the quantity received in correct quantity and quality if pending items do not affect working or use of supplied items.</p> <p>iii) No further supplies are to be accepted except that required to make the already supplied items work.</p> <p>iv) In case of turnkey projects, If the material is commissioned and is usable without any degradation of performance, then settle bills for the acceptable equipment/ material (or its part).</p> <p>v) In case of turnkey projects, if the material is inducted in network & it is not possible to return it and/ or material is acceptable with degraded performance, the purchaser may determine the price for degraded equipment (Financial penalty = Price – price determined for degraded equipment) himself and/ or through a committee.</p> <p>Undertake recovery of financial penalty from outstanding dues of vendor including PG/ SD.</p>
9	In the event of the vendor, its proprietor, Director(s), partner(s) is / are convicted by a Court of Law following prosecution for offences involving moral turpitude in relation to the business dealings.	<p>i) Termination/ Short Closure of the PO/ WO.</p> <p>ii) Settle bills for the material received in correct quantity and quality if pending items do not affect working or use of supplied items.</p> <p>iii) No further supplies are to be accepted except that required to make the already supplied items work.</p> <p>iv) In case of turnkey projects, If the material is commissioned and is usable without any degradation of performance, then settle bills for the acceptable equipment/ material (or its part).</p> <p>v) In case of turnkey projects, If the material is inducted in network & it is not possible to return it and/ or material is acceptable with degraded performance, the purchaser may determine the price for degraded equipment (Financial penalty = Price – price determined for degraded equipment) himself and/ or through a committee.</p> <p>Undertake recovery of financial penalty from outstanding dues of vendor including PG/ SD.</p>

S. No	Defaults of the bidder / vendor.	Action to be taken
A	B	C
10	If the vendor does not return/ refuses to return BSNL's dues:	i) Take action to appoint Arbitrator to adjudicate the dispute.
	a) inspite of order of Arbitrator.	i) Termination of contract, if any. ii) Banning of business for 3 years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL from date of issue of banning order or till the date by which vendor clears the BSNL's dues, whichever is later. iii) Take legal recourse i.e. filing recovery suite in appropriate court.
	b) inspite of Court Orders.	i) Termination of contract, if any. ii) Banning of business for 3 years which implies barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL from date of issue of banning order or till the date by which vendor clears the BSNL's dues, whichever is later.
11	If the Central Bureau of Investigation/ Independent External Monitor (IEM) / Income Tax/ Sales Tax/ Excise / Custom Departments recommends such a course	Take Action as per the directions of CBI or concerned department.
12	The following cases may also be considered for Banning of business:	i) Banning of business for 3 years which implies Barring further dealing with the vendor for procurement of Goods & Services including participation in future tenders invited by BSNL for 3 years from date of issue of banning order.
	(a) If there is strong justification for believing that the proprietor, manager, MD, Director, partner, employee or representative of the vendor/ supplier has been guilty of malpractices such as bribery, corruption, fraud, substitution of tenders, interpolation, misrepresentation with respect to the contract in question.	
	(b) If the vendor/ supplier fails to execute a contract or fails to execute it satisfactorily beyond the provisions of Para 4.1 & 4.2.	
	(c) If the vendor/ supplier fails to submit required documents/ information, where required.	
	(d) Any other ground which in the opinion of BSNL is just and proper to order for banning of business dealing with a vendor/ supplier.	
Note 7: The above penalties will be imposed provided it does not clash with the provision of the respective tender.		
Note 8:- In case of clash between these guidelines & provision of invited tender, the provision in the respective tender shall prevail over these guidelines.		
Note 9: Banning of Business dealing order shall not have any effect on the existing/ ongoing works/ AMC / CAMC which will continue along with settlement of Bills.		

Signature of the Bidder.

SECTION - 4 PART- B**E-TENDERING INSTRUCTIONS TO BIDDERS**

Note :- The instructions given below are NIC's e-tender portal and for e-tenders invited by CGM,MHTC, BSNL, Mumbai only.

General

These Special Instructions (for e-Tendering) supplement 'Instruction to Bidders', as enclosed in Sec 4 Part A of the Tender Documents. Submission of Bids only through online process is mandatory for this Tender. For conducting electronic tendering, BSNL Maharashtra Circle has decided to use the portal <http://www.eprocure.gov.in> through Central Public Procurement Portal of NIC, (Govt. of India) New Delhi.

1. Tender Bidding Methodology:

Sealed Bid System –'Single Stage Using Two Envelopes',
The Techno-commercial & Financial bids shall be submitted online by the bidder at the same time.

2. Broad outline of activities from Bidders prospective:

1. Procure a Digital Signing Certificate (DSC)
2. Register on Electronic Tendering System® (ETS)
3. Create Users and assign roles on ETS
4. View Notice Inviting Tender (NIT) on ETS
5. Download Official Copy of Tender Documents from ETS
6. Clarification to Tender Documents on ETS
 - Query to BSNL (Optional)
 - View response to queries posted by BSNL, as addenda.
7. Bid-Submission on ETS
8. Attend Online Tender Opening Event (TOE) of Techno-commercial Part
9. View Post-TOE Clarification posted by BSNL on ETS (Optional) Respond to BSNL's Post-TOE queries
10. Attend Online Tender Opening Event (TOE) of Financial-Part (Only for Technical Responsive Bidders).

3. For participating in this tender online, the following instructions are to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the CPPP.

a. DIGITAL CERTIFICATES:

For integrity of data and its authenticity/ non-repudiation of electronic records, and be compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC). also referred to as Digital Signature Certificate (DSC), of Class 2 or above, issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer <http://www.cca.gov.in>].

b. REGISTRATION :

To use the Electronic Tender® portal (<https://www.eprocure.gov.in/>), vendor needs to register on the portal. Registration of each organization is to be done by one of its senior persons who will be the main person coordinating for the e-tendering activities. For further details, use the Electronic Tender portal www.eprocure.gov.in, The vendor should visit the home page of the portal www.eprocure.gov.in and go to the eprocure link then select Bidders Manual KIT.

On successful submission of Registration details . Please contact NIC Helpdesk as given below, to get your registration accepted/activated.

NIC HELPDESK	
Telephone No. (Toll Free)	1800 233 7315
E-Mail I.D.	cphp-nic@nic.in (Please mark cc to support-nic@ncode.in)
BSNL CONTACT DETAILS.	
BSNL's Contact Person-1	Shri Bidyut Dass,AGM(CPC-I)
Telephone No.	022-26604648 / 26467761 (between 10:00 hrs. to 17.30 Hrs. on working days.
E-Mail I.D.	agmmht_cpc1@bsnl.co.in
BSNL's Contact Person-2	Shri Ashok E. Pawar, J.T.O.(CPC-I)
Telephone No.	022-26467774 (between 10:00 hrs. to 17.30 Hrs. on working days.
E-Mail I.D.	apawar@gmail.com

4. **METHOD FOR SUBMISSION OF BID DOCUMENTS:-**

The bid-submission shall be online on CPPP, however Some documents mentioned bellow in clause 4.2 are to be submitted physically offline as follows:

4.1 **ONLINE SUBMISSION: (as per Clause-2 & 10 of Section-4 Part-A) :**

Sl.No.	Contents of 1 st Electronic Envelops	Contents of 2 nd Electronic Envelops
01	The documents listed in Clause 10.1 of Section-4 Part-A and required as per any other clauses of tender document.	(1) Original Price Schedule (BOQ) as per Section-11 Part-II. (Download Price Schedule (BOQ) in XLS format, duly fill in the required details & upload) 2) Additional Details in the Proforma(Breakup of quoted Custom duty) kept at 9 (J) of Section-9 duly filled in PDF File format (In case of Imported item) 3) Card level priced BOM in PDF format. 4) Summary of Price Schedule (Section-11 Part-II(B))

Note:- (i) (i) In e-Tendering portal due to limitation of software only 15 files in PDF Format can be uploaded. Hence each PDF file is clubbed with more than one document as mentioned above (i.e. Doc.(a) of (1), Doc.(b) of (1), Doc.(c) of (1) etc.)

Therefore while preparing the PDF file, scan all the documents mentioned in the respective Sr. No. of the above table. Each document of this PDF file should be named as *Doc.(a) of file-(1)*, *Doc.(b) of file-(1)* & *Doc.(c) of file-(1)* and upload the said PDF file on e-portal serially.

(ii) If some document is not applicable for the bidder then he has to upload scanned copy of paper mentioning "The document < Name> called vide clause_____is not applicable on us".

(iii) If document asked for contains more than one page then all those pages may be uploaded in one PDF format file

- Please take care to scan documents that total size of documents to be uploaded remains minimum. If required, documents may be scanned at lower resolutions say at 150 dpi. However it shall be sole responsibility of bidder that the uploaded documents remain legible.
- Utmost care may be taken to name the files / documents to be uploaded on CPPP. These should be no special character or space in the name of file. Only underscores are allowed. The illustrative examples are given below:-

File Name	Allowed or not allowed in CPPP	Reason for allowed / not allowed
QA Certificate	Not allowed	Space in between words / characters not allowed
QACertificate(I)	Not allowed	Special characters not allowed.
QA_Certificate	Allowed	Under Score allowed between words / characters.
QACertificate	Allowed	Upper & Lower case allowed

- c. It is advised that all the documents to be submitted as per Clause 2 & 10 of Section-4 Part-A of bid document are kept scanned or converted to PDF format in a separate folder on your computer before starting on-line submission.
- d. The names and total size of each document (Preferable below 50 MB) may be checked before uploading.

4.2 OFFLINE SUBMISSIONS:

The bidder shall submit the following documents offline **AGM (CPC –I) O/o the Chief General Manager, Maharashtra Telecom Circle, 1st Floor, D wing, BSNL Admin Building, Juhu Tara Road, Santacruz (W), Mumbai-40005.** on or before the date & time of submission of bids specified in NIT, in a Sealed Envelope. The envelope shall bear (the tender name), the tender number and the words 'DO NOT OPEN BEFORE' (due date & time).

- i) EMD – Bid security (original copy) as per Clause 5 of Section-1 of bid document. **(As per proforma given at 9(A) of Section-9).**
- ii) Copy of DD/ Banker's Cheque or Cash Receipt from AO(F&A) as per Clause 2 of Section-1 of bid document for Tender fee which is submitted at the time of collecting the Tender document.
- iii) Power of Attorney in accordance with clause 15 of Section-4 Part-A and authorization for executing the power of Attorney (Original ink signed copy) **(As per proforma given at 9(G) of Section-9).**
- iv) Attestation of Specimen Signature POA holder by Company's / Firm's Banker as per clause 15(d) of Section-4 Part-A.
- v) Copy of Non-Discloser Agreement (NDA) duly signed by the Bidder which is submitted at the time of collecting the Tender document to **"A.G.M.(CPC-I), 1st Floor, BSNL, Admin Building, Juhu Road, Santacruz (W), Mumbai- 400 054 "**
- v) Integrity Pact.
- vi) Purchased Tender document Copy duly signed at the end of each section.

(NOTE: All above offline documents are to be signed by the bidder.)

Note: The Bidder has to upload the Scanned copy of all above said documents during Online Bid submission also except sl. No. (vii)(Tender document).

5. SPECIAL NOTE ON SECURITY OF BIDS :

Security related functionality has been rigorously implemented in ETS in a multi-dimensional manner. Starting with 'Acceptance of Registration by the Service Provider', provision for security has been made at various stages in Electronic Tender's software.

6. ONLINE TENDER OPENING EVENT (TOE) :

CPPP offers a unique facility for 'Online Tender Opening Event (TOE)'. Tender Opening Officers as well as authorized representatives of bidders can attend the Online Tender Opening Event (TOE).

Every legal requirement for a transparent and secure 'Online Tender Opening Event (TOE)' has been implemented on CPPP.

(i) The bids will be opened in 2 stages i.e.(i) Techno-commercial bid & (ii) **Financial bid**. The techno-commercial bid shall be opened on the date of tender opening given in DNIT. **The financial bid will not be opened on the date of opening of techno-commercial bids.**

- As soon as a Bid is decrypted by the TOC, the documents will be opened from the Techno-commercial bid one by one and the same report of TOC will be uploaded on e-tender portal.
- Thereafter the TEC will evaluate Techno-commercial bids and the report of TEC will be approved by competent authority and the names will be uploaded on e-tender portal of techno-commercially compliant bidders for information of financial bid opening.
- The financial bids of those bidders who are approved to be techno-commercially compliant by the competent authority will be opened by TOC in front of techno-commercially eligible bidders/authorized representatives.

(ii) The following information should be read out at the time of Techno-commercial bid opening:-

- a) Name of the Bidder

- b) Name of the item
- c) EMD amount & validity and acceptability
- d) Information in respect of eligibility of the bidder
- e) Details of bid modification / withdrawal, if applicable

(iii) The following information should be read out at the time of Financial bid opening:-

- a) Name of the Bidder
- b) Name of the item
- c) Quantities / prices quoted in the bid
- d) Discount if offered
- e) Taxes & levies.

7. PRICE SCHEDULE / BOQ (Bill of Quantity) :

Utmost care may kindly be taken to upload Price Schedule/ BOQ (Section-11 Part-II). Any change in the format of Price Schedule / BOQ file shall render it unfit for bidding. Following steps may be followed:-

1. Down load (i) price schedule / BOQ in XLS format **and (ii) Break up of quoted rate of Custom Duty Proforma kept at 9 (J) of Section-9 (in PDF format) (In case bidders quote for imported items).**
2. Fill rates in down loaded price schedule / BOQ as specified in XLS format only in White back ground cells. Don't fill in grey back ground cells. In case bidders quotes for Imported item, then fill the downloaded proforma **kept at 9 (J) of Section-9 (in PDF format)**
3. BOQ file is password protected XLS file. Don't unprotect the file. Price has to be filled in the same file and has to be uploaded along with Proforma 9 (J) of Section-9 (in PDF File Format.) *(In case Imported item)*.
4. Save filled copy of downloaded price schedule / BOQ file & Proforma 9 (J) of Section-9 Part-C (PDF format) in your computer and remember its name & location for uploading correct file (duly filled in) when required.

8. OTHER INSTRUCTIONS :

For further instructions, the vendor should visit the home-page of the portal (www.eprocure.gov.in), and go to the Bidders Manual Kit. The compatible support software (PDF Converter, Java, etc) for online bid submission may be downloaded from CPP Portal.

Important Note: It is strongly recommended that all authorized users of Supplier organizations should thoroughly peruse the information provided under the relevant links of e-procurement portal (CPPP), and take appropriate action. This will prevent hiccups, and minimize teething problems during the use of CPPP.

The following 'FOUR KEY INSTRUCTIONS for BIDDERS' must be assiduously adhered to:

1. Obtain individual Digital Signing Certificate (DSC or DC) well in advance of your first tender submission deadline on CPPP.
2. Register your organization on CPPP well in advance of your first tender submission deadline on CPPP.
3. Get your organization's concerned executives trained on CPPP well in advance of your first tender submission deadline on CPPP.
4. Submit your bids well in advance of tender submission deadline on CPPP as there could be last minute problems due to internet timeout, breakdown, etc.

While the first three instructions mentioned above are especially relevant to first-time users of CPPP, the fourth instruction is relevant at all times.

(BSNL shall not be responsible any problem arising out of internet connectivity issues).

9. Minimum Requirements at Bidders end

- Computer System with good configuration (Min P IV, 1 GB RAM, Windows XP)
- Broadband connectivity.
- Microsoft Internet Explorer 6.0 or above
- Digital Certificate(s) for users.

Signature of the Bidder.

SECTION-4 PART-C**SPECIAL INSTRUCTIONS TO BIDDERS**

1. The Special Instructions to Bidders shall supplement the 'Instructions to Bidders' and in case of any conflict with those in Section-4 Part-A i.e. GENERAL INSTRUCTIONS TO BIDDERS (GIB), the provisions herein shall prevail.
2. The suppliers must get revalidation of expired TAC/TSEC i.e. expired after opening of the Tender of the tendered item but before the issue of PO and submit the same to this Office within 15 (Fifteen) days from the date of expired TAC/TSEC failing which the offer is liable to be cancelled without any further notice. However, in case TAC/TSEC validity expires after placement of PO, the supplier shall take advance action to avoid any delay in supplies and no extension without LD/DC shall be given on this count.
3. **FORMATION OF RINGS FOR QUOTING CARTEL RATE :**
 - (i) Equality of Net cost (Composite price excluding duties & taxes CENVATable) at any rank, whether evaluated on individual item-wise or package value basis, as the case may be, shall be sufficient ground to declare such bidders as Cartel."
 - (ii) If one or more groups of bidders are found to have formed rings for bidding Cartel Rates intended to restrict competition and to boost up rates of tender items to the detriment of the BSNL, the **Purchaser reserves the right to ignore their offers**. If the offers are taken into consideration taking into account reasonability of rates, group or groups forming the cartel shall be treated as one offer and quantity distribution shall be made accordingly.
 - (iii) **Wherever evaluation and the ranking of the bids are made on package value (i.e. unit price of each item X quantity then total of all the prices of all items) basis, action as contained in Clause 3(i) & (ii) above as deemed fit shall be taken if the package value is same..**
 - (iv) **Not applicable**

4. DISTRIBUTION OF QUANTITY:

The Purchaser intends to limit the number of technically and commercially responsive **1(One)** bidder for tendered item from the list of such bidders arranged in increasing order of their evaluated prices starting from the lowest for the purpose of ordering against this tender. The distribution of the quantity shall be as given in Table 1 below.

Table 1(A) (Without provisions for MSE Units)

No. of Bidders to be approved (Col. 1)	Quantity allotted to the respective bidder (Col. 2)				
	L1	L2	L3	L4	L5 and so on
One bidder	100%	Nil	Nil	Nil	Nil

Table 1(B) (With provisions for MSE Units)

No. of Bidders to be approved (Col. 1)	Quantity allotted to the respective bidder (Col. 2)					Qty earmarked for MSE bidder(s) (Col. 3)
	L1	L2	L3	L4	L5 and so on	
One bidder	80%	Nil	Nil	Nil	Nil	20 %

Note-1: 20 % of the Estimated Quantity /requirement in any tender shall be earmarked to be procured from MSEs provided their quoted price is within the band of L1+15%. Out of this quantity, a sub target of 4% is earmarked to be procured from SC/ST owned eligible MSEs. In case of non availability of SC/ST owned MSEs, this 4% quantity shall be offered to other MSEs.

Note-2: The participating MSEs in a tender, quoting price within the band of L1+15% are also be allowed to supply a portion of the requirement by bringing down their price to the L1 price arrived after tender evaluation. Such MSEs shall be ordered to supply up to 20 % of the total tendered value. In case of more than one such eligible MSE, the supply will be shared equally.

Note-3: In case a MSE bidders happens to be L1, then distribution shall be as per sub column of Col.2 of Table 1(B) above.

Note-4: If no eligible MSE bidders are available then aforesaid earmarked 20% quantity shall be de-reserved & the allotted quantity for other general bidders will be restored to 100% and distribution shall be as per Table -1(A) above.

5. METHODOLOGY FOR INCORPORATION OF STATUTORY DUTIES & TAXES & EVALUATION & DETERMINATION OF RATES FOR OTHER THAN L1 BIDDE.

(a) (i) Statutory duties & taxes such as ED/ Service Tax, Educational Cess on ED/ Service Tax & Sales Tax, if quoted higher than the applicable as on the due date of submission of tender or concessional duties & taxes have been quoted by the bidder without necessary supporting documents, clarification may be sought for from bidder, if required, during evaluation and ranking and same shall be replied by the bidder on FAX within 2 days followed by ink signed copies by authorized signatory. On receipt of clarification within the stipulated date, the same shall be examined and decision taken in this regard by the Purchaser shall be binding on the bidder.

(ii) Normally for indigenous items (items manufactured in India) the ED/ Service Tax & Educational Cess on ED/ Service Tax are fully Cenvatable at BSNL end, therefore, the amount shown in BOQ under ED including Educational Cess in Col. No. 7 of Price Schedule (BOQ) shall be the amount to be quoted against Cenvatable duties & taxes under Col. No. 14 ibid. In case of any discrepancy without necessary supporting document is noticed during evaluation, clarification may be sought for from the vendor which should be replied by the bidder on FAX within 2 days followed by ink signed copies by authorized signatory. On receipt of clarification within the stipulated date, the same shall be examined and decision taken in this regard by the Purchaser shall be binding on the bidder.

(iii) Wherever clarification is sought for from the bidder during evaluation and the same is not replied within 2 days, tendering authority would proceed with evaluation and ranking as quoted by the bidder and any such clarification received late shall not be entertained.

(iv) Corrections, if any, made based on above shall result in correction of other columns of the price schedule and corrected amount of Net Cost to BSNL (i.e. per unit discounted price excluding Cenvatable duties & taxes) will be taken for evaluation and ranking purpose. Evaluation and ranking determined based on above shall be final and binding to all participating bidders.

(b) NOT APPLICABLE.

6. In case the tender is cancelled due to unreasonableness of the quoted rates and required to be re-tendered, the tendering authority may negotiate with L1 bidder (s) for supply of a bare minimum quantity from this tender to meet the urgent and essential demand of BSNL and under such circumstances, clause 25 of Section-4 Part-A shall not be operative.

7. The Purchase order is liable to be short closed at the end of the scheduled delivery period with the accepted supplies. No supplies shall be made or production be continued in anticipation of extension of delivery date.

8. Request for extension on the ground of delay in payment of previous supplies under the same contract or under any other contract of BSNL is not consistent with the terms & conditions of contract, and therefore, not acceptable.

In case of any delay in payment, the matter should be taken up by the vendor with the concerned Paying Authority. The disputes related to payment may be resolved separately as per the provisions in the contract.

9. NOT APPLICABLE.

10. RANKING:

- (a) The charges for AMC period mentioned in the price schedule shall be calculated to the present value, discounted at a rate of 12% per annum and shall be added while evaluating bids **(Please refer clause-38 of Section-5 Part-B)**. The formula for calculating the NPV shall be:
- (b) (i) **Ranking & Evaluation of the offers for Item sl. No. 1 to 33 of Price Schedule will be made on 'Grand Total' by addition of total quoted price for item no 1 to 16 & Sl.No.24 to 33 & NPV for AMC cost of year-1, year-2, year-4, year-5, year-6 & year-7 as per table given below.**
- (ii) **The Ranking & Evaluation of the offers will be made on PACKAGE WISE value basis.**

SI.No.	Item	Ref: Price schedule (Section-9 part-B)	Amount	NPV
1	Equipment+ Services+ any other items from SI.No. 1 to 16 & 24 to 33	A= Sum of values as indicated in col. '15' of SI.No. 1 to 16 & 24 to 33	A=aaa	aaa
2	AMC of Items SI.No.17 to 23 of BOQ (after 1 year Warranty)	Instalment of 1 st year AMC	E= as indicated in col. '15' of Sr. No. 17	$eee = \frac{E}{(1.12)^2}$
		Instalment 2 nd year AMC	F= as indicated in col. '15' of Sr. No. 18	$fff = \frac{F}{(1.12)^3}$
		Instalment 3 rd year AMC	G= as indicated in col. '15' of Sr. No. 19	$ggg = \frac{G}{(1.12)^4}$
		Instalment 4 th year AMC	H= as indicated in col. '15' of Sr. No. 20	$hhh = \frac{H}{(1.12)^5}$
		Instalment 5 th year AMC	I= as indicated in col. '15' of Sr. No. 21	$iii = \frac{I}{(1.12)^6}$
		Instalment 6 th year AMC	J= as indicated in col. '15' of Sr. No. 22	$jjj = \frac{J}{(1.12)^7}$
		Instalment 7 th year AMC	K= as indicated in col. '15' of Sr. No. 23	$kkk = \frac{K}{(1.12)^8}$
TOTAL = aaa + eee + fff + ggg + hhh + iii + jjj + kkk				

11. Paying authority shall be The C.A.O. /A.O. (Mobile), O/o The CGM, MHTC, Mumbai and details shall be indicated in PO.
12. (i) Tender shall be processed & APO shall be issued by CPC unit of MH Circle.
(ii) The Purchase Order on successful submission of PBG to CPC, shall be issued by AGM (NWP-GSM), O/o The CGM, MHTC, Mumbai.
13. In case of any change in constitution of firm / company during the contract period, written approval of tendering authority shall be obtained by submitting the necessary documents, with undertaking that the changed entity shall continue to perform the contractual obligations of the supplier under this contract.

Signature of Bidder

SECTION- 5 Part- A**GENERAL (COMMERCIAL) CONDITIONS OF CONTRACT****1. GENERAL CONDITIONS OF CONTRACT :**

The General Conditions of Contracts provide the terms and conditions applicable to the Supplier for the supply of Goods and the provision of Services.

2. STANDARDS :

The Goods and Services supplied under the Contract shall conform to the standards prescribed in the Technical Specifications mentioned in Section 7 and Annexure 1 of Section 5 Part B(DTR).

3. PATENT RIGHTS :

The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods and/or Services or any part thereof in network of BSNL.

4. PERFORMANCE SECURITY :

4.1 The Supplier (including small scale units who are registered with National Small Scale Industries Corporation under single point registration scheme) shall furnish Performance Security to the Purchaser for an amount equal to **5% of the value of Advanced Purchase Order** within 14 days from the date of issue of Advance Purchase Order by the Purchaser.

4.2 The proceeds of the Performance Security referred to in Clause 4.1 above shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

4.3 The Performance Security shall be in the form of Bank Guarantee issued by a scheduled bank and shall be as per the format provided in 9(B) of Section-9 of this Tender Document respectively **valid for period of 2 Years 6 Months**. The Bidder shall ensure that Performance Security is sent to the Purchaser directly by the issuing bank by Registered Post (A.D). In exceptional circumstances where the Performance Security is submitted by the Bidder to the Purchaser, the Bidder shall ensure that an unstamped duplicate copy of the Performance Security is sent immediately by the bank directly to the Purchaser by Registered Post (A.D).

4.4 The Performance Security will be discharged by the Purchaser after completion of the Supplier's performance obligations including any warranty obligations under the Contract.

4.5 In case EMD is in the form of DD/ Banker's Cheque & contractor wants to submit PBG in the form of DD/ Banker's Cheque; PBG amount may be adjusted by appropriating the EMD amount & balance, if any, shall be paid by DD/ Banker's Cheque within 14 days from the date of issue of APO. However no interest on PBG amount shall be payable by BSNL.

NOTE:

i) **In view of above, the supplier on expiry of warranty period shall furnish COMPLETION REPORT-CUM-NO DEMAND CERTIFICATE against the purchase order to AGM(CPC-I), O/O the Chief General Manager Telecom , Maharashtra Circle, Mumbai-54 in the format to be enclosed with P.O.**

ii) On receipt of 'No Demand' and 'No Dues' Certificate, the concerned AGM after verification of his record that warranty period has expired and there are no dues outstanding from the Supplier and deducting all cost and other expenses, the Purchaser/Consignee may have incurred on consignment and other means including losses and damages which the Purchaser is entitled to recover from the Supplier, shall pass order for releasing the Performance Security/closing the Purchase Order.

iii) The Bank Guarantee towards PERFORMANCE SECURITY as stipulated in Clause-4 of Section -5 Part-A shall be furnished (in the format indicated at 9 (B) of Section -9) duly issued by a Scheduled Bank, in favour of the Purchaser, on prescribed **Non-Judicial Paper** with stamp of proper value and should contain full address of the issuing branch of the Bank and its regional/controlling office with code numbers, official seal with designation/ signature , Telephone Number/Fax number.

5. INSPECTION AND TESTS :

5.1 The Purchaser or its representative(s) shall have the right to inspect and test the goods and services as per prescribed test schedules for their conformity to the specifications

- ("Inspectors"). Where the Purchaser decides to conduct such tests on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance like testing instruments and other test gadgets including access to drawings and production data shall be furnished to the Inspectors at no charge to the Purchaser.
- 5.2 Should any inspected or tested goods and services fail to conform to the specifications the Purchaser may reject them and the Supplier shall either replace the rejected Goods or make all alterations necessary to meet specification requirements free of cost to the Purchaser. In case of Services, the Bidder shall make arrangements to rectify the deficiencies in Services to conform to the specifications and all quality aspects of installations.
- 5.3 Notwithstanding the pre-supply tests and inspections prescribed in Clause 5.1 and 5.2 above, the Equipment and accessories on receipt at the Purchaser's premises will also be tested during and after installation before "take over" and if any Equipment or part thereof is found defective, the same shall be replaced free of all cost to the Purchaser as laid down in Clause 5.4 below.
- 5.4 If any Equipment or any part thereof including the Services, before it is taken over under Clause 5.5, is found defective or fails to fulfil the requirements of the Contract, the Inspector shall give the Supplier notice setting forth details of such defects or failure and the Supplier shall make the defective equipment and/or the Services good, or alter the same to make it comply with the requirements of the Contract forthwith and in any case within a period not exceeding **three months of the initial report**. These replacements shall be made by the Supplier free of all charges at the site designated by the Purchaser. Should it fail to do so within this time, the Purchaser reserves the discretion to reject and replace at the cost of the Supplier the whole or any portion of Equipment and Services as the case may be, which is defective or fails to fulfil the requirements of the Contract. The cost of any such replacement of Goods and Services made by the Purchaser shall be deducted from the amount payable to the Supplier.
- 5.5 When the performance tests including A/T have been successfully carried out, the Inspector will forthwith issue a Taking Over Certificate for all aspects of the Contract in respect of both Goods and Services. The Inspector/ shall not delay the issue of any "Taking Over Certificate" contemplated by this clause on account of minor defects in the Equipment and Services which do not materially affect the commercial use thereof provided that the Supplier shall undertake to make good the same in a time period not exceeding six months.. All the major validation issues and major technical problems reported by the Circles should have been satisfactorily resolved.
- 5.6 Nothing in Clause-5 shall in any way discharge the Supplier from any warranty or other obligations under this Contract.
- 6. DELIVERY AND DOCUMENTS :**
- 6.1 Delivery of the Goods and documents, its installation and commissioning shall be made by the Supplier in accordance with the terms specified by the Purchaser in its SoR and Special Conditions of Contract. The title of the Equipment/material so supplied shall vest with the Purchaser after the sale is concluded by way of High Sea Sales or sales of indigenous materials. Thereafter, the Goods will be issued by the Purchaser to the Supplier and the risk of the Goods shall remain with the Supplier until delivery of the complete network as a turnkey job has been completed and the network is made over to Purchaser for operation. The delivery of the Equipment shall be to the ultimate consignee as given in the Purchase Order. E1 and E2 transactions are allowed. Bidder shall comply with the provisions of Applicable Law.
- 6.2 The supply, installation and commissioning of the system shall commence immediately on placement of Purchase Order on the Supplier and be completed in accordance with the commissioning schedule stipulated in the Special Conditions of Contract. .
- 6.3 All technical assistance for installation, commissioning and monitoring of the Equipment shall be provided by the Supplier at no extra cost during laboratory evaluation, if any, validation/type approval and field trial/operation period as stipulated in the Special Conditions of Contract .

- 6.4 The extension of delivery period against the Purchase Order, if any, should be granted subject to the condition that BSNL shall have the absolute right to revise the price(s) and also to levy penalty for the delayed supplies.

7. TRAINING :

- 7.1 The Successful Bidder shall provide training for installation and maintenance staff of the Purchaser free of cost. The specific requirement of man months training is specified in Section- 5 Part B of the Tender Document.
- 7.2 The Bidder shall specify in his Bid the quantum of proposed training for different aspects, pre-training qualifications required of the trainees and duration of the proposed training to complete the required person months of the proposed training.. Extensive training on administration ,operation and maintenance of IN system shall be provided prior to commissioning of system.
- 7.3 The Successful Bidder shall provide all training material and documents in soft and hard copies. The training material given shall contain both the slides with bullet points/diagrams etc used in presentations and the descriptive part giving detailed information.
- 7.4 Conduct of training of the Purchaser's personnel shall be at the Supplier's plant and/or training facility in installation, operation, maintenance and/or repair of the supplied goods. If the training centre facilities of BSNL are to be utilised it is essential for the Supplier to install and commission the training model and to arrange all the necessary instrumentation and training documentations in advance to enable hands on training on the equipments. The Bidder has to give detailed training plan along with the Bid submission.

8. INCIDENTAL SERVICES :

- 8.1 The Supplier may be required to provide any or all of the following services:
- (a) Performance or supervision of on-site installation and/or start-up of the supplied Goods.
 - (b) Furnishing of tools required for installation and/or maintenance of supplied Goods.
 - (c) Performance of supervision or maintenance and/or repair of the supplied Ggoods, for a period of time agreed by the Parties provided that this Service shall not relieve the Supplier of any warranty obligations under this Contract.

9. SPARES :

- 9.1 The Supplier shall be required to provide a list of the following material and notifications pertaining to spare parts manufactured or distributed by the Supplier of spares including cost and quantity considered for arriving at the price of spares stated at Clause 9, Section-4 Part A.
- (a) Such spare parts as the Purchaser may elect to purchase from the Supplier provided that such purchase shall not relieve the Supplier of any warranty obligation under the Contract.
 - (b) In the event of termination of production of the spare parts, the Supplier shall:
 - (i) give advance notification to the Purchaser pending termination (not less than 2 years), in sufficient time to enable the Purchaser to procure life time spare; and
 - (ii) following such advance intimation of termination, furnish at no cost to the Purchaser, the blue prints, drawings and specifications of spare parts, if and when requested.
- 9.2 Over a period of three years starting from the date of final acceptance, the Supplier shall supply, at his own cost, all necessary spares which have not been included in the offer as part of the requirement. These spares should be supplied within a maximum period of 30 days from the notification by the Purchaser of his need.

10. WARRANTY :

- 10.1 The Supplier/Bidder shall warrant that all supplies under the scope of the Contract shall be new and free from all defects and faults in materials used, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards for materials of the type ordered and shall perform in full conformity with the specifications and drawings. The Supplier shall be responsible for any defect that may develop under the conditions provided by the Contract and under proper use, arising from faulty material, design or workmanship such as corrosion of the equipment, inadequate quantity of material to meet equipment requirements, inadequate contact protection, deficiencies in circuit design and/or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writing in what respect the stores are faulty. This warranty shall survive inspection or payment for / and acceptance of goods, but shall expire (except in respect of complaints notified prior to such date) twelve months from the date of commissioning of the complete IN and have been taken over under Clause 5.5 above.
- 10.2 If it becomes necessary for the Supplier to replace or renew any defective portion(s) of the Equipment under this clause, the provisions of the Clause 10.1 shall apply to the portion(s) of the equipment so replaced or renewed or until the end of the above mentioned period of twelve months, whichever may be later. If any defect is not remedied by the Supplier within a reasonable time, the Purchaser may proceed to get the defects remedied from other supplier etc., at the Supplier's risk and expenses, but without prejudice to any other rights which the Purchaser may have against the Supplier in respect of such defects.
- 10.3 Replacement under warranty clause shall be made by the Supplier free of all charges at the site designated by the Purchaser including freight, insurance and other incidental charges.

11. PAYMENT TERMS :

- 11.1 The payment terms shall be governed by Clause-10 of section-5 Part B.
- 11.2 Form C and also a certificate stating that the tendered item (stores) are meant for the use of BSNL shall be provided by the purchaser on the request of the bidder. The request is to be submitted within 3 weeks from the date of invoice to A.G.M.(Concerned PO issuing Officer).
- 11.3 The bidder has to give mandate for receiving payment electronically and the charges, if any, levied by bank has to be born by the bidder / contractor / supplier. The bidder company is required to give the information for this purpose in the bidders profile & questionnaire as per Section-10.
- 11.4 No payment will be made for goods rejected at the site designated by the Purchaser on testing.

12. PRICES :

- 12.1 The prices payable under the Contract shall be governed by the following:
- (i) Prices charged by the Supplier for goods delivered and services performed under the Contract shall not be higher than the prices quoted by the Supplier in his Bid except for variation caused by change in duty/tax as specified in Clause-12.1(ii).
 - (ii) The duty/tax part of the unit price shall be regulated as under:
 - (a) Prices will be fixed at the time of issue of Purchase Order as per taxes and statutory duties applicable at that time. If the duties are not quoted correctly, the basic price may be revised downwardly at the time of PO. Further, during extended delivery period, if there is increase in duties/taxes then the basic price would have to be reduced to accommodate the increase in taxes.
 - (b) In case of reduction of taxes and other statutory duties during the scheduled delivery period, Purchaser shall take the benefit of decrease in these taxes / duties for the supplies made from the date of enactment of revised duties / taxes.

- (c) In case of increase in duties / taxes during the scheduled delivery period, the Purchaser shall revise the prices as per new duties / taxes for the supplies, to be made during the remaining delivery period as per terms and conditions of the Purchase Order.
- (iii) Any increase in taxes and others statutory duties / levies after the expiry of scheduled delivery date shall be to the Supplier's account. However, benefit of any decrease in these taxes / duties shall be passed on to the Purchaser by the Supplier.

13. CHANGES IN PURCHASE ORDERS :

- 13.1 The Purchaser may, at any time, by a written order given to a Supplier, make changes within the general scope of the Contract in any one or more of the following:
- (a) Drawings, designs or specifications, where goods to be supplied under the Contract are to be specifically manufactured for the Purchaser;
 - (b) the method of transportation or packing;
 - (c) the place of delivery; or
 - (d) the services to be provided by the Supplier.
- 13.2 If any such change causes an increase or decrease in the cost and quantity of, or the time required for the execution of the Contract an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any proposal by the Supplier for adjustment under this clause must be made within thirty days from the date of the receipt of the change in order. There shall not be any change in the contract price in case of any change in consignee at any time before delivery within the scope as specified in Section-6.

14. SUBCONTRACTS :

- 14.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in his Bid. Such notification, in his original bid or later shall not relieve the Supplier from any liability or obligation under the Contract.
- 14.2 Only a single level of sub-contracting is permitted for delivery of services. The sub-contractor of the Supplier shall not himself further sub-contract the work awarded to him. Only the Successful Bidder shall interface with BSNL for implementation of the Contract and he shall be responsible not only for doing the work as per required specifications but also to strictly adhere to all statutory rules and regulations in force.
- 14.3 The Supplier shall furnish, within 30 days from the date of issue of PO, full details of organisation, experience, man power and capability of the sub-contractor for executing the assigned job in writing to the Purchaser. The Purchaser reserves the right to reject the proposal of the Supplier to engage a sub-contractor, if the sub-contractor in the opinion of the Purchaser is not competent to execute the work proposed to be assigned to him. Such rejection, with the full details of the ground, shall be communicated in writing to the Supplier and such rejection shall not entail the Supplier for any change in the delivery schedule.

15. DELAYS IN THE SUPPLIER'S PERFORMANCE :

- 15.1 **Delivery and performance of the Goods and Services shall be made by the Supplier in accordance with the time schedule and technical specifications provided in the Purchase Order.** In case the supply of Goods and delivery of Services are not completed in the stipulated delivery period, as indicated in the Purchase Order, the Purchaser reserves the right either to short close/cancel the Purchase Order in part or full and/or recover liquidated damage charges. The cancellation/short closing of the order for Goods and Services in part or full shall be at the risk and responsibility of the Supplier and **Purchaser reserves the right to purchase balance unsupplied and/or short closed/cancelled supplies and services at the risk and cost of the defaulting Supplier.**
- 15.2 Delay by the Supplier in the performance of its delivery obligations with reference to both the supplies and services shall render the Supplier liable to any or all of the following sanctions:
- (i) Forfeiture of its performance security.
 - (ii) Imposition of liquidated damages.

- (iii) Short closure of Contract in part or full and/or termination of the Contract for default.
- 15.3 If at any time during the performance of the Contract, the Supplier or sub-contractor(s) encounters condition impeding timely delivery of the goods and performance of service, the Supplier shall:
- (i) promptly notify to the Purchaser, in writing, the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the period for performance of the Contract (by not more than 20 weeks or as per the provisions of Section-5 Part A clause 16.2) as per provisions given below.
 - (ii) The Supplier shall submit their request for extension along with the undertaking as per Section 5 Part A, clause-24 (fall clause) and a copy of QA inspection certificate at least two weeks before the expiry of delivery period. The decision regarding extension shall be communicated within two weeks of the receipt of request.
 - (iii) In case extension is being granted beyond 20 weeks, then the Supplier shall submit additional Bank Guarantee while seeking extension. For piecemeal items, the amount of additional Bank Guarantee shall be 5% of the value of balance quantity of items to be supplied for which extension in delivery period has been sought. In cases of infrastructure/turnkey projects, other than as stated above, 1% of the total project value should be the value for additional Bank Guarantee. The additional Bank Guarantee shall be valid for six months beyond the extension of the delivery period sought and shall be discharged after the full ordered quantity has been supplied to the ultimate consignee within the last extended delivery period on submission of inspection certificate from QA and consignee receipt without prejudice to the other remedies available to the Purchaser.
 - (iv) If the Supplier fails to deliver the full ordered quantity even during extended delivery period then the PO shall be short-closed and the Performance Bank Guarantee as well as additional BG shall be forfeited.
 - (v) Format of (i) letters conveying conditions of DP extension and (ii) DP extension letter are at 9(E) and 9(F) of Section-9.
- 15.4 If the supplies are not completed in the extended delivery period, the Purchase Order shall be short-closed and both the performance securities shall be forfeited.

16. LIQUIDATED DAMAGES:

- 16.1 Time is the essence of this Tender Document/Contract. The Bidder shall adhere to the project execution schedule given in the Tender Document /APO/PO. The milestones stipulated for delivery of supplies and services in the acceptance of the Tender shall be deemed to be the essence of the Contract and delivery must be completed not later than the dates specified therein. Extension will not be given except in exceptional circumstances. In the event of Bidder's failure to perform as per the milestones mentioned in the project execution schedule in section-5 Part B, the Bidder shall be liable to pay liquidated damages. The target dates for selected milestone shall be sacrosanct for the purposes reckoning liquidated damages in this Tender/ Contract. Should, however, deliveries be made after expiry of the contracted delivery period, without prior concurrence of the Purchaser and be accepted by the Purchaser, such delivery will not deprive the Purchaser of his right to recover liquidated damage under Clause 16.2 below. However, when supply is made within 21 days of the contracted original delivery period, the Purchaser may accept the stores and in such cases the provision of Clause 16.2 will not apply.
- 16.2 While granting extension of delivery period as per clause 15.3, the liquidated damages shall be levied as follows:
- (i) Should the Supplier fail to deliver the store/any consignment or service thereof within the period prescribed and agreed for delivery, the Purchaser, without prejudice to other remedies available to the Purchaser, shall be entitled to recover, as agreed liquidated damages for breach of Contract, a sum equivalent to 0.5% of the value of the delayed supply and/or undelivered material/ supply for each week of delay or part thereof for a period up to 10 (ten) weeks, and thereafter at the rate

- of 0.7% of the value of the delayed supply and/ or undelivered material/ supply for each week of delay or part thereof for another 10 (Ten) weeks of delay.
- (ii) Extension of delivery beyond 20 weeks shall not be generally allowed. The extension beyond 20 weeks shall be decided in most exceptional circumstances on case to case basis by the Chief General Manager of the concerned Telecom Circle that has placed the PO stating the reasons and justifications for grant of extension of delivery period beyond 20 weeks.
 - (iii) In the case of turnkey projects when the delayed portion of the supply materially hampers installation and commissioning of the systems, liquidated damages charges shall be levied as above on the total value of the Purchase Order.
 - (iv) Quantum of liquidated damages assessed and levied by the Purchaser and decision of the Purchaser thereon shall be final and binding on the Supplier. Further, the same shall not be challenged by the Supplier either before an Arbitration Tribunal or before the Court of Law. The same shall stand specifically excluded from the purview of the arbitration clause and as such shall not be referable to arbitration. However, when supply is made to the ultimate consignee within 21 days of QA clearance in the extended delivery period and the goods were despatched within this delivery period, the consignee may accept the stores and in such cases the liquidated damages shall be levied up to the date of dispatch after QA clearance only.
 - (v) The total value of the liquidated damages as per above sub-clauses shall be limited to a maximum of 12% (Twelve percent) i.e. liquidated damages shall be levied up to 20 weeks only as per provision at para. (i).
- 16.3 The provision of the Section-5 Part-A clause-16 shall be applied together with those specified in Section- 5 Part B clause-52.

17. FORCE MAJEURE :

- 17.1 If, at any time, during the continuance of this Contract, the performance in whole or in part by either party of any obligation under this Contract is prevented or delayed by reasons of
- (a) wars, invasions, acts of foreign enemies, terrorism, revolutions, riots, or sabotage, civil commotion, insurrection, rebellion or blockade;
 - (b) explosions, major fires, floods, earthquakes, epidemics, or other exceptional natural calamities and exceptional acts of God;
 - (c) Nationwide/region/state strike or lockout by persons other than Supplier's or its subcontractor's employees;
- (herein after collectively referred to as an "**Event of Force Majeure**")
- 17.2 Event of Force Majeure shall not include:
- (a) Strikes, collective bargaining agreements between the Supplier or its subcontractors with their employees resulting in a delay in performance of the Supplier's obligations under the Contract and labour disputes of any kinds (other than strikes, labour delay or stoppage or other labour disputes, on an industry wide, region wide or nationwide basis);
 - (b) Late delivery of good and services caused by Suppliers' subcontractors or due to inefficiencies on the part of the Suppliers or its subcontractors.
- 17.3 Relief under this Clause 17 shall not be given unless the Party intending to claim relief has, by notice to the other Party within ten (10) days of becoming aware of an Event of Force Majeure or if later, within ten (10) days of an Event of Force Majeure having an effect upon the performance of such Party's obligations under this Contract, informed the other Party that it desires to claim relief under this Clause 17. Such notice shall include such relevant information as is available, including without limitation, a description of the Event of Force Majeure and the date of its occurrence, the effect of such Event of Force Majeure upon the performance of such Party's obligations, the expected duration of such Event of Force Majeure and its effects and the actions it is taking in order to comply with this Clause 17.

- 17.4 As soon as practicable after the occurrence of an Event of Force Majeure, the Party affected shall:
- (a) use its best endeavours to prevent and reduce to a minimum and mitigate the effects of the Event of Force Majeure, including where appropriate and having recourse to alternate acceptable sources; and
 - (b) use its best endeavours to perform its obligations to the maximum extent practicable. Relief under this Clause 17 shall cease to be available to a Party if it fails to use such best endeavours.
- 17.5 Subject to above clauses, the Party affected by an Event of Force Majeure shall be relieved from liability and shall not be construed to be in default in respect of any obligation hereunder to the extent that and for so long as the failure to perform such obligation shall be due to an Event of Force Majeure.
- 17.6 If an Event of Force Majeure has occurred that results in delay in performance of the obligations of the Parties, in excess of thirty (30) calendar days, the Parties may, enter into good faith negotiations regarding adjustments to the relevant terms of this Contract or the relevant Purchase Order. If any Event of Force Majeure prevents, or the Parties agree that such an Event of Force Majeure will prevent, the Supplier from fulfilling its obligations under the Contract for a continuous period of more than 60 days. Either Party may terminate this Agreement or corresponding Purchase Order in accordance with the provisions hereof.
- 17.7 Provided, also that if the Contract is terminated under this Clause 17, the Purchaser shall be at liberty to take over from the Supplier at a price to be fixed by the Purchaser, which shall be final, all unused, undamaged and acceptable materials, bought out components and stores in course of manufacture which may be in possession of the Supplier at the time of such termination or such portion thereof as the Purchaser may deem fit, except such materials, bought out components and stores as the Supplier may with the concurrence of the Purchaser elect to retain.

18. ACTION BY PURCHASER AGAINST BIDDER(S)/ VENDOR(S) IN CASE OF DEFAULT.

- 18.1 In case of default by Bidder(s)/ Vendor(s) such as
- (a) Failure to deliver and/ or commission any or all of the goods within the time period(s) specified in the contract, or any extension thereof granted by the purchaser pursuant to clause 15 of this section;
 - (b) Failure to perform any other obligation(s) under the Contract; and
 - (c) Equipment does not perform satisfactory in the field in accordance with the specifications;
 - (d) Or any other default whose complete list is enclosed in Appendix-1 of Section-4, Part-A;
- Purchaser will take action as specified in Appendix-1 of Section-4, Part-A.

19. TERMINATION FOR INSOLVANCY: (CLAUSE DELETED)

20. ARBITRATION:

- 20.1 In the event of any question, dispute or difference arising under this agreement or in connection there-with (except as to the matters, the decision to which is specifically provided under this agreement), the same shall be referred to the sole arbitration of the CGM, BSNL, MHTC or in case his designation is changed or his office is abolished, then in such cases to the sole arbitration of the officer for the time being entrusted (whether in addition to his own duties or otherwise) with the functions of the CGM, BSNL, MHTC or by whatever designation such an officer may be called (hereinafter referred to as the said officer), and if the CGM, BSNL, MHTC or the said officer is unable or unwilling to act as such, then to the sole arbitration of some other person appointed by the CGM, BSNL, MHTC or the said officer. The agreement to appoint an arbitrator will be in accordance with the Arbitration and Conciliation Act 1996. There will be no objection to any such appointment on the ground that the arbitrator is a government servant or that he has to

deal with the matter to which the agreement relates or that in the course of his duties as a government servant he has expressed his views on all or any of the matters in dispute. The award of the arbitrator shall be final and binding on both the parties to the agreement. In the event of such an arbitrator to whom the matter is originally referred, being transferred or vacating his office or being unable to act for any reason whatsoever, the CGM, BSNL, MHTC or the said officer shall appoint another person to act as an arbitrator in accordance with terms of the agreement and the person so appointed shall be entitled to proceed from the stage at which it was left out by his predecessors.

20.2 The arbitrator may from time to time with the consent of both the parties enlarge the time frame for making and publishing the award. Subject to the aforesaid, Arbitration and Conciliation Act, 1996 and the rules made there under, any modification thereof for the time being in force shall be deemed to apply to the arbitration proceeding under this clause.

20.3 The venue of the arbitration proceeding shall be the office of the CGM, BSNL, MHTC at Mumbai or such other places as the arbitrator may decide.

21. SET OFF :

Any sum of money due and payable to the Supplier (including security deposit refundable to him) under this Contract may be appropriated by the Purchaser or the BSNL or any other person(s) contracting through the BSNL and set off the same against any claim of the Purchaser or BSNL or such other person or person(s) for payment of a sum of money arising out of this Contract or under any other contract made by the Supplier with the Purchaser or BSNL or such other person(s) contracting through the BSNL.

22. MONTHLY DETAILS OF SUPPLIES :

The Bidder, who is given Purchase Orders, must give the details of the supplies made against all the purchase orders every month on the first working day of the following month to the concerned planning branches of the concerned circle/licensed service area of BSNL,

23. DETAILS OF EQUIPMENT :

The Bidder shall furnish the name of his collaborator (if applicable), brand name, model no. and type of the Equipments /products offered in this Tender. Detailed technical literatures of the products should also be submitted. No change in either technology or product shall, ordinarily, be permitted after opening of Bids.

24. FALL CLAUSE :

24.1 The prices once fixed will remain valid during the Scheduled Delivery Period except for the provisions in clause 12.1 of section 5 Part A. Further, if at any time during the Contract:

(a) It comes to the notice of Purchaser regarding reduction of price for the same or similar equipment/service;

and/or

(b) The prices received in a new tender for the same or similar equipment/service are less than the prices chargeable under the Contract.

24.2 The Purchaser, for the purpose of extension to the delivery period, if any, will determine and intimate the new price, taking into account various related aspects such as quantity geographical location etc. and the date of its effect for the balance quantity/service to the Vendor. In case the Vendor does not accept the new price to be made applicable during the extended delivery period and the date of its effect, the Purchaser shall have the right to terminate the Contract without accepting any further supplies. This termination of the Contract shall be at the risk and responsibility of the supplier and the Purchaser reserves the right to purchase the balance unsupplied quantity/service at the risk and cost of the defaulting vendor besides considering the forfeiture of his performance security.

24.3 The Supplier shall be required to ensure that:

(a) While applying for extension of time for delivery of Equipment/Service, if any, the Supplier shall furnish an undertaking to the effect that ***"We have not reduced the sale price, and/or offered to sell the same or similar equipment/service to any person/organization including Department of Central/state Government or any***

central/state PSU at a price lower than the price chargeable under the Contract for scheduled delivery period."

- (b) In case undertaking as in Clause 24.3(a) is not applicable, the Supplier shall give the details of prices, the name(s) of Purchaser, quantity etc. to the Purchaser, while applying extension of delivery period.

25 COURT JURISDICTION :

- (i) Any dispute arising out of the Tender Document/Bid /evaluation of Bids/issue of APO shall be subject to the jurisdiction of the competent court at Mumbai .
- (ii) Where a Supplier has not agreed to arbitration, the dispute/claims arising out of the Contract /PO entered with him shall be subject to the jurisdiction of the competent court at the place from where the Contract /PO has been issued.

"This Contract / P.O. is subject to jurisdiction of Court at Mumbai only".

26. COMPLIANCE TO APPLICABLE LAW :

26.1 SECURITY REQUIREMENTS :

- a) The Supplier shall enable the Purchaser to comply with Applicable Laws including but not limited to notifications, circulars etc issued by DoT from time to time.
- b) The Supplier recognizes and accepts that in order to make, maintain and ensure Purchaser's networks compliant with security related instructions and guidelines issued by the DoT from time to time, complete cooperation and commitment of the Supplier is necessary. To help and address the business continuity, communication, security requirements and security management of Purchaser's network, the Supplier shall execute an agreement in the form as contained in Section 13 of the Tender Document before issuance of any APO by the Purchaser, subject to the guidelines issued by DOT as amended from time to time. It is clarified that the execution of such agreement shall be a condition to the effectiveness of the Advance Purchase Order.

26.2 COMPLIANCE WITH LICENSE :

The Supplier shall assist and provide support as and when required to the Purchaser including the providing of information and documents to comply with the provisions of the Licenses, any amendments made thereto as well as any notifications, circulars, letters issued by DoT or any other Governmental Authority from time to time specially in relation to security clearance and lawful interception.

26.3 NON-COMPLIANCE :

The Supplier, including their personnel, employees, associates and sub-suppliers shall be solely responsible for complying with the statutes, laws, regulations, subordinate legislation, administrative orders and instructions issued by relevant Government Authorities, regarding, but not limited to, environment, industrial relations, security and taxation, during the performance of their respective obligations under this Contract. Without limiting the generality of the foregoing, the Supplier shall be responsible for compliance with the Applicable Laws and similar regulations applicable to its activities hereunder, at its own cost and expenses.

In the event there is a delay by the Supplier which is solely attributable to Supplier in fulfilling its obligations under this Contract or any non-compliance or breach of obligations under this Contract by the Supplier due to which any Governmental Authority imposes sanctions on Purchaser, which results in financial and other liabilities on the Purchaser, the Supplier shall be liable to make good such loss immediately which has been suffered by the Purchaser.

SECTION -5 PART B
SPECIAL CONDITIONS OF CONTRACT

1. SPECIAL CONDITIONS OF CONTRACTS :

The Special Conditions of the Contract shall supplement the 'Detailed Notice Inviting Tender' as contained in Section-1, 'General Instructions to the Bidders' as contained in Section-4 Part A, "General Conditions of the Contract" as contained in Section-5 Part A. Wherever there is a conflict, the provisions herein shall prevail over those in GRs, Section-1, Section-4 Part A and Section-5 Part A.

2. SCHEDULE OF ACTIVITIES FOR THE TENDER :

2.1 The following is the tentative schedule of activities associated with the Tender:

Sl.No	Description of the activity after release of Tender Document.	Schedule
1.	Pre-bid conference after release tender document.	19/05/2015 ; 1100 Hrs
2.	Receipt of queries from prospective bidders after release of tender document.	From 20/05/2015 to 25/05/2015
3.	Reply to queries of bidders.	Up to 02/06/2015
4.	Submission of bids.	From 20/05/2015 up to 09/06/2015 : 11:00 hrs.

Any change in the schedule will be notified on the web site www.eprocure.gov.in The prospective Bidders are required to keep a watch on this web site for any change in the schedule.

2.2 **VENUE OF PRE-BID VENDORS CONFERENCE:** Vendors conference shall be held at the *Conference Hall : O/o the Chief General Manager, Maharashtra Telecom Circle, 2nd floor, C wing, BSNL Admin Building, Juhu Road, Santacruz (W), Mumbai-400054 at 11:00 hrs of 19/05/2015.* Any change shall be communicated through E-tender portal www.eprocure.gov.in.

3. GUIDELINES FOR SUBMISSION OF SOFT-COPY OF THE BID :

The following guidelines shall be observed in submitting the soft copy of the Bid:

- (i) The softcopy of the technical and commercial offer shall contain product documentation with complete details to verify the compliance to the requirements provided in the Tender. The product documentation shall be of the product offered and shall not be of generic in nature. ***(Please refer clause 3 (a) of Section-4 Part-B)***
- (ii) The softcopy of the Price Schedule in the financial Bid shall be in Microsoft Excel. The Excel sheet shall be set for precision of two decimals only [ie. For paise only] and the display shall also be set accordingly. ***(Please refer cl. 7 of Section-4 Part-B)***
- (iii) The card level Priced BoM shall also be in Microsoft Excel with the precision limited to two decimals only. ***(Please refer cl. 28 of Section-5 Part-B)***

4. CLARIFICATION :

(Please refer clause 5 of Section-4 Part-A& Clause 7 below)

5. QUALITY ASSURANCE, TESTING, INTEGRATION AND SUPPLY :

- (i) **Indigenous Equipment:** The supply of Equipments manufactured indigenously shall be accepted only after quality assurance test are carried out by the QA. . For other items which do not have TEC GR, QA shall be done based on a test schedule submitted by the Successful Bidder and approved by BSNL. However, for branded IT items such as computers, laptops, servers and computer peripherals that are supplied by ISO certified companies, BSNL, at its discretion, may accept the testing and quality certificate of such companies in lieu of QA requirements and copy of the same shall be submitted to the relevant Circle at the time of supply of these Equipments and to the INSPECTION circle for verification while offering for acceptance testing. The relaxation of QA requirement, if necessary, shall be given by BSNL on a case-to-case basis.

- (ii) **Imported Equipments:** The supply of imported Equipment shall be accepted only if it is accompanied with factory test reports/certifications of various performance parameters required as per relevant TEC GR & DTR of this Tender together with environmental test as per BSNL QA document QM333. Any imported Equipment not accompanied by the factory test reports/certifications of various services, features, facilities and performance parameters as per relevant TEC GR together with environmental testing certificate as per QA document QM-333 shall not be accepted. For the IT equipments such as Routers, servers etc. supplied by ISO certified companies Supplier shall seek for any specific relaxation, if necessary along with reasons, on QM333 requirements from CGM, QA before supplies are made which will be considered by QA circle and decision of the same will be binding. The factory test reports and certification with relaxed parameters are to be submitted along with the supplies.
- (iii) BSNL shall conduct certain quality tests at factory premises of the Successful Bidder or its vendor (as the case may be) like load test, environmental test and any other test for which Successful Bidder/Vendor expresses his incapability of demonstrating at the designated installation site.
- (iv) The supply of equipment/stores/services shall strictly adhere to the package discipline as described in the Purchase Order. A particular item mentioned in SoR would deem to have been received in full only if all the parts/components, installation material etc are supplied as a package during Scheduled Delivery Period.
- (v) The network Elements to be supplied shall be fully integrated and tested for all the features, facilities, services, performance, parameter setting, capacity, protocols etc., before despatch to the installation site designated by the Purchaser. No interworking trials for API, interfaces and protocols shall be allowed during testing in the field. Any delay arising out of such integration trials in the field would viewed seriously and dealt appropriately.

6. DISQUALIFICATION AND BARRING OF BIDDERS :

- 6.1 The Purchaser reserves the right to disqualify such Bidders who have a record of not meeting contractual obligations against earlier contracts entered into with the BSNL.
- 6.2 In the event of the Bidder/Supplier/Vendor's failure to perform any of the obligations under this Contract, the Bidder/Supplier/Vendor including his/their associated firms/companies/collaborators shall be barred from participating in any of the tenders of BSNL or it's units for a period of three years.
- 6.3 The Purchaser reserves the right to blacklist a Bidder/Successful Bidder debarring him to participate in any of the tenders floated by BSNL for a suitable period, in case he fails to honour the obligations under the Tender/Contract.

7. SEEKING CLARIFICATION ON THE TENDER DOCUMENT :

- 7.1 A prospective bidder, requiring any clarification on the Bid Documents shall notify the Purchaser in writing by FAX or by Email of the Purchaser as indicated in the invitation of Bid in following format. The Purchaser shall respond in writing to any request for the clarification of the Bid Documents, which it receives **14 days prior to the date of opening of the Tenders**. Copies of the query (without identifying the source) and clarifications by the Purchaser shall be posted on website www.eprocure.gov.in for information of bidders.

Query No	Section	Main Clause	Sub clause	Sub-Sub Clause	Sub -sub-sub Clause	Clause Description	Query

- 7.2 Clarifications issued by the Purchaser, either by its own volition or in response to the queries raised by the prospective Bidders shall form an integral part of Tender Document and shall be treated as amendment of relevant clauses of the Tender Document.

8 PROJECT IMPORT BENEFIT :

- (i) Benefit in custom duty, if any, on account of infrastructure project import shall be passed on to the Purchaser. The Supplier shall take action for arranging infrastructure benefit for telecom equipment. It shall be the responsibility of the Supplier to avail reduced rate of custom duty as applicable.
- (ii) In order to avail the above benefit, the Purchase Order for the imported Equipment shall be directly placed by the respective Circles who are the licensees to operate the cellular mobile service on the Supplier. The Supplier shall be responsible for the reasonability of the cost quoted for the imported Equipment including satisfying the custom authorities, if required, in this regard. The Supplier shall also be responsible for custom clearance, transportation, insurance etc., including payments thereof. The Supplier shall be fully responsible for the performance, compliance to TEC specifications and tender requirements of the imported Equipment.
- (iii) The Purchaser proposes to adopt provisions under High Sea Sales to avail infrastructure project import benefits and/or other benefits that accrue with it of the imported equipment. Since the title of the goods/materials would be in the name of BSNL after the High Sea Sales, the customs duty will be paid by the Purchaser directly to the customs authorities. The payment of customs duty shall be regulated as under:
 - (a) In case the custom duty levied by the customs authorities is less than the rate indicated in the Bid, the benefit of the reduced rate would be passed on to the Purchaser. However, if the rate of customs duty paid is higher than that quoted in the Bid and no revision in the duty structure is done by the Government at the time of import, the same will be absorbed by the Supplier. Revision in custom duty during and after the Scheduled Delivery Period will be regulated as per the clause 12.1 of Section-5 Part A.
 - (b) Custom duty paid directly by the Purchaser to the custom authorities including that, if any, paid in excess of that quoted by the Supplier shall be deducted in full from the first payment due to the Supplier
 - (c) subsequent to the payment of custom duty.

9 PAYMENT SCHEDULE & SUPPLY / INSTALLATION / COMMISSIONING SCHEDULE :

The payment shall be made in Indian Rupees only. The reference to the percentages at each Milestone is on a cumulative basis. The mode of payment (excluding AMC) is on a cumulative basis. Supply/Installation/rearrangement/commencement of commissioning of the systems should start within two months from the date of the Purchase Order and commissioning of entire systems including customization and rearrangement should be completed within 9 months from the date of the Purchase Order. The critical milestones for roll out along with payment due, circle wise, is given in the table below:-

No.	Critical Milestones of the Project	Scheduled Time from the date of P.O.	Payment Due
1.	Commencement of supplies & delivery of documents and manuals (Both hard & soft copy).	2 Months	Nil
2.	Supply of 100% Equipment along with all the associated equipments / Infrastructure.	4 Months	50% of the price of the equipment supplied less Customs Duty paid by BSNL, if any, as per 8(iii)(b) of Section 5 Part B.
3.	Installation, Integration and commissioning of IN including main and DR. Completion of A/T of the IN resolving all interoperability & charging issues	8 Months	60% of the Equipment cost of the supplied elements in the Zone and 60% of the Services cost in the Zone. This amount shall be released after adjusting the amount paid against supplies as above

4.	Migration of all existing customers/accounts and closure of all validation points	9 Months	90% of the Equipment cost and 90% of the Services cost in the Zone. This amount shall be released after adjusting the amount paid.
5.	One year of successful commissioning or on/after 80% loading of the network supplied, whichever is earlier, if the performance of the network is satisfactory and the deliverables, as per the requirements including customisation and services, are completed as per the Tender.		The balance 10% of the Equipment cost + Services cost in the Zone. This amount shall be released after adjusting the amount paid as above.

10.0 PAYMENT REQUIREMENTS:

- 10.1.1 Delay in meeting the schedule provided above shall attract the provisions of liquidated damages as provided in the relevant clauses of the Tender.
- 10.1.2 Functional testing and successful completion of pre-A/T testing, conducted by the Supplier in association with BSNL.
- 10.1.3 For claiming payments against supplies Milestone (Milestone 2), the following documents are to be submitted by the Supplier to BSNL:
- Invoice.
 - Delivery Challan.
 - Supplier certificate for dispatch.
 - Excise gate pass/invoice for Indigenous equipment and High Sea Sales Agreement and Customs duty challan for the imported equipment.
 - Inspection certificate of QA for Indigenous equipment
 - Consignee receipt confirming receipt of the (i) specified quantity of the equipment mandated for the supply/payment milestone (ii) Factory Test Reports for the imported equipment
 - Proof of payment of octroi /entry tax/LBT etc., if any
- 10.1.4 For claiming payments against commissioning Milestone (milestone-3) the following documents are to be submitted by the Supplier to BSNL:
- Invoice.
 - A/T certificates for the commissioning.
 - A certificate to the effect that all the charging and inter-operability issues have been resolved, provisional AT clearance received
 - A certificate that all the software loaded in the corresponding equipments, their testing, operational software etc including the media have been made over and received in the circle. The certificate should indicate clearly the list of software made over along with media and the original license in the name of BSNL.
- 10.1.5 For claiming payments against services for Milestone (milestone-4), the following documents are to be submitted by the Supplier to BSNL:
- Invoice along with the following documents/certificates
 - A certificate that Validation has been completed and all the pending issues have been closed, is to be provided by the Supplier along with the invoice.
 - Certificate regarding successful migration of all customers and accounts on new platform, to be issued by DE In-charge.
- 10.1.6 For claiming payments under the Milestone-5, in addition to the documents stated in Clause 10.1.4, the Taking Over Certificate is also to be submitted along with the invoice.
- 10.1.7 The Supplier shall submit a mandate for receiving payment of Rs. 5 lakhs and above electronically. Charges, if any, levied by the bank for electronic fund transfer shall be borne by the Supplier. The Supplier is required to submit the following information for this purpose:

- (a) Name of the beneficiary's bank and branch.
 - (b) IFSC code of the beneficiary's branch.
 - (c) Account number of the beneficiary.
 - (d) Branch serial number (MICR No.).
- 10.1.8 Customs duty already paid directly by BSNL shall be deducted in full from the first payment due to the Supplier, subsequent to the payment of customs duty.
- 10.1.9 BSNL, if required by Applicable Law, shall deduct withholding tax at source as per the applicable rates at the time of raising of the invoice for which it shall provide tax withholding certificate to the Supplier. Provided further, that if required by Applicable Law, BSNL shall pay the service tax on the approved invoice, in compliance with Applicable Laws to the Supplier who shall be obliged to pay the service tax to the authorities within the statutory timelines provided under Applicable Law.
- 10.1.10 Anti dumping duty, if any, levied shall be borne by the supplier.
- 11. COMMERCIAL USE :**
The Purchaser reserves the right to commercially exploit the installed Equipments. Such commercial utilisation of the network shall not entail the Supplier to claim deemed completion of otherwise incomplete obligations under the terms and conditions of this Contract and shall not relieve the Supplier of the liability under the relevant clauses of liquidated damages arising out of such non-completion/delay.
- 12. TECHNOLOGY :**
The Bidders should clearly indicate the technology for which the offer has been made. If it is a case of transfer of technology, the details such as name of technology, name of company etc. should be given and the copy of Memorandum of Understanding for Transfer of Technology and RBI clearance, if applicable, should be enclosed.
- 13. SCOPE OF TENDER :**
The Tender invites Bids for planning, engineering, supply, installation, testing, commissioning, migration and annual maintenance of IN & VOMS, battery, power plant/UPS for these equipments, in West Zone of BSNL on turn key basis. The Schedule of Requirements (SoR) is provided in Section-6 of the Tender Document. All the Equipment to be supplied shall conform to relevant latest TEC specifications including amendments up to date as per details provided in Section-7 and DTR forming part of this section (Annexure-I).
- 14. FACILITIES :**
The Purchaser shall provide space, commercial AC mains power supply, air conditioning and other environmental requirements for installation of various components of IMPCS equipment at the core sites which shall be BSNL sites. Supply, installation, testing and commissioning of battery and power plant, Inverters and UPS along with 4 Hours battery backup, wherever required for IN and VOMS **Including exploitation terminals as per DTR Clause 1.33** equipments shall be the responsibility of the Bidder and shall be quoted by them additionally in the Bid, if the same are not indicated in the SoR of the Tender Document. The battery backup shall be for a minimum period of 4(FOUR) hours. The UPS shall of 1+1 configuration catering to the required capacity with an ACDB at the output. If no TEC approved UPS of the required capacity is available, UPS of reputed brands may be supplied. The Bidders shall indicate the space, power and air conditioning requirement of each unit as part of their Bid.
- 15. GUIDELINES FOR BATTERY AND POWER PLANT :**
The following guidelines shall be followed for the battery, power plant to be supplied for the core/ IN locations:
- 15.1 SMPS power plant is to be provided as per TEC specification TEC/GR/FLA/SMP-001/06 JUN 2010 and MF VRLA/Tubular battery sets as per G/BAT-01/03 MAR.2004, GR/BAT-03/01 MAR 2006 with amendments thereto. The Bidder should source the equipment (both batteries and SMPS power plants) from TSEC approved manufacturers who have service network across the concerned LSA to service both hardware and software components of the Power Plants and Batteries.
- 15.2 Only 100 amp or higher power modules shall be provided in power plants to be supplied for core network element sites((G)MSC S, (G)MGW, SGW, BSC, RNC , VAS,IN elements etc.)

- 15.3 The cabinet of power plant supplied at main locations shall be capable of generating at least 2000A. It shall be possible to increase the capacity of power plant just by addition of modules.
- 15.4 SMPS power plants are to be compatible with VRLA batteries.
- 15.5 While engineering the sites, the capacity of the battery sets shall be planned such that the battery sets are not required to be discharged beyond 80% of their rated capacity at any time to meet 100% load.
- 15.6 For MSC Server, MGW/TRANSCODER/IN and BSC locations, it is to be ensured that a total of 04 hours back up is provided through two battery banks at each location. Therefore, each battery bank of 3X equipment load in DC Amps/0.8 AH capacity will be required, where 0.8 is the permissible depth of discharge at 3Hr discharge rate of battery to an end cell voltage of 1.75Volts per cell. For BTS & Node B locations, it is to be ensured that a total of 04 hours back up is provided through two battery banks at each location. Therefore, each battery bank of 4X equipment load in DC Amps/0.8 AH capacity will be required, where 0.8 is the permissible depth of discharge at 4Hr discharge rate of battery to an end cell voltage of 1.75Volts per cell. Each battery bank should not be less than 300AH.
- 15.7 Suitable switching arrangement for inter connection between various items of SMPS Power Plants, MFVRLA Battery sets and their interconnection in switching cubicle and further power distribution to equipment as required for the ultimate capacity of the power plant and battery sets shall be provided.
- 15.8 The following shall be assumed while calculating the lengths of power cable and the same shall be included as a distinct item in the detailed priced BoM of Installation material for respective elements:
- For core sites- 50m run from Power plant room to the switch room and from switch room to equipment as per the actual layout.
 - An average run of 20m for core sites shall be taken from each battery bank to power plant.
 - For LT panel to power plant, in the core sites, an average run of 50m shall be taken
- 15.9 SMPS power plant capacity should be such that it is to take following loads simultaneously:-
- 10% of rated capacity of MFVRLA battery, (battery float load for all sets)
 - Equipment load during busy hour (Detailed calculations to be given for all configurations).
- 15.10 SMPS Rectifier efficiency is to be taken as 90%.
- 15.11 Redundant SMPS Module(s) shall also be provided as hot standby in addition to requirement as calculated above. There should be a provision of one redundant module for every five modules (or part thereof as per details given below) in a system.
- The number of SMPS modules required for load and battery shall be calculated as below:
 If Y = dividend = the number of modules required for load and battery as calculated above,
 5 (five) = divisor
 N = quotient
 M = remainder = natural number,
 Then $Y = N \times 5 + M$
 No. of spare modules required = either N when M is less than 3 or (N+1) when M is greater than or equal to 3. That is redundant modules shall be provided on the following basis:

	SMPS module as calculated vide Para 22.10	Spare SMPS Module (H/SBY) Required
1.	Upto 7	1
2.	8-12	2
3.	13-17	3
4.	18-22	4
5.	23-27	5
6.	28-32 and so on.	6

- 15.12 Maintenance spares including spares for control panel and spare fuses should also be provided. 5 numbers of each type of fuse used in the power plant may be supplied along with each unit power plant.
- 15.13 D.C. Distribution cabinet and power cables between the D.C. distribution cabinet & switch room and other related items shall have to be provided by the supplier. The details are to be calculated by Bidder based upon the capacity of Power plant and load of the equipment etc.
- 15.14 The power cable and bus bar shall be rated at 2 Amp/Sq. mm.
- 15.15 Only TEC approved equipment/Modules are to be provided.
- 15.16 Complete power plant and battery calculations and information regarding inter-connecting arrangements and layout shall be given. Ultimate capacity of SMPS-Power Plant as approved by TEC for SMPS modules of 25A, 50A, 100A, 200A etc. capacity, is to be indicated.
- 15.17 The price for each component such as SMPS modules, control rack, auxiliary rack/ expansion rack, power cable, cable trays, all types of fuse required, lugs, DCDB etc. shall be quoted.
- 15.18 The Supplier shall arrange DCDB, MCBs etc and extend DC power supply, AC power supply, earthing etc from the available points to the supplied equipments. Flexible, multistrand, fire retardant copper cables of appropriate gauge with ISI rating only should be used with tinned copper lugs of appropriate size fixed with crimping tool at the connecting ends. The power shall be tapped from MCB if the same is available at the power plant end or from the riser, if that is the case. DCDB shall be provided by the supplier with adequately rated circuit breakers in either case.
- 15.19 The circuit breakers [DCDB] shall conform to standards such as IEC 62019, IEC 60898, IS 8828 etc The distribution boxes shall CONFORM to IS 13032 /IS 8623 etc. ISI marking shall be an essential requirement.

16. SPACE REQUIREMENT FOR IMPCS EQUIPMENT :

The information regarding details of space requirement for IMPCS equipment as stated above, whether indoor or outdoor, shall be supplied by the Bidder network element wise along with the Bid.

17. STORAGE OF EQUIPMENT :

BSNL will provide the address of a warehouse store on Circle/area basis/ station basis for storing the Equipment for all the sites, which are not acquired or ready for handing over to the Supplier. The Supplier shall deliver the Equipment/material directly to the designated sites, for the sites already acquired/handed over. BSNL shall provide the information of such sites a week prior to the date of QA release/custom release/date of dispatch. However, if requested by Supplier, it may provide a single consignee at central location for all the equipment to be received in that Circle. In case the Supplier consolidates the supply of various equipments for a site, then it shall arrange space for storage of all such equipments till such time it is delivered to the ultimate site. In all cases, safe custody of the Equipment shall be the Supplier's responsibility. The material received at site or at BSNL store will be issued to the installing team of Supplier on written request in packed condition and the same shall be at the risk of the Supplier until the equipment is made over back to BSNL after commissioning.

18. EARTHING ARRANGEMENTS :

For the IN sites, the existing earth shall be tapped from the Earth Busbar.

19. ENGINEERING AND PLANNING OF THE IMPCS NETWORK :

- 19.1 The engineering and dimensioning of the various IMPCS network elements shall be done as per the Detailed Technical Requirements (DTR) specified in the **Annexure-I**.

20. NEW ENHANCED SERVICES/FEATURES :

Any new/enhanced services/features which may be required for competitive advantage of BSNL may be indicated by the Bidder for inclusion at the discretion of BSNL.

21. EXTRA ITEMS :

BSNL reserves the right to order extra infra items than those stipulated in SoR based on the actual site conditions in the field at the time of placement of the PO. It is also BSNL right to reduce the SOR items at the time of placing PO.

22. MAKE MODEL LIST :

22.1 The Bidder shall quote for only one make, model and manufacturer included in the proposal for each of the network elements (subject to the conditions given below). Once quoted in the Bid, no change of make, model or manufacturer shall, ordinarily, be permitted. Not more than one independent and complete offer shall be permitted from the Bidder. The Bidder shall furnish the details of make, model no., supplier together with complete details of the address of the supplier of the imported and indigenous equipments as part of the technical Bid.

22.2 For any evolving products, technologically upgraded/improved version of the product can be offered which shall be considered on a case to case basis.

23. EXTENSION OF ALARMS :

There shall have facility to extend the infrastructure alarms viz. power plant, battery, air conditioner, DG sets, fire alarm, temp alarms UPS etc. to the OMC/OSS/NOC/NMS. All the infrastructure equipments and systems supplied shall have inbuilt facility to extend alarm through potential-less NO/NC contacts or through change of suitable voltage levels as required by the radio equipment. The minimum set of alarms required are:

- (i) AC mains failure alarm
- (ii) DG on load indication
- (iii) Diesel Low (below a threshold level) alarm
- (iv) High temperature alarm.
- (v) Battery Low (Voltage of the battery bank below a threshold level) alarm
- (vi) DG Battery Low (Voltage of the battery of the DG set below a threshold level) alarm
- (vii) Fire Alarm

The Successful Bidder shall provide the tag block, terminate the alarm cable and do the required extension of the alarms from the respective infra elements to the central OMC/OSS/NOC/NMS. Responsibility of extending all these alarms from IN to OMC and from OMC to OSS/NOC/NMS lies with the Supplier.

24. OPEN INTERFACES :

All the Application Protocols, for implementation of the interoperability between network elements of different vendors, shall have open interfaces. The Successful Bidder shall provide the API along with complete documentation to facilitate opening of the system interfaces for establishing the system interoperability with any other system needing interconnections. The Successful Bidder shall provide all open APIs along with acceptance of APO. The Successful Bidder shall adapt to existing APIs the details of which shall be shared with BSNL as part of their agreement with the existing vendors as defined in this Tender Document.

25. NUMBERING SCHEME :

The numbering scheme for the proposed service shall be in accordance with approved numbering plan. Any changes, including that in software, required in the network due to changes in the technical fundamental plans, etc before the commissioning of the network shall be implemented by the Supplier free of all costs as and when requested by the Purchaser.

26. SUPPLY OF HARDWARE FOR IMPCS EQUIPMENT :

The Bidders shall supply hardware for various units of IMPCS equipment as per the projections made in this Tender Document. However, the racks/ shelves should be completely wired so that the expansions to the ultimate capacity, as per the projections made/specified in this document, are possible by adding PCBs/ Modules only.

27. RELATED ITEMS :

The Bidder shall indicate in the Bid any other related items (along with the price) not reflected in the Tender Document required for successful commercial launch of the service.

28. DETAILED BOM:

- 28.1 DTR provides a detailed requirement of the Purchaser. The Bidders shall provide along with the techno-commercial Bid, detailed unpriced price schedule as per the SoR indicating along with card level Bill of Materials ("**BoM**") in the SoR with complete details of PCBs contained in each Module/unit of IMPCS together with their quantity required to meet the performance requirement sought for in the Tender and DTR. A detailed specification of generic items such as laptop and desktop computers, Printers, inverters, UPS etc shall form part of the technical Bid and shall be of latest versions in the market. The card level BoM for all the network elements, but with itemized prices shall form part of the financial Bid. Bids without such details shall be loaded with the price of highest configuration of such items quoted by other Bidders. This need arises out of the requirement of the Purchaser to engineer and design network for the individual Licensed Service Area and to estimate the quantity of equipment/material to be ordered for each such area. Absence of itemised prices of any such items, if found essential to be ordered shall have to be supplied free of cost. The Bidder shall ensure that the Bid is complete and comprehensive as regards detailed card level BoM.
- 28.2 The submission of detailed BoM sought above shall apply to both hardware and software line items. While the BoM for hardware line items shall have itemized card level prices, the BoQ ("**Bill of Quotes**") for the software line items shall have itemized prices for each of the software block and the number of units of each software block under quantity column.
- 28.3 Lump sum price quote for the software line items are not allowed. Every software line item shall have a detailed BoQ with price indicated for each of the component software item together with unit price and quantity. The Bidder shall indicate the software price for each and every feature, facility, interface peripheral etc. as part of their offer and such detailed BoQ with price shall form part of the financial Bid. The same BoQ for the software line items with itemised price masked shall form part of the techno-commercial bid.
- 28.4 The price of each of the discrete items in Detailed BOM upto card level may be quoted as a percentage of the total price(upto two decimal point) quoted for the main item concerned. While apportioning the percentage price of a main item for which price has been explicitly quoted in the financial Bid, care should be exercised to ensure that the total of all the sub-items forming part of the main item shall be equal to 100 %.
- 28.5 A Bid without the detailed BoM/BoQ may be rejected as substantively non responsive. However, if BSNL chooses to consider the Bid, then non-submission of the detailed BoM/BoQ shall be considered as the Bidder conveying his explicit consent to BSNL to exercise the right of BSNL to determine the detailed BoM/BoQ and individual item prices with the information available with BSNL and deemed fit.

29. THE LAYOUT OF THE RACK/SHELF :

The layout of the rack/shelf detailing the equipment of the cards/modules demonstrating the result of the dimensioning done in compliance to requirements stated in the Tender shall be provided as part of the Bid. This should accompany with proper legend etc so as to enable verification with detailed BoM of the equipment and product documents supplied.

30. THIRD PARTY VENDOR :

The Purchaser recognises the fact that the scope and extent of the work would necessitate the Bidder to seek supply and services from a number of third parties to complement his own supplies and services to meet the Tender requirements. With a view to ensure transparency in the third party transactions and to safeguard the interest of the Purchaser as the principal buyer, the Bidder shall furnish the maximum mark-up charged from BSNL over the price quoted by the third parties for the supplies and services. As the Bidder's purchase from the third party is for and on behalf of BSNL, the Purchaser reserves the right to inspect the agreement between the Bidder and third parties for procurement of the concerned item including the agreement on pricing and payments. However, all such information shall be kept confidential by the Purchaser.

31. CHANGE IN THIRD PARTY VENDOR :

Notwithstanding the provisions contained in Clause- 22 above, should there be a need arise to change the third party vendor, the substitute third party vendor shall, ordinarily, be from among those whose network element had qualified on technical evaluation. Such requests for change of third party vendor shall be considered only under exceptional circumstances and needs to have the specific approval of the Purchaser . In such a case the Supplier shall provide the contract entered into with the third party vendor and the price for the specific item shall be restricted to lesser of the finalised price or the price payable to the third party vendor as per the agreement entered with him. The mark up shall be limited to that indicated in the initial offer of the Bidder for the specific item. In the eventuality of a commissioned equipment failing to meet the Tender requirements and if a request for change of Equipment is sought by the Supplier, BSNL reserves the right to accept or reject such request. Further BSNL reserves the right to induct or expand from among the existing equipment of those technology equipments which are presently in operation in the BSNL network. The cost of any such replacements made by the Purchaser shall be deducted in full from the amount payable to the Supplier.

32. SUPPLY OF ADDITIONAL HARDWARE AND SOFTWARE :

The Supplier shall be bound to supply the additional hardware/ software for expansions as per the need of the Purchaser on the finalized itemised price after applying the applicable duties and taxes for meeting the expansion needs, as per mutually acceptable time line.

33. TRAINING :

As part of the project, each Supplier shall provide training for a minimum of 50 person-months (1500 person days) to BSNL/DoT officers in India/abroad in planning, engineering, installation, operation, testing and maintenance of system and software. The training on Planning, engineering, installation, testing and commissioning needs to be organised immediately on acceptance of APO while other training may be organized as the IN is being rolled out. The training modules shall be finalized by Bidder in consultation with Purchaser. However, the travel expenses, boarding and lodging for the trainees shall be borne by the Purchaser.

34. ADDITIONAL ITEMS :

The SoR details the various network components that shall be required which needs to be further elaborated by the Bidders by providing detailed bill of material along with the itemised card level prices. Every effort has been made to capture all the items mentioned in the DTR or elsewhere in the Tender. The list of all such items which might have been left out and not captured in the SoR but requirement of which is spelt out in the DTR or elsewhere shall be serialised beyond the last serial no of the SoR and price quoted along with the detailed BoM and the quantity that may be required. As mentioned above in Clause-28 unpriced price schedule with detailed bill of material shall form part of the techno-commercial Bid. The sanctity of sl.no and description as appearing in the SoR may be maintained by the Bidders whether the component forms part of the indigenous or imported items. The Bidders shall ensure that rates quoted for individual items are reasonable for ordering these items separately. Although a separate Price Schedule has been called for as per prescribed format specified in Section-11 Part-II of this Tender, the Bidders are required to provide a consolidated format in a separate excel sheet of the complete quote in accordance with details appearing in the SoR.

35. INTEGRATION WITH EXISTING OPERATIONS SUB SYSTEM(OSS) & BUSINESS SUPPORT SYSTEM(BSS) :

35.1 The Successful Bidder shall ensure that the Network/IN Equipments supplied under this order are integrated with the existing BSS and upcoming NMS/NoC/OSS systems of the BSNL. The necessary APIs or EMS details shall be shared for seamless integration with BSNL NMS/OSS/NoC setups

35.2 The Successful Bidder shall integrate the EMS of the IN and VOMS network elements supplied under this Tender Document with the OSS/NOC/NMS of BSNL network to ensure replication of the current reports and monitoring capability (calendar

management, configuration management, fault management, performance management, security management, software management, diagnostics and statistical information features to be extended) for the new elements as well.

35.3 The Supplier shall furnish all details of CDR etc to the Purchaser.

36. INTERWORKING WITH EXISTING NETWORK ELEMENTS :

36.1 It shall be the responsibility of the Successful Bidder to make the Equipment supplied under this project inter-work with all other network elements supplied by other vendors and the existing equipment. The Vendor shall also ensure that the interworking of network with the various network elements of other technology in other licensed service areas of the BSNL Mobile network (both post-paid and pre-paid services) for nationwide seamless working and provision of services to its subscribers. Any hardware requirement in terms of interfaces etc the existing NEs and the software requirement such as additional licenses/API implementation etc, wherever required, shall have to be done by the Successful Bidder free of all costs to BSNL. It shall be the responsibility of the Successful Bidder to get their Core network integrated with the existing equipment. It shall be the responsibility of the Successful Bidder to get their RAN integrated with the existing/new core and ensure seamless 2G<->3G and upcoming LTE interoperability, reselection, handoff, hand over etc between the new RAN and existing RAN (GERAN as well as UTRAN). It shall be the responsibility of the Successful Bidder to get their equipment integrated with the existing/new Core, Radio, OSS & BSS Systems and ensure seamless integration & interoperability.

36.2 All the network elements and software units supplied for the system shall be fully compatible with the existing systems and inter-work seamlessly without any limitation. In case any hardware/software upgrades are required in the existing systems to make them compatible, the Successful Bidders shall be fully responsible for the same as part of this Tender Document. The Tender Document envisages seamless roaming between GSM & WCDMA and LTE networks independent of network. It shall be the responsibility of the Supplier to identify the network elements for which upgradation will be required and such upgradation shall form part of entire package. The scope of upgradation of the existing network infrastructure shall include necessary upgrades to ensure smooth interworking of offered equipment with existing equipment with regard to voice and data handovers and reselections. This shall not include features and capacity upgradation of the existing equipments to meet present tender specifications.

36.3 The work of upgradation of the existing network elements being proprietary in nature, it is expected that the Successful Bidder shall coordinate and get the work done from the present incumbents.

36.4 In case the Successful Bidder fails to establish seamless interworking with the existing equipments, BSNL reserves the right to get upgradation done by the incumbent vendors at the cost of the Successful Bidder.

37. The Bidders shall furnish with the Bid detailed project implementation schedule by means of PERT/CPM/GANTT chart detailing the various activities involved, their time frame for completion and the dependency on other activities to match with the schedule of roll out specified herein.

38. EVALUATION :

38.1 The Financial evaluation methodology is as per Section- 4 Part A clause-23 of the Tender Document.

38.2 The offers of the Bidders shall be evaluated as a single package consisting of IN sub package. The offers of the bidders will be evaluated on the total package basis. Although the bid is submitted electronically but evaluation will be done manually.

38.3 Further, the Bid shall be evaluated as a package quoted by the Bidders for various equipments/materials/services as per the criterion given below:

- (i) The price of various components forming part of the SoR at Section-6 shall be evaluated. It shall also include all those items which respective Bidders consider essential for commissioning purposes. The sanctity of the price of individual items shall be maintained by the Bidders within the package.

- (ii) For such items which are to be included in addition to what has been mentioned in the SoR, it is the responsibility of Bidder to indicate the quantities to be ordered for the project execution and it shall also form part of evaluation of total package. If the Bidder indicates quantities of any of the item as zero, such items are to be supplied free of cost irrespective of quote being available. Further the quantity of such items shall match with the quantity specified for the network element to which such an item is associated with.
- (iii) The prices of each individual item shall form part of financial Bid and the total package price for evaluation shall be the quoted price excluding AMC + NPV of the AMC of seven years discounted @ 12% per year **(Please refer clause 10 of Section-4 Part-C)**
- (iv) The Bidder shall quote the cost of AMC for a period of 7 years for all the elements (except for the battery) from the date of completion of the project and on the expiry of the warranty as mentioned in clause-61. The Bidders shall quote the AMC prices as a percentage of the quoted equipment and software cost for each of the seven years. The NPV of the quoted AMC price at the rate of 12% taken from the date of start of AMC (i.e. after expiry of the warranty period) shall be included in the total package price for evaluation as defined in clause above. The amount of AMC shall be payable in arrears in half yearly instalments.
- (v) A minimum AMC cost of 3% of the equipment and software cost shall be considered for evaluation, if the rate of AMC quoted by the Bidder is less than 3%. However, payment towards AMC shall be as per the corrected quoted bid price.
- (vi) Although the AMC amount quoted is taken for evaluation as referred above, the amount payable towards AMC charges shall be determined based on the actual purchase made by BSNL.
- (vii) In order to establish techno-commercial parity among the Bids, the financial Bids shall be loaded as below:
 - (a) Cases in which Bidder has not quoted the price of the item mentioned in the SoR of the Tender Document and has not given any comments/justifications for not quoting the same, the price Bid will be loaded with the maximum price quoted for that item by any other Bidder for the purpose of evaluation.
 - (b) Cases in which the Bidder has quoted for less quantity for any of the items than that indicated in the SoR of the Tender Document, then the price Bid will be loaded to the extent of the difference in quantity of the item to meet the full requirement of the SoR on a pro-rata basis for the purpose of evaluation. For ordering purposes, the unit price in such cases shall be re-worked for the total quoted price with the revised quantity.
 - (c) No loading is envisaged for the following in case the Bidders submit unconditional undertaking to meet the Tender requirements:
 - (i) Realisation of the features and functionalities that are sought in the Tender for which requirement of equipment is not explicitly indicated in the SoR of Tender Document.
 - (ii) Equipments and materials that are to be captured by the Bidders from the various clauses of the Tender Document and GR.
 - (iii) Cases in which Bidder have not quoted some features in his equipment and the price for that feature is not possible to deduce from the quotes of the other Bidders.
 - (iv) For items that are specified in lots.
 - (v) Items for which a minimum quantity is specified in the SoR, if any, with certain dimensioning guidelines, if the SoR submitted along with the Bid includes at least the specified minimum quantity.
 - (d) No de-loading of the Bid is envisaged, if the quoted quantity in the Bid is higher than that requested in the Tender for the purpose of evaluation.
 - (e) Loaded items shall be supplied free of all costs to BSNL.
 - (f) Offer to L1 (and L2, L3 etc. if required) after correcting the arithmetical errors and loading shall not tantamount to counter offer.

CLAUSE 39 TO 50 ARE DELETED.

51. PRESUMPTION FOR CERTAIN ITEMS :

This Tender Document seeks a comprehensive and complete requirement of hardware and software for the successful installation, commissioning and migration of IN. In case the Bidder has not quoted for any of the item that are essential for the completion of the project, it shall be presumed that cost of such items is covered as part of some other sub-system of the offer and no extra amount shall be payable by Purchaser. In the evaluation of the Bid, cost of such item shall be taken as 'Nil' while the same shall be made available to Purchaser as per requirement without any additional cost. The Successful Bidder shall be required to supply all material/goods/services required to make the equipment operative as per the requirements, after integrating with the existing network (even if it is not shown in Bill of Material).

52. LIQUIDATED DAMAGES/ INCENTIVES :

- (i) The Supplier shall be levied liquidated damages at the rates as defined in the General Conditions of Contract as provided at Clause 16 Section-5 Part A of the Tender Document for any delay in the turnkey job entrusted to the Bidder.
- (ii) In the present case of turnkey solution of supply, installation and commissioning of the services including the relocation of the radio subsystems, where the delayed portion of the delivery and provisioning of service materially hampers effective usage of the systems otherwise deployed in the Licensed Service Area, liquidated damage charges shall be levied as above on the total value of the Purchase Orders. The liquidated damages shall also be leviable with reference to commissioning of entire network and services in the licensed area. Should there be any delay in the availability of site, civil infrastructure, media or any other BSNL deliverables, it shall be considered on a case to case basis for relaxation in levy of liquidated damages, by the concerned heads of circles who shall be the final authority for deciding the case. However, the Purchaser may accept the network, if the Supplier submits coverage map of the town actually realised as obtained from the drive test tool with a date and time tag, duly acceptance tested within 21 days of the extended delivery period by the INSPECTION circle and accepted with a copy to the Purchaser. In such a case liquidated damages charge is leviable, if any, up to the date as appearing in the drive test map provided to the INSPECTION circle.
- (iii) The following timelines shall be followed for site make over:
BSNL shall make over the sites that are ready with all BSNL deliverables to the supplier within four weeks of date of issue of Purchase Order.
- (iv) The liquidated damages will be levied from the identified milestone date till the date of commissioning of IN in accordance with Section-5 Part A clause-16. However, if the Supplier is able to rollout 100% capacity within the milestone timeline identified in clause 9 of Section 5 Part B, then the liquidated damages envisaged for the network shall not be levied. Should there be a time overrun on the total project timelines, then in addition to the liquidated damages levied for the delay in the network milestone, LD shall also be levied on the proportionate cost of the network for the delayed portion of the network.
- (v) *Quantum of liquidated damages assessed and levied by the Purchaser shall be final and not challengeable by the Supplier.*
- (vi) The Supplier shall be provided an incentive @0.5% of the cost of the core network element for each week of early commissioning of core network. Similarly, Supplier shall also be provided an incentive @0.5% of the project cost for each week of early commissioning of the entire access network as specified in the schedule. The total value of the incentive shall be limited to a maximum of 3% of the total value of the Contract excluding AMC.

53. INCIDENTAL DAMAGES :

- 53.1 Notwithstanding any of the other provisions contained in this Contract, the Bidder shall protect, defend, indemnify and hold harmless BSNL and its employees, officers, Directors, agents, or representatives from and against any and all liabilities, damages, fines, penalties and costs (including legal costs and disbursement) arising from 'or' relating to:

- (a) Any breach of any statute, regulation, direction, orders or standards from any governmental body, agency, or regulator issued with respect to the product/services being supplied/provided under this Contract.
 - (b) Any claim made by third parties arising out of the use of the services of BSNL being provided using the equipment supplied under the Contract to the extent these are attributable solely to the poor quality or non compliance of the product/services to the respective specifications.
 - (c) Any claims arising from the customers or other service providers, in connection with interruptions 'or' degradation of services due to non availability of services beyond the stipulated time frame as contained in AMC and solely attributable to the supplier of the product and services under this Contract.
 - (d) Any claim that the Equipment/Services/'or' any value addition component offered and supplied by the Supplier in this Contract, infringe any patent, trademarks or copyright of any third party.
- 53.2 The Bidder shall furnish an unequivocal, unqualified and irrecoverable undertaking along with the Bid to the effect that;
 "During the Bidding process 'or' during the course of execution of the Contract 'or' at any stage thereafter, if it is found that the Bidder has fraudulently misrepresented any of the facts about the product/services etc being offered under the Tender/Contract, the Purchaser (BSNL) shall be free to claim a sum equivalent to damage as assessed by it subject to a maximum of the value of the tendered goods and services from the Bidder for such misrepresentation. The Bidder shall immediately on being told by BSNL pay such sum of money to BSNL. Quantum of damages under this clause assessed and levied by the Purchaser (BSNL) shall be final and not challengeable by the Bidder/Supplier".
- 54. SOFTWARE :**
- 54.1 Software version, including OS and application, of the Equipment being supplied should be latest and must be indicated in the Bid element wise.
- 54.2 All the software licenses supplied against this Tender Document shall be perpetual without any limitations on use and shall be licensed in the name of BSNL. Any product level support [called by names such as Annual Technical Support – ATS etc in the industry] for these softwares during warranty and AMC shall be the responsibility of the supplier. Implementation of all patches including in OS shall be carried out by the supplier in order keep them in the latest version, during warranty and AMC.
- 54.3 No software licenses spanning multiple network elements shall be allowed and if quoted in the Bid shall not be paid. The software licenses shall correspond to a specific network element and BSNL reserves the right to acquire the quantum of license for each network element independently and as it deems appropriate. The Supplier shall supply the extent of software license ordered and shall not impose any restriction on the use of such license for the bonafide operational requirements of BSNL.
- 54.4 All the system and application software loaded in the various network elements shall be supplied in reloadable media to the consignee in a manner suitable for re-loading in the network element.
- 54.5 All the Software upgrades and/or patches required for the maintenance of the system supplied/shown in the roadmap for realisation of the features stated in the Bid will be implemented without any additional cost at each site during the currency of the warranty and AMC and acceptance testing of the system will be done by the Supplier through an authority designated by BSNL for all functions of all systems after the implementation of Software upgrades/patches in each system. The Successful Bidder shall have to associate BSNL officers in developing any additional features/services in the software centres which are not inherently available in the system and required to match with the competition.
- 54.6 Software support centre:- Successful Bidder shall have to establish its software support centre within six months of award of Contract to provide software support to ensure smooth functioning of equipment supplied by them and to meet additional requirements from time to time. The Bidder shall submit details of location, number of personnel, facility to be made available for software centre in the Bid.

55. VALIDATION :

- 55.1 The systems/Equipments supplied in the network, and installed by the Bidders against the Purchase Orders placed on them shall be subjected to validation by the team designated by BSNL during which the tests as per the provisions in the TEC specifications and Tender requirements shall be conducted. The test schedule and procedures for the same shall be finalised by the testing authority in consultation with the Bidders within 2 months from the date of Purchase Order. Any deficiency found during validation in performance of the system as per the requirement shall be rectified by the Bidders immediately at all locations. The system for the purpose of equipment validation is defined as a set of network elements that shall be required to simulate all the services which are mandated in this Tender Document. If the offered equipment is of the same hardware and software that has already been successfully validated by BSNL for the requirement in earlier phases, the same need not be validated again. The new/additional features, if any, shall be validated in such cases.
- 55.2 Inter-working both intra and inter zones and between network elements of various vendors shall form an essential part of the requirement for validation clearance. The configuration that shall be offered for validation shall be decided by testing authority designated by BSNL and the testing methodology shall be finalised in consultation with the Supplier. The Supplier at their own cost shall provide all the testing equipment including load test equipment, and the post-processing tool etc. required for validation of the system.
- 55.3 If the offered equipment is of the same hardware and software that has already been successfully validated by BSNL for the requirement of earlier phases, the same shall not be again validated in full. Only the new/additional features, if any, shall be validated in such cases.

56. ACCEPTANCE TESTING :

- 56.1 The Purchaser reserves the right to appoint any testing authority including its own INSPECTION circle for carrying out acceptance testing of the network and its network elements. The Successful Bidder has to satisfy any such testing authority appointed by the Purchaser on technical performance. The acceptance test schedule generally covers the following:
- (a) Check on ironwork, cabling, wiring and earthing.
 - (b) Functional test on individual equipment/network for meeting the required features and parameters
 - (c) Load testing of engine , battery, UPS and power plants
 - (d) Capacity test
 - (e) 100% traffic trials.
- 56.2 The Bidder shall submit, as part of his Bid and in a separate volume, a comprehensive and complete test schedule together with test set-up and procedure for conducting acceptance testing on each of the network elements to be supplied under this project. The Supplier shall modify the tests as required by BSNL and finalize an acceptance test schedule at least one month in advance of beginning of installation in consultation with TEC/verification & testing authority. He shall also clearly indicate the specifications clause(s) verified by each test. The tests shall include test on the traffic handling capacity, performance etc. BSNL shall have the right to make modifications or additions to any test or techniques of measurement as considered necessary by it. **(added at DOC.(b) of 12 of clause 10 of section 4 part a:)**
- 56.3 The Bidder shall make available the software programs and testers required for carrying out the acceptance tests as per the schedule. The Bidder shall indicate whether the software package includes programs for testing the nodes under full load conditions and overload conditions by creation of artificial traffic. Such test program shall be supplied by the Bidder. He shall also indicate the technique used in the creation of such artificial traffic.
- 56.4 BSNL will carry out all the tests detailed in the acceptance test schedule to confirm that the performance of the different modules, subsystems, and entire installation satisfies the specified requirement of specifications including service performance.

56.5 Any components or modules failing during the acceptance tests shall be replaced free of cost at site by the Bidder immediately by spare cards from their stock holding. The replacement of faulty cards will be ensured within the time frame similar to what has been specified for the purpose of AMC.

56.6 After all acceptance tests have been successfully carried out to the satisfaction of the BSNL, the Inspection Circle, Jabalpur will certify the station/system as fit for commissioning when all the elements at the site including infrastructure have passed the required tests and all the pending points pointed out have been attended to. The said site-commissioning-order will be issued only when all the elements are satisfactorily functioning at that point in time and individual clearances of the elements at various points in time will not suffice for this purpose.

57. TAKING OVER OF SITES :

57.1 IN & VOMS SITES :

- (a) These sites (IN and VOMS) shall be taken over after three months of successful AT /proving-in during which time the Supplier will undertake all O&M activities with 24 x 7 manning at the main and Mated site along with generation of all revenue reconciliation reports, Traffic, FMCC & DSS connection / reports, Sancharsoft reports, activities for pairing of new SIMs.
- (b) The sites shall be made over with the following documents:
 - (a) Approved layout plan (along with soft copy in AutoCAD)
 - (b) Asset details including card level equipage.
 - (c) Acceptance Test results and clearance letter.
 - (d) Details of O&M logs and preventive and corrective maintenance tests done.
 - (e) Prescribed preventive and corrective maintenance practices

58. PACKAGE DISCIPLINE :

The Supplier shall schedule his supplies in such a way, to ensure the installation, testing, validation, commissioning and migration is completed as per schedule. The Supplier shall also ensure that those equipments that are meant for planning, design and installation shall be supplied as first set of items. The Bidder shall, as part of their Bid, indicate the sequence of supply of various items to appropriately take care the different lead times required for commissioning of the individual network elements to fit into the overall commissioning schedule.

59. OPERATION/ MAINTENANCE :

During the O&M period, the Successful Bidder shall put into operation the set of maintenance procedures, periodic test schedules, Traffic Report generation & analysis and remedial measures to be taken in each occasion, Extraction of performance statistics from the various OSS/OMCs and other network elements, Statistics regarding in-roamers and out-roamers in various formats and classification as required by the Purchaser, Management Information System (MIS) parameters for fault, performance and planning of network expansion. The Bidder shall also help BSNL to put into practice maintenance schedules viz opening of appropriate registers for log, test schedule and performance and fault recording. The Successful Bidder shall fully associate the staff of BSNL during this period so that the take over of the OM functions by the BSNL staff is smooth and they are able to operate & maintain the network efficiently and independently. The Bidder shall indicate, as part of the techno –commercial Bid, the number of resource persons that would be committed for this function.

60. TECHNICAL AUDIT OF NETWORK :

The Purchaser reserves the right to carry out technical audit of the network through any designated agency from time to time and Bidder shall take necessary corrective measures to conform to the performance parameters stipulated in the Tender Document within the period of Performance Security.

61. WARRANTY PERIOD :

- 61.1 The general warranty of the stores/ equipment supplied shall be for a period of twelve months from the date of commissioning of the complete network in the purchase order ("**General Warranty**")
- 61.2 Warranty for individual equipments/elements shall commence with the commissioning of the each of the equipments/elements and shall, thereafter, be brought under the general warranty as specified in clause-61.1 above.
- 61.3 All the terms and conditions of the AMC including the penal provisions shall apply during the Warranty period also except that no payment shall be made for warranty.

62. ANNUAL MAINTENANCE CONTRACT (AMC) :

- 62.1 The Bidder shall quote the cost of AMC for a period of 7 years(AMC for 6th and 7th year is optional) from the date of completion of the project and on the expiry of the warranty as mentioned in clause-61. The Bidders shall quote the AMC prices as a percentage of the quoted equipment cost other than the services. The normal day-to-day operations and diagnosis to the extent possible will be done by Purchaser.
- 62.2 The terms and conditions for AMC are given in Annexure-II. No separate charges shall be paid for visit of engineers or attending to faults and repairs or supply of spare parts.
- 62.3 The price for year-wise AMC shall truly reflect the efforts required to maintain the SLA specified for AMC in Section-5 Part B, Annexure-2 of the Tender Document. Towards meeting that objective, the price of AMC for any year shall not be higher than that for the subsequent year.
- 62.4 During the Warranty Period, the Bidder shall perform all the functions as enunciated under the AMC without any additional cost to BSNL. All the penalty clauses shall be applicable during the Warranty Period also in case of failure on part of Supplier.
- 62.5 The Bidder shall, at the time of submitting the Bid submit the proposal specifying the fault control centre locations together with the resources to be deployed including the number of personnel and how the bidder proposes to carry out repair under AMC. He shall also indicate what spare will be kept in different locations. The infrastructure planned to be created by the Bidder to fulfil his obligations under AMC and his action plan to deal with the various situations arising out of hardware and software faults shall be clearly indicated.
- 62.6 The Supplier shall provide all the consumables that are required to be replaced under the following circumstances:
(a) Periodic preventive maintenance of elements such as air filters in servers
(b) Becoming faulty and require to be changed during corrective maintenance.
- 62.7 The parts such as circuit breakers, fuses, contactors, change-over switches, chokes, fire extinguishers, surge arrestors, meters, burnt electric cables etc shall be replaced by Supplier upon poor/degraded/faulty performances.
- 62.8 The batteries supplied with UPS/Inverters/SMPS shall not be treated as consumables and any replacement or repair required to ensure their specified performance and capacity during their life time shall be the responsibility of the Supplier 6 years for the UPS/SMPS battery shall be taken as its effective life. During this lifetime, warranty/AMC shall be applicable and any replacement of any set/cells shall be done by the Bidder so that the capacity/performance maintained till the end of designated life.

63. BID SECURITY/ PERFORMANCE SECURITY :

- 63.1 The Bidder shall have to pay Bid Security of Rs. 1,70,00,000/- (Rupees One Crores Seventy Lakhs only) at the time of submission of the Bid and the Successful Bidder shall pay Performance Security @ 5% of the value of the Advance Purchase Order , within 14 days from the date of issue of the APO.
- 63.2 Performance Security shall remain valid for a period of 6 months after the expiry of warranty of the last portion of the Equipments commissioned under the project. The PBG(AMC) shall be equivalent to the five years AMC amount valid for a period of five and a half years from the date of start of AMC with scope for extension for the 6th and 7th years(at the applicable prices), should BSNL decide to enter into AMC for those years.
- 63.3 The Successful Bidder shall submit the original performance bank guarantee (PBG) to the Purchaser.

64. INDEMNITY BOND :

The Successful Bidder shall have to execute a bond to indemnify the BSNL from all statutory/legal liabilities towards all the personnel either employed by itself or in the rolls of its sub-vendors, who have been deployed for execution of various works against this project, that may arise due to various labour and other laws as specified by central/state from time to time. Further the engagement and employment of any personnel and payment of wages to them as per the existing provisions of various labour laws and regulations is the sole responsibility of the Bidder and any breach of such laws or regulation shall be deemed to be breach of this Contract. The duration of bond can be considered as duration of contract including AMC period.

65. SECURITY CLEARANCE OF FOREIGN PERSONNEL :

All foreign personnel likely to be deployed by the Successful Bidder for any activity pertaining to this project shall obtain security clearance from the Government of India prior to their deployment. The security clearance will be obtained from Ministry of Home Affairs, Government of India.

66. SAFETY HAZARD :

The Successful Bidder shall ensure that any installation carried out by them under this project should not become a safety hazard and is not in contravention of any statute, rule or regulation and public policy.

67. DOCUMENTATION :

The Successful Bidder shall supply one set of documents(hard copy and soft copy) on operation, maintenance and planning aspects of the system to each Circle.

68. No Remote Access (RA) shall be provided to any equipment manufacturer or any other agency out side the country for any maintenance/repairs. However, RA may be allowed for catastrophic software failure (such as failure to boot up etc.) which would lead to major part of the network becoming non-functional for a prolonged period, subject to meeting the following conditions:-

- (a) Whenever RA is to be provided, the Supplier shall notify BSNL in writing the reasons necessitating requirement of RA.,
- (b) Remote Access password will be enabled only for a definite period of time and only for access from pre-approved locations of the Original Equipment Manufacturer (OEM) Vendors to the equipments specifically under repair/maintenance alone.
- (c) The control of Remote Access i.e. activation, transfer of data, termination etc. shall be within the country and not at a Remote location, abroad.
- (d) The Successful Bidder shall provide a central server for each of the Licensed Service Area as part of the Bid with facility to record the transactions on-line and also to stream the transactions for monitoring by security agencies. All necessary hardware and software required to set up, on-line recording and monitoring shall be supplied by the Successful Bidder.
- (e) Any equipment or software that forms part of the Lawful Intercept System and overall monitoring shall not be permitted to have remote access under any circumstances.
- (f) The catastrophic software failure, major part of the network, and prolonged period used under this clause shall be defined by BSNL from time to time in accordance with the instructions from Government of India on the subject.
- (g) Wherever RA is provided, the access shall have to be through firewall and has to be governed through secure tokens. The access shall be based on individual and task specific.

69. OPTIONAL ITEMS :

Though the prices of optional items have been separately asked for, the cost of Optional item/s shall be included for evaluation of the tender, unless otherwise specified. BSNL reserves the right to procure or not to procure the optional items.

70. **IN SUB PACKAGE:** The IN sub package essentially contains the supply, installation and, commissioning of core network elements such as IN & VOMS along with the required infrastructure and services and integration with the existing network including OSS. This also includes migration of customers on new IN and vouchers on new VOMS.

ANNEXURE-I TO SECTION- 5 PART- B
DETAILED TECHNICAL REQUIREMENTS(DTR)

1. GENERAL :

- 1.1 This document outlines the detailed technical requirements of IN and VOMS .
- 1.2 In the detailed technical requirements, the number of subscribers is given based on standard Erlangs per subscriber/ BHCA per subscriber. However, all the network elements shall be configured with a dynamic range and shall be restricted only by the total Erlang or BHCA or TPS by assuming 1 BHCC per subscriber. All the necessary hardware and the related software licenses including databases in all the network elements shall be dimensioned and equipped accordingly except for those network elements for which higher capacity, if any, has been specified elsewhere in this document.
- 1.3 All server based applications shall have latest servers equipped. Scalability shall be in all the related components within the chassis and can be implemented easily without shutting it down. Partitioning of the servers is allowed for multiple applications.
- 1.4 The common control equipment provided in crucial network elements of IMPCS like IN &VOMS shall be provided in duplicate and in hot stand by mode. All power supply units shall be in redundant mode. The Bidder shall define the redundancy provided in the system as part of the bid document. The interfaces shall be distributed at least in a minimum of two cards/modules. The definition of redundancy shall include the following and details of compliance shall be submitted as part of the Bid for every network element:
- (a) **Type of redundancy:**
 - (a) Redundancy Mode: 1+1
 - (b) Operating Mode: Hot standby mode/load sharing mode/.
 - (c) Activation of redundancy: Switch over logic and events that trigger switch over to the redundant equipment.
 - (d) Traffic restoration time: Down time, partial restoration time and restoration to full functionality.
 - (b) The processing stages protected by the redundancy.
 - (c) If the calls/sessions in certain processing stages are lost, what is the impact of such loss from the customers perspective, operators perspective and network perspective.
- 1.5 The IN system availability shall be at least 99.999% measured over a period of one year and accordingly each network element forming part of the system shall have much improved fault tolerance and higher reliability as called for elsewhere in the DTR.
- 1.6 The software version of equipment to be supplied shall be the latest and same for all configurations and for all the sites including validation site. The hardware version to be supplied shall be the same for all configurations and for all sites including the validation site.
- 1.7 The Bidder shall furnish, as part of the techno-commercial Bid, solution document detailing the network architecture along with dimensioning rules/tools for each of the network element and realisation of all the applications and services both for prepaid and post paid subscribers. A sizing certificate with calculations shall be submitted along with bid.
- 1.8 The material list must include all the items needed for up-gradation of the existing network elements of the respective technology to ensure smooth interworking of offered equipment with existing equipment in respect of voice and data handovers and reselections and integration and interoperability of of the core and radio equipments including IN & VAS as well. In case any item is found missing in the material list, the supplier will have to supply the same at no additional cost. The inter-working and inter-operability with all the existing network elements is the responsibility of the Successful Bidder.
- 1.9 The Supplier must indicate details of all items with quantities, which are being replaced due to compatibility problems. Details about corresponding new items being provided to replace old items are also to be given. Such items are to be supplied at no additional cost. The Supplier will have to give an undertaking at the time of placement of APO in this regard with the following minimum details:

- (a) Details of all items with quantities, which are becoming spare for different configurations due to dimensioning rules.
 - (b) All such items rendered spare due to dimensioning rules are to be re-deployed in the new network elements, wherever feasible. The Purchaser reserves the right to specify the details of deployment. Redeployment of such items has to be done by the supplier at no additional cost. Quantities of these items which are being utilised for new areas shall have to be correspondingly reduced from the material list of same item as required at the time of submission of site specific BoM to the concerned circles before placement of PO. The suppliers will have to give an undertaking at the time of placement of APO in this regard.
 - (c) Such rendered spare items which cannot be utilised in new areas, are to be used as spares and corresponding quantities are not to be provided in the spares list by the supplier at the time of submission of site specific BoM to the concerned circles before placement of PO. The suppliers will have to give an undertaking at the time of placement of APO in this regard.
- 1.10 There shall be dedicated auto-tests in all the network elements and equipments required for installation, troubleshooting, Maintenance, optimization etc.
- 1.11 Clause Deleted.
- 1.12 CDRs generated by the various network elements such as MSC Server, SMSC, MMSC, GGSN, SGSN, PoC, SMLC, GMLC, LBA, WAP and any other network elements, the services of which are to be charged, in respect of the pre-paid subscribers shall necessarily contain CAMEL FLAG. Identification of pre-paid CDRs shall be made solely on the basis of CAMEL FLAG in all those network elements that need such identification for processing. Network elements which do not have the facility of creation of CAMEL flag, should ensure provisioning of suitable alternate arrangement other than IMSI/MSISDN to identify prepaid subscribers, which shall be used for filtering in the mediation device. The CDRs generated in the IN for the LBA services shall also have the identification of the LBA service being used.
- 1.13 In case of long duration calls, an automatic alert upon crossing the threshold during call shall be generated together with LOG. The threshold for the long duration calls shall be configurable through MML.
- 1.14 It shall be the responsibility of the successful bidder(core as well as access network) to integrate the supplied network elements with the existing OSS/BSS/NMS/NOC in BSNL without any commercial implication to BSNL.
- 1.15 IN CDRs to be transported to B&CCS system using the MPLS routers placed at each site.
- 1.16 The Network elements to be provided under this Tender shall have an availability of 99.999% for the core equipment.
- 1.17 All network elements shall have the ability to upgrade software or hardware in the live system without any interruption or degradation of services.
- 1.18 It shall be possible to expand all network elements by adding hardware & software to a live system without any interruption or degradation of services.
It shall be the responsibility of the supplier to make the equipment supplied under this project inter-work with all other network elements supplied by other vendors and the existing equipment. The supplier shall also ensure the interworking of offered network with the various network elements of other technology in other licensed service areas of the BSNL Mobile network/its roaming partners (both post-paid and pre-paid services) for nationwide/international seamless working and provision of services to its subscribers.
- 1.19 The signalling links shall be dimensioned with a minimum of two links and with a traffic loading of not more than 30% for all types of signalling protocols. Signalling with other exchanges/network elements shall be on , Sigtran and/or SIP-T/I(if applicable) and shall conform to the relevant GR of TEC.
The signalling planes to be built for transport of signalling messages between the various network elements and interconnect interfaces shall be dimensioned for a load of not more than 30%. The load of 30% applies both for the signal processing capability of the node as well as to the interfaces required for connecting to the various nodes inside and outside the network. It shall be possible to create adequate signalling link sets including those used for internal purposes. Each of the signal processing nodes shall be capable of supporting analysis for at least 1024 SS7 point codes or 1024 SIGTRAN point

codes/equivalent. All the nodes handling signalling shall support multiple point codes for both SS7 and SIGTRAN. SIGTRAN stack capacity must be able to handle full load equipped capacity and should be expandable. Its maximum load during busy hour should never exceed 50%.

- 1.20 Each of the network elements shall be supplied with the required Element Management System (EMS) for integration with the existing NMS/OSS/BSS. The EMS to be supplied shall conform to TEC standard SD/NMS-02/01 FEB 2005. The specifications of the existing OSS/BSS/NOC under implementation is provided as part of existing Network Details.
- 1.21 A minimum of two O&M terminals for each of the Circles of WZ are to be provided. However, the access privileges shall be configurable to limit the access for such terminals only to the data/services pertaining to the concerned licensed service area. The password management should be hierarchical and should apply to system console as well as terminals. The password should be reconfigurable. Access logs for sensitive commands shall be available for review to the administrator.
- 1.22 It shall be the responsibility of the Successful Bidder to supply DDF(The 120 ohm DDFs are for E1s and there shall be 8E1's per frame and 64 E1's min. for each rack. They shall be of wrapping type. For terminating STM1s from the MGW/BSC/RNC etc., 75 ohm DDFs with 8 STM1 per frame and atleast 64 per rack DDFs shall be supplied.), ADF and HF cables for connection between different network elements to DDF/ ADF and to Transmission systems located in the same building. The cables supplied shall have standard colour coding for identification. All the cables used for carrying signals of 2Mb/s and above shall necessarily be screened. DDF, ODF, Pigtails, screened cables etc to be included with each of the network element. An average run of 30m may be taken between the equipment and DDF for the termination of the E1 cables. Minimum 30 metre of 16 pair HF screen cable per length (Run) between DDF and transmission room shall be supplied. For STM-1 interface, a minimum of 60-meter pre-connectorised optical cable length with suitable connectors/adapters catering to the site specific BSNL transmission media shall be provided. These shall form part of the Sub packages of respective network elements like MSC-S/MGW, Transcoder, BSC, IN, VAS elements and BTS.
- 1.23 The requirement at the IP interfaces of all the network elements are below:
 - a. Availability of synchronisation through IEEE 1588 V2-2008 standard is a must for IP interfaces and networks.
 - b. System clock should be synchronized with NTP with 1+1 redundancy.
- 1.24 IN shall be provided with storage capacity sufficient enough to hold the CDRs that would be generated for a period of 15 days. The day load shall be calculated as 10 times the rated capacity of the respective NE and the storage assigned exclusively for this purpose shall not be used beyond 70% for the storage of CDR and IRI for 15 days.
- 1.25 Any equipment, material or system to be supplied under this Tender shall conform to the latest TEC GR(along with up to date amendments), if one exists. In case TEC GR does not exist for any element of GSM, UMTS, Networking, VAS, B&CCS etc, then the Bidder shall furnish the detailed specification of such elements comprehensive enough to establish the features, functionalities, capacity, redundancy, interfaces and protocols claimed including the integration procedures and methodologies. However, some of the essential GRs are listed elsewhere in the Tender document and the bidders shall furnish only the deviations in respect to such GRs.
- 1.26 The busy hour traffic for all engineering, design and dimensioning purposes shall be taken as 16% of the day traffic in case of voice calls, data sessions and messages.
- 1.27 The software licenses sought for busy hour traffic handling such as BHCA, BHSM, BHMM, BHRA (Recharge Attempts) etc are to be used only to dimension the per second handling capacity of that particular kind of traffic. There shall not be any cap on the overall traffic handling capacity that may accrue due to variations in the parameters used for defining the particular traffic model.
- 1.28 No manual process and intervention shall be permitted in handling and charging of all types of calls and services. Similarly the entire chain of prepaid management shall be automated. All charging ,routing configuration shall be configurable through single web GUI for whole system.

- 1.29 All network elements handling IP shall support IPv6 addressing and routing with backward compatibility for IPv4. All equipment (Hardware, firmware, software) / services / features should be available on both IPv4 and IPv6 simultaneously (dual stack). All the network elements located within the LSA including the IP-MPLS networking elements shall use only private IP address. Wherever multiple GE interfaces are sought, the IEEE Link Aggregation Control Protocol shall be supported to ensure load sharing and redundancy across the interfaces.
- 1.30 Network elements that generate CDRs shall provide for generation of simultaneous multiple CDR files on the basis of at least four criteria. **The identified criteria are postpaid, prepaid (CAMEL flag), Lawful Interception and hot billing.** The files shall be so named and numbered that it shall be possible to poll these defined files separately and independently by authorised mediation devices. It shall also be possible to redefine the set criterion through suitable **MML command.**
- 1.31 **A soft copy of the documentation shall be supplied in each of the network elements.**
- 1.32 Total of 30 Laptops and 30 PC with 5 Laser printer (20 ppm legal size Black & White or better) shall be provided for both IN(Main & Mated) sites .
- 1.33 All PCs/Laptops to be supplied shall have following minimum configuration:
- (a) Personal Computer**
 - (a)** CPU: Intel core-i7 core at least 3.4 GHz clock speed or latest.
 - (b)** RAM: 8 GB DDR3.
 - (c)** HDD: 1 TB
 - (d)** Monitor: 21 Inch HD LED
 - (e)** Others: 10/100/1000 Mbps LAN port, 3 x USB 3.0 ports, 22X DVD Drive(R/W) , wireless mouse & keyboard
 - (f)** Software: Licensed Windows 8.1 or above Business OS with recovery disk, Microsoft Office 2013 Enterprise edition/Professional Plus along with latest life time licesend Antivirus software.
 - (b) Laptop**
 - (a)** CPU: core i7 [5th Gen] at least 3.4 GHz clock speed or latest.
 - (b)** RAM: 8 GB DDR3.
 - (c)** HDD: 1 TB.
 - (d)** Monitor: At least 15 Inch FHD LED with touch display
 - (e)** Others: 10/100/1000 Mbps LAN port, Wi-Fi, Bluetooth, 3 x USB 3.0 ports, 22X DVD Drive(R/W), Fingerprint security. Support 3G WLAN.
 - (f)** Software: Licensed Windows 8.1 or above Business OS with recovery disk with touch screen & with latest version, Microsoft Office 2013 Enterprise edition/Professional Plus along with latest life time licesend Antivirus software. Weight of the laptop shall be less than 2.5 Kilograms and the battery backup shall at least for 4 hours.
- 1.34 **Installation of exploitation LAN and required peripherals is to be arranged by Bidder.**
- 1.35 **Installation and Commissioning spares & consumables**
- 1.35.1 All installation material and installations consumables shall be provided by bidder to enable the proper installation of IMPCS equipment supplied (like runways & other accessories for fixing runways & lugs, media cleaning solution, alcohol isopropyl, soft cotton, soft brushes, solder wire, printer papers, adhesive tape, optical disc drive, various sizes of fuses/ connectors, covers, hand gloves, MCBs, fuses for batteries, spare fuses for DC distribution cabinet, etc. Any other materials and consumables, which are technology dependent and required for installation, but not quoted shall also be supplied free of cost.
- 1.35.2 Item-wise details of installation materials required for installation has to be furnished along-with its unit price and quoting of installation materials in LOTS is not acceptable.
- 1.35.3 Complete details of each and every item of installation materials, maintenance spares and maintenance consumables shall be provided.
- 1.35.4 It shall be possible to load the sound files in the WAV format in IN elements that play recorded announcement.

- 1.36 If all the traffic and statistical reports as required by the Purchaser are not available then necessary post processing software for off-line generation of reports is also to be provided to each site along with necessary hardware including printer along with IN equipment, system, office and network data are to be supplied. However, sometimes, these data need to be changed due to modifications to be carried out at site. Supplier has to ensure that necessary modification of the system, office and network data shall be possible at site together with re-configuration, if required. Necessary tools and commands have to be provided by the supplier for the same.

- 1.37 The call model and the processor capacity sharing at full load shall be as below:

CPU PROCESSING CAPACITY(IN & VOMS)	
Functions	Usage rate
Call processing, Network mobility management, SMS management, Radio mobility management, Supplementary services.	75%
Maintenance, Measurements, Reports and Background tasks,	14%
Sharing between the two types of functions	11%
TRAFFIC MODEL FOR PROCESSOR/SWITCH SIZING(voice call)	
Total voice traffic per user (in milli-erlang)	50
Answered/Non answered calls	90/30 sec.
Calls directed towards the voice message system	40 sec.
Incoming call rate	50%
Successful incoming call rate	80%
Outgoing call rate	50%
Successful outgoing call rate	80%
Total number of successful call attempts/total BHCA	80%

Note: The non answered call duration can be taken for the PRBT dimensioning.

- 1.38 All the core network elements (voice/packet core/ Billing/IN/VAS/ shall support all India Mobile Number Portability as per the instructions of the Licensor(DoT).

2. INTELLIGENT NETWORK AND VOUCHER MANAGEMENT SYSTEM:

- 2.1 IN system shall be provided as per TEC Spec. No S/ING-01/02 MAY 2007 read with the additional requirements specified in this Tender.
- 2.2 It shall support CAMEL Phase I, II, III & IV. The system shall be upgraded to latest phase & versions of CAMEL finalized any time during the currency of the Tender.
- 2.3 The proposed IN shall serve the requirements of multiple licensed service areas without any limitations of number of LSAs, zones etc. The IN system shall provide system & data segmentation for administering each Circle data independently with access restrictions. It shall be possible for the central administrator to allocate capacities to different Circles as per the demand arising from time to time. It shall be possible to add LSAs from different zones in case BSNL desires..
- 2.4 The requirement of IN system shall be met by the Bidder as per following:
- The west zone is presently having IN system of one technology, the Bidder shall either upgrade the existing IN system or swap the existing IN with a new IN system to achieve a total capacity in terms of BHCC stated in the SoR with a subscriber capacity (in terms of any applicable licenses, database) assuming 1 BHCC per subscriber. The existing platform can be utilised to the extent required but the details of reutilisation plan shall be submitted in detail as part of the response to this tender. The proposed IN should be able to handle active data sessions of atleast 30% of equipped capacity, initially.
 - The reutilised/upgraded components/systems, if any including those which are part of IN functionality but resides at other sites like the SRP at MSC sites, shall be supported fully during the warranty and AMC periods at par with the new parts which are deployed afresh. Any prior AMC arrangements that BSNL would have had for these reutilised equipments/systems would be terminated as soon as the warranty is commenced for the IN system deployed under this project. Hence, any product in the current system which is likely to be end-of-support from the OEM, in case proposed for reutilisation, shall need to be replaced during warranty/AMC free of all costs to BSNL.

For all such reutilised items, Bidder shall submit agreement with OEM for support during warranty and AMC periods along with the bid.

- (c) The detailed priced BoM shall capture each of the features that is sought in the current tender and which are part of the upgradation process on the existing IN system, if expansion and upgradation is proposed. The Successful Bidder shall be responsible for migration of customer data{ as on day total customers on IN is 14 M} from the existing IN to the proposed IN, wherever swap is proposed or is required as per engineering need, without causing any interruption of service to existing customers. The proposed system, new/swapped/upgraded, for the zone should seamlessly integrate with existing/new core and IN systems including central IN (within & outside the zone). All the features asked in this Tender shall be provided for the system being upgraded also as the part of the upgradation mentioned above.
- (d) It shall be BSNL's prerogative to decide the distribution of IN capacities amongst the different LSAs without any limitation as per need
- 2.5 The Bidder shall specifically indicate its implementation methodology as part of its Bid. The Bid should fully reflect the total requirement of all necessary equipments for implementation of the selected option. BSNL shall not pay any additional price for realisation of the additional capacity and configuration as mentioned in para above.
- 2.6 The system shall be provided with IN platforms based on GSM 3.78 CAMEL Phase I, II, III & IV supporting all functionalities to provide voice and data services including pre-paid roaming between IN platforms supplied by different vendors. The system shall support number portability amongst any LSA within India. The IN system shall inter-work with different network elements from multiple vendors without any limitations. The requirements of TS 02.78, 03.78 & TS 09.78 shall be fully complied with and provisioned as per the relevant standards.
- 2.7 The proposed IN system shall be expandable to 160MBHCC (at 70% CP Load) capacity with carrier class nodes so that provisioning, operation, maintenance, administration etc can be done centrally from a single terminal. From the network and services point of view, it should work as a single logical unit. Wherever server based IN system is offered, the system shall comply to ATCA architecture or equivalent architecture. The CPU load includes all administrative, operations & management functions, online charging functions of all features, and house keeping functions.
- 2.8 Clause deleted.
- 2.9 The system shall be configured with maximum 40 M subscriber license including SSF functionality restricted only by the total BHCC capacity.
- 2.10 The IN system shall support online charging of all GSM/EDGE/Evolved EDGE/UMTS/LTE voice & data services based on upto 3GPP Rel 10 standards seamlessly on the same platform including VoLTE as and when BSNL launches these services, if not launched already, during the warranty and AMC phases of contract . It shall support charging of multiple data services based on content, volume, event & QoS over the same APN. The IN system shall support online charging of all 3G and upcoming LTE Services such as Video Call, VOIP Calls, Video Conference, Video Mail, mobile broadband services etc based on QoS for the subscriber. Subscriber's QOS should be dependent on the parameter like balance, usage, loyalty etc (e.g. Higher balance higher bandwidth, lower balance lower bandwidthIN shall have capability to integrate with PCRF for QoS feature.It shall be possible to configure various features from time to time, by using system service logic, by purchaser's team. The bidder shall ensure adequate training in this regard.
- 2.11 This IN system shall also support following methods of charging :-
 - A) Subscriber charging based upon his location in various granularities upto his BTS location.
 - B) Charging based upon his preferential destination.
 - C) The charging of the voice calls based on time of the day (Calendar and or Time band), origin/destination pair, class profile of the subscriber.
 - D) It shall have feature so that customer shall configure his own plan based upon his need. It shall be readjust able as per customer need.
 - E) It shall be possible to define Telescopic Charging and discount in various modes in real time, independently for Voice, SMS and Data

- a. on per call basis,
 - b. on the basis of total number of calls /
 - c. on the basis of total usage .
- F) If subscriber recharges during a session with STV then charging from that point shall happen as per STV tariff.
- 2.12 It shall support online data charging and interface to other nodes on various open standard protocols such as Diameter (with host authentication & failover mechanism etc.), , XML, http, etc. Diameter as per latest 3GPP and Parlay XML, http as per latest IETF standards are to be provided. The nodes like GGSN, , CTOPUP shall be integrated on latest diameter and PCRF on Sy interface. The features, Attribute Value Pairs [AVPs] and other requirements under relevant 3GPP specifications including the online charging architecture specified in TS 32.299 shall be fully provided. All IN interfaces shall be clubbed into an intelligent aggregator(1+1). This router shall be a part of the IN system. In turn, this will be connected to BSNL MPLS system with appropriate redundancy.
- 2.13 There shall not be any proprietary interfaces with any external network elements & for any external transactions.
- 2.14 All IP based interfaces shall be suitably protected through exclusive Firewall & Intrusion Detection System at both main and mated sites..
- 2.15 The total number of C7 links required for connecting IN to different network elements shall be calculated at 30% loading of signalling link. The IN shall be connected to redundant signalling gateway nodes. The SIGTRAN interfaces shall be provided in IN with suitable Gateways to be connected to SSTPs. The requirement of IN shall be in line with requirement of all other network elements.
- 2.16 It shall be possible to provide any combination of unprohibited teleservices and supplementary services and data services to the prepaid subscribers and charge them ON-LINE as per the prescribed tariff. It shall also interface with the VAS elements like SDP, SMSC, MMSC, LBS Application server for the location based services etc to the prepaid subscribers on DIAMETER and ensure online charging of such subscribers. The system shall ensure that adequate balance is available in the account of the pre-paid subscriber before the service is provided.
- 2.17 The Bidder shall provide all necessary components required for IN based prepaid service The supplier should integrate or swap existing IVRs at their own cost. IP-SRP (IVR) shall be VXML/ IP based and shall have provision of English, Hindi and a regional language.
- 2.18 Bidder should either swap the existing SRP systems with a new VXML based IVR systems, or expand & upgrade the existing SRP systems to VXML based IVR system (connectivity with core network at IP overlay).. Two IVR shall be supplied per Circle. The IVR shall be of Stand-alone type and shall provide 50% expansion capability within the same unit. The bidder shall swap/expand to provide required capacity of SRP. Each IP SRP system shall have capacity of 240 ports.
- 2.19 The pre-paid service application should be able to determine the duration of the call to the nearest of 100 msec and update the subscriber's account on real time basis to record the new available balance. It should be able to notify subscriber regarding low balance during session or prior to session. It shall be configurable to notify the customer prior to event, at the event and after the event . Different notifications as per TRAI requirement shall be configurable in the system.
- 2.20 It shall be possible to have personalized tariffing and personalized end user communication within same Class of Service, which can be configured by subscriber himself, at least through IVR, SMS, USSD, WAP and WEB. Information should also be captured in Data Records generated in system. It shall be possible to charge differentially all such customer requests automatically. It shall be possible for the customer to switch between tariff plans at least through IVR, SMS, USSD, WAP, WEB and activate specially designed/normal recharge coupons in accordance with the business policy of the BSNL. In all such cases suitable security mechanism shall be implemented by bidder to prevent fraud & misuse.
- 2.21 Simultaneous provisioning in IN along with HLR and other network elements shall be executed without manual intervention for bulk batch processing or individual provisioning. IN-HLR online interface shall be provided on MAP V4/IP The Barring/unbarring of services, QoS modification, etc at HLR should be through MAP/IP-

- ATM/ATI (any time modification/ Interrogation message) based on events in IN. The provisioning time per subscriber in IN shall be less than 80ms (Excluding latency of network which may be taken as 20ms). It shall be possible to Trace the live calls or simulated calls using GUI to view the proper functioning of service Logic.
- 2.22 Friends and Family feature shall be applicable for voice, text, and video. The following features shall be available.
- Each subscriber shall have option to configure this list.
 - It shall be possible to charge subscription at each occasion of change number.
 - This list shall be configurable individually for voice, SMS services.
 - The list shall be configurable based on onnet, offnet, local and STD on/off net numbers
 - List can have varying numbers as per criteria decided by BSNL.
- 2.23 It shall be possible to sponsorship rules wherein part of call charges are provided by called party. This could be applicable to scenario wherein subscriber making download from specific site and specific content, some charges are borne by content provider.
- 2.24 The GUI shall be user friendly, easy to understand & operate and shall have capability for multiple concurrent users (minimum 50) to independently develop different services at the same time. It shall have scheduling plan implementation feature, which automatically enables a plan at a desired time and date and time. All tables and subscriber parameters should be visible and modifiable using this service creation logic by the operator. Supply of detailed documentation on the same is a prerequisite and the same shall be supplied along with the equipment.
- 2.25 A Test & Development tools to simulate tariff, promotional, grants, bonus and any other plans before uploading to the live system to ensure accuracy. IN system shall have Dashboard display with color coding for severity of alarms, so that O & M team can take appropriate action upon.
- 2.26 The IN Prepaid System shall have full fledged reporting tool to provide various Business and Financial reports which can be configured and presented through GUI. The reports shall be easily customizable to meet immediate or periodic requirements. It shall have in-built capabilities to enrich the data received from various nodes such as SCP, SDP and VoMS etc. The system shall have the capability to work in a multi-vendor network with quick customizations. Following minimum set of circle wise reports should be available from one common reporting system in IN by default:

Report No.	Report Name
1	Daily Usage Report
2	Service Usage Report
3	Usage Report
4	Account Balance Report
5	Adjustment Detail Report
6	Bonus Report
7	Cleared Credits Report – FP
8	Cleared Credits Detail Report
9.	Cleared Credits - All Report
10.	Expired Accounts Report/Lapse balance Report
11.	Refill Detail Report
12.	Refill Summary Report
13.	Replenish Detail Report
14.	Replenish Report
15.	Service Fee Deduction
16.	Subscriber Summary Report
17.	Break-up of Customer Figures Report
18.	Recharge Coupon's Expiry Report
19.	Service Class Wise Revenue Report
20.	Minutes of Usage Report

- (a) Reports on Revenues accrued from different schemes/plans/STV in HPLMN, Roaming and other usages reports required as per TRAI shall be provided by bidder.
 - (b) Churn Report.
 - (c) Financial Report to verify that total recharges on IN(in MRP) with source of it like Ctopup and VOMs.
 - (d) Reconciliation report : This report shall tally the total credit given in accounts available in the IN system with the transaction ids through various charging elements like CTOPUP and VoMS for any given time frame like hourly, daily etc and raise an alarm in case of any exceptions.
- 2.27 Accounting of all IN services & inventories shall be in the IN system and it shall be possible to send the consolidated accounting information to B&CCS for the purpose of reconciliation and compilation of accounts. IN systems shall have data segmentation and partitioning over market codes. The IN shall have automatic subscriber management features to reflect the changes in the credit events of the subscriber occurring in the IN on to the HLR and other associated network elements where services are provisioned for the customers.
- 2.28 IN system should have APIs which allows interface with any third party Recharge mechanism , VAS providers, Banks, Financial institutions, clearing houses, credit card settlement houses etc. These API's shall support ISO protocol 8583/Diameter and https connectivity. There shall be capping restriction upon deduction happening through different API. It may be user wise or Connection ID wise, this limit shall be configurable.
- 2.29 All the hardware of IN system shall be in fully duplicated and hot standby mode. The Bidder shall provide a data replication solution for disaster recovery to be located at a geographically separate location. The data replication shall be online With in 50ms excluding network latency which is 20ms) with suitable protection for data integrity and consistency. The Bidder shall submit detailed documentation clearly detailing the data replication methodology and protection mechanism. The IN shall have geographically separated & electronically coupled SCPs that shall access both its own data base as well as the replicated data at disaster recovery site to ensure continued operation. Both the sets of hardware located in geographically separated locations shall be capable of handling the full rated load and each set shall be capable of handling the full rated load in case of disaster. Plane level redundancy at each site is also required. It should be also possible have these geographically separated nodes to work in load sharing way(Active –Active mode). The DR site of IN for all elements should be located as per BSNL requirement.
- 2.30 It shall be possible to award cross product discount in online fashion based on accumulated usage of voice, data, text and video or number of recharges during specified period. Notification to reach accumulated threshold shall be configurable. There shall be provision for notification prior, at and after such event. It should also provide fair usage policy i.e., changing the tariff on crossing a threshold separately and also jointly for voice, data, text and video.
- 2.31 IN system shall have at-least 50 multiple balances configured in the same account assigned to different services. It shall be possible to transfer balances within the account under user control using USSD, Web, IVR, SMS etc. It shall be possible to recharge specific balances through appropriately designed recharge mechanism. . It shall be possible to define the contents of usage buckets as Minutes of usage per month, per x nos. of days, amounts of money spend within a month, within x nos. of day etc.
- 2.32 IN shall have family account which can be administered by the primary account holder. The account shall have discreetly identifiable sub accounts with independent balances and associated tariff plans. The sub accounts shall have separate MSISDN & IMSI .It shall be possible for Sub accounts to share the balance available in the related Primary account. User can select which account is to be debited for particular call. It shall be possible to set limit for each user to use common balance per month or per service in a month. It shall be possible to configure sub account to sub account(Three tier).
- 2.33 Further these group accounts will comprise of common balance and individual balances. Calls made within the group shall be debited to the common balance whereas calls outside the group will be debited from the individual accounts. The group account shall have one master account with recharge privilege for all accounts and at least 50000 individual accounts which can be charged.

- 2.34 The IN shall have single user multiple accounting mechanisms for the same account, the debit of which would be dependent on the time, day, destination, location of the activity.
- 2.35 IN system shall be equipped and provided with USSD server functionality providing prepaid recharge and all prepaid related USSD based enquiries like balance enquiry, last five calls/recharges, profile, tariff enquiry etc. It shall provide USSD based recharge both from home and visited networks and would provide end of call notifications after each call. The dimensioning of IN system shall take into account the requirement of the USSD based load at the 70% processing load at the rated BHCC. Busy Hour transaction for USSD enquiry/recharge may be taken as 0.2 BHCA/Sub initially.
- 2.36 IN System shall have capability to reconfigure capacities of amongst various services, like voice, data, USSD and SMS. For example reduced Voice BHCA, shall be available to enhance data BHCA.
- 2.37 IN shall provide appropriate alerts, configurable (Before, during and after the event) based upon usage thresholds like if balance in data bundle is below a configured threshold {say 90% of uses allowed for an active STV} or account is entering into GP1/GP2. The message shall be customised as per the profile of account and as per business strategies of BSNL.
- 2.38 VPN services:
- 2.38.1 VPN Service shall be available to Zonal Post Paid, Prepaid and blended (mix of postpaid and prepaid) subscribers using the Zonal IN system.
- 2.38.2 In addition to the voice/video call, VPN service should be made available for, SMS service also for the purpose of differential charging for 10 digit format.
- 2.38.3 VPN Service shall be provided for 15% of the Prepaid IN capacity at same rated BHCC
- 2.38.4 VPN system shall support Session based charging based on Diameter.
- 2.38.5 VPN shall get integrated with existing zonal IN.
- 2.38.6 VPN system shall allow asymmetric charging i.e. different discount rates for different companies within same VPN.
- 2.38.7 VPN system shall support Call Forwarding Unconditional with VIP list features i.e. calls coming from persons that are on the VIP list be allowed otherwise Unconditional forward to predefined number.
- 2.38.8 VPN service shall support following features
- (a) Private Numbering Plan
 - (b) Number Substitution
 - (c) Reserved Public Number List
 - (d) Off-Net calls
 - (e) On-Net calls
 - (f) Forced On-Net [Operator defined/configured - ON-Net call]
 - (g) Virtual On-Net [System defined/configured - ON-Net call]
 - (h) User groups using Multi user Account
 - (i) Dual invoicing-one for official account and another for personal account.
 - (j) Personal Call/Business Call based on the called party number, time, date, location or a combination of these items to be configured by the customer in self care.
 - (k) Discount Number list
 - (l) Call Screening [Both incoming and outgoing call filtering]
- 2.39 The Prepaid system should be able to integrate with existing Central IN System for online charging on Diameter using session based for voice and event based for SMS/MMS for national VPN service. The rating should be at the Zonal IN.
- 2.40 IN-Prepaid system should be able to integrate with all existing Circuit Core/Packet Core/IN/VAS elements which are working in BSNL.
- 2.41 IN shall have LSA wise Closed User Group feature wherein customers within the LSA have CUG with different tariff for call within CUG and outside CUG like Maha Krishi plan working for MH circle..
- 2.42 IN system shall have a unified administration system for service provisioning, service maintenance, service administration, backup & restoration management. Enterprise backup solution is to be provided for centralized automated backup of IN nodes. All software modules including patch management shall be done from the unified administration system. The administration system shall provide GUI based tools for exception handling of subscriber account with adequate security and logging of

transaction. The subscriber management part of administration system shall be provided in each of Circle (at-least two terminals in each Circle) with suitable security & password management. The security & password management of the system shall be with the central administrator. It shall be possible to assign access privileges based on user name. All administrative transactions impacting services of subscriber shall be logged with user ID & terminal ID. All tables and subscriber parameters shall be visible and modifiable using this service logic by BSNL.

2.43 The proposed IN system shall have been subjected to IOT with all the existing SSFs of BSNL/MTNL network. The PICS (Protocol Interface Conformity Specifications) of ITU-T for IN on CAP III, CAP IV (22.078, 23.078, and 29.078) & DIAMETER shall form part of the techno commercial Bid.

2.44 Not applicable.

2.45 There shall be no restriction in offering all the services available to postpaid customers to prepaid customers also and charge them on-line.

2.46 It shall be possible to store & analyse the 12 months CDR's related to account, recharge, lifecycle & usage history etc. in the prepaid IN system (SCP/SMP) for the purpose of customer care, accounting, MIS reports etc. Complete accounting of the prepaid IN services shall be in the prepaid IN system. The summary of the accounting, MIS & other reports shall be forwarded to BSS for further reporting purpose. The CDRs shall be accessible through web GUI by BSNL Call Centres and CSRs of SSA for the Zone and shall contain the details of all types of IN CDRs.

2.47 **Subscriber Account Management (SAM)** :-There shall be a light GUI to be accessed for subscriber management. This GUI shall be accessed by users of all SSAs of WZ and Call centre executives. Hence it shall be configured to connect simultaneously minimum 300 sessions. There shall be different levels of access to GUI like modification, view, updation this depending upon rights assigned to concerned user. This GUI shall be available along with CDR GUI as mentioned above in 2.46.

Following is the list of activities of minimum activities that should be possible form SAM

GUI

(a)

Subscriber enquiry regarding

- (i) Balance information
- (ii) Balance and usage bucket information
- (iii) Validity of main and buckets
- (iv) Tariff plan
- (v) Recharge history

(b)

It should be possible for Customer care executives to

- (i) Pass positive and negative adjustment to subscriber accounts balance and validity.
- (ii) Change subscriber alternate notification number.
- (iii) Change tariff plan
- (iv) Recharge for subscriber.
- (v) Last 30 days call details with rating information.
- (vi) Voucher information used or not and if used on which number.
- (vii) Unblock/block subscriber
- (viii) Unblock subscriber in event of blocking due to unsuccessful recharge attempts.
- (ix) View Scheme/Offer under which the subscriber have taken the SIM
- (x) Temporarily suspend accounts/preserve accounts without loss of privileges, balances and/or validity when re-activated. The suspension period shall be fixed and definable. Suspension/reactivation incurs a definable fee, to be deducted from the account.
- (xi) Offer churn prevention incentives, telesales incentives and loyalty program incentives.

2.48 It shall be possible to add, modify, delete and upload announcement at site. Sufficient tools to be provided for enabling the OPERATOR staff to perform this task. Suitable GUI based Client shall also be provided to perform the above mentioned task.

- 2.49 It shall be possible to configure IN to I rate calls that are dropped due to network reasons based on the disconnection cause code in the following manner:
- (a) It shall be possible to charge a call only till the last charging unit (say, if the tariff defined is for unit charge per x seconds, then the charging unit is x seconds) and not to charge the charging unit during which the call was dropped.
 - (b) It shall be possible to drop the call charges for the entire duration of the call.
 - (c) It shall be possible to configure one of the two charging methods as detailed above on a per subscriber basis.
 - (d) In both the cases, an appropriate USSD message shall be sent to the subscriber indicating that the call has not been charged due to call dropping.
 - (e) The system shall mark such dropped call events resulting in non-charging of the calls subscriber-wise and notify of the administrator and raise an alarm, if the number of such events occurring against any particular subscriber crosses a threshold.
 - (f) A report shall be generated of all such events subscriber-wise and also based on cause code/event..
- 2.50 The Bidder shall provide prepaid IN system which shall have features/capabilities already listed above. Apart from these features/ capabilities as listed in those clauses, following features/ capabilities as categorized in two categories shall have to be complied with:
- 2.50.1 Category I: The Bidder shall provide the following features / capabilities in the prepaid IN system as part of the offered system.
- (a) Balance Dependent Tariff, discounts and bonus.
 - (b) Bonus and Tariff Based on Accumulated usage.
 - (c) Bundling of services with cross product discounts.
 - (d) At least 250 Dedicated Accounts.
 - (e) Mixed CUG like post and pre paid , It shall be also possible to have one customer presence in multiple CUG.
 - (f) Digressive (Staggered) Tariff during the length of the call.
 - (g) Discounts for Special Day of the Year and particular time of the day.
 - (h) Loyalty discounts in percentage & promotion.
 - (i) Multiuser account.
 - (j) Cumulative and non cumulative (configurable) validity period extension after recharge.
 - (k) Online Subscriptions deductions.
 - (l) First call of day deduction from main balance.
 - (m) Reward on a particular day shall be customisable individual customers.
 - 1. Special day and time.
 - 2. Subscriber Service.
 - 3. Loyalty & Bonus based on age on network.
 - 4. Current uses statistics.
 - (n) Recharge based flexible promotions like second recharge above some amount shall get some benefit in any form like SMS ,extra TT or Data
 - (o) Voucher based tariff with credit.
 - (p) Notification on alternate MSISDN.
 - (q) Low balance call back notification
 - (r) Automatic Validity extension for main account by deduction of specified fees from main balance on a specified day in life cycle.
 - (s) Menu driven USSD service for enquiry/STV activation.
 - (t) Volume and validity based notification for all buckets upon reaching a specified threshold from main balance and sub accounts.
 - (u) Details of last five calls and recharges shall be available to subscriber on USSD.
 - (v) Subscription of applicable STV from WEB/USSD/IVR by deducting the required charge from main balance in recurring or single mode.
 - (w) Service wise Post call Notification Deactivation .Option should be available with customers to deactivate PCN for say GPRS/sms/call alone.
 - (x) Deletion of all accounts/sub-accounts linked with a account, in a single deletion command.
 - (y) Auto deletion of old expired STVs attached to a profile after a specified period.

- (z) IN shall support "TRY" for a limited period Offers.
 - (aa) Data uses during the roaming shall be notified by USSD and SMS.
 - (bb) Customers can select personalised Happy Hours based upon fixed subscription.
 - (cc) IN shall have capability to grant deferred awards.
 - (dd) Online Charging of UMTS & Multimedia Services. Refill configurations should allow to give packages based on
 - (a) Special Day & time.
 - (b) Subscriber life cycle.
 - (c) Subscriber services
 - (d) Loyalty & Bonus base on age on network
 - (e) Current Usage statistics
- 2.50.2 Category II: The Bidder has to provide following features in the prepaid IN system. If these features/ capabilities are not available readily then these will have to be developed and deployed successfully within the scheduled delivery period of the PO.
- (a) Community charging shall be possible.
 - (b) Differential bonus based on accumulated incoming usage depending on the incoming on-net / off-net and Local/STD calls etc.
 - (c) Discounts and Bonus based on Life cycle status of the customer.
 - (d) Multimedia charging - bearer charging differentiation.
 - (e) USSD communication with end user about bonus etc.
 - (f) Time limited Promotions packages & campaign bundles.
 - (g) Automatic removal / addition of a account to CUG after verification of Customer Balance and validity.
 - (h) Automatic removal of customers from CUG upon reaching below a specified group size
 - (i) User wise logs for all balance adjustments ,bucket adjustments ,plan change or any other minor modifications done to the all the customer accounts by that particular user .
 - (j) Subscriber wise modification logs ,indicating all the modifications done to that particular subscriber account including balance adjustments, bucket adjustments, STV additions, plan change, expiry date change etc .
 - (k) SMS alerts shall be made available for UPS/Power Supply/Hardware/SMPS all types of Connectivity failure including IVR connectivity
- 2.50.3 Apart from this the Bidder has to quote for man hour rate for developing any other features/ capabilities which may be required by BSNL from time to time. **For evaluation purpose rate of 1000 (One thousand) man hours will be taken.**
- 2.50.4 All the category 1 and category 2 features are expected to be the part of offered IN. For the category 2 features, if not already available in offered IN, has to be developed and deployed successfully within the scheduled delivery period of the PO. The evaluation for IN shall include the Price of IN and amount for 1000 man-hours taking together. The man hours required for development of any feature would be decided by the BSNL and successful Bidder through mutual consensus.
- 2.51 The features sought in IN TEC GR like Free phone service, Televoting & UAS are not envisaged in this tender.
- 2.52 This prepaid IN shall work with the Central IN and fixed IN set up with the following services:
- (a) M-VPN account
 - (b) Free Phone
 - (c) Premium Rate
 - (d) Universal Access Number
 - (e) Universal Personal Number
 - (f) Televoting
 - (g) Number Portability
- 2.53 The prepaid IN shall also work with the IN platforms of PSTN network to provide all the service defined at Clause 2.52 above for a mixed mobile and fixed line customers.
- 2.54 BSNL reserves the right to order or not to the DR site/functionality. In case BSNL does not order the DR site/functionality, all features shall be available from main site.

2.55 Voucher Management System

- 2.55.1 The Voucher Management System shall be provided as per TEC GR No GR/VOM-01/01, Feb 2006.
- 2.55.2 Not applicable.
- 2.55.3 Voucher Management System should be a separate standalone node with adequate built-in redundancy for processors, power supplies, fan units etc as envisage in clause 1.4 of Section 5 Annexure I . There should not be proprietary interfaces to other network elements. The necessary APIs along with all the necessary details of the APIs shall be provided so that other network elements can be made to interwork through an inter-working unit. The inter-working unit shall be provided by the Successful Bidder with complete details of APIs.
- 2.55.4 The VoMS shall be dimensioned to handle 5Recharges per second per million of subscriber. VoMS shall be able to generate at least 200K recharge Vouchers per Hour per session in encrypted form without affecting the other activity of VoMS. Facility of at least five simultaneous sessions shall be provided.
- 2.55.5 VoMS shall support industry standard on HRN encryption. All database and data files of the system shall be encrypted. Voucher HRN data must be stored on IN in encrypted format. It must not be visible to Customer care staff and Operation staff on GUI or Database queries.
- 2.55.6 It shall be possible to recharge the prepaid account from any licensed service area, with the coupon purchased from any other licensed service area within the zone. All bearers like SMS, USSD, IVR and WEB are required. In such cases, the VoMS shall provide accounting reports for cross utilisation of vouchers. Information for automatic reconciliation and settlement of accounts between different licensed service areas on the basis of the serial number of the voucher purchased and the MNC of the mobile to which it is charged shall also be provided. WEB bearer is to be provided and implemented by the successful bidder.
- 2.55.7 The VoMS shall maintain separate number series for each of the license Areas/circle identified on the first two prefixed digits of the voucher serial number. The LSA /circle wise accounting information shall be built on these prefix digits and all accounting reports shall be based on this. The VoMS shall provide additional reports required for day to day management & operations. VoMS shall provide the standard interface towards the Inventory management system and Distribution management system.
- 2.55.8 The electronic recharge in BSNL, as mentioned in TEC GR, is working through third party and is known as CTOPUP system., Hence the supply of same through this tender is not envisaged.
- 2.55.9 The number of transactions between IN and Channel TOP UP server shall be at least 50 recharges per second per million customers using bearers like SMS, IVR, USSD and Web. 50 such third party interfaces that provide the capability to simultaneously allow access to the channel partners' servers who will be integrated with this system through secured means may be provided with the possibility of expansion to 250.
- 2.55.10 The system shall provide all necessary data required for scratch cards. The Scratch card data shall be protected against frauds. The secret code in recharge coupons shall be of 18 digits. The total capacity of VOMS shall be 5 times the capacity of subscribers capacity envisaged herein i.e. 40million subscribers..
- 2.55.11 It should be possible for customer care executive to retrieve voucher status by entering Serial number in a light web GUI(as mentioned at 2.47) for VOMS also. The information for a used voucher must reflect the subscriber MSISDN, date of recharge etc.
- (i) It shall be possible to retrieve subscriber recharge history for last 10 recharges.
 - (ii) It shall be possible to generate report/log files on used coupons with coupon serial numbers, MSISDN, date and time of recharge etc.
- 2.55.12 It shall also be possible to generate the report / log files on coupons undergone different status modification Viz. pending, blocking, purging, deletion etc., on daily basis with identification of operator/login.
- 2.56 Operation and Maintenance Centre
- 2.56.1 There shall be one GUI interface for administration, Operation and maintenance.

- 2.56.2 IN and VOMS shall have IP Based ,user wise date and time wise logs both at OS and DB level. It shall be possible to allot different rights to individual users for BD and GUI access.
- 2.56.3 The OMC of the IN system shall have a dash board which shall present major and minor alarms along with severity and code details, curcial KPIs on live basis, so that O & M team can take appropriate action . It shall be possible to extend the dashboard to external monitors.
- 2.56.4 An LCD projector with WiFi capability, high resolution, 2000 ANSI lumens and USB port shall be provided as part of the OMC

ANNEXURE II TO SECTION 5 PART B
ANNUAL MAINTENANCE CONTRACT (AMC)

1. SCOPE OF AMC/WARRANTY :

1.1 The Annual Maintenance Contract of the ordered equipments/system/network shall start immediately after the general warranty period ends. The Annual Maintenance Contract (herein after called AMC) shall be for seven years. Bidders shall quote for AMC charges for every year for seven years and AMC for the 6th and 7th year shall be optional for BSNL to order.

1.2 Consumables which are required for the daily operation of the equipments are not covered under AMC. Computer stationary is the daily consumable provided by BSNL. Other consumables required for preventive and corrective maintenance such as fuses, Air filters etc. shall be provided by the AMC provider / Bidder. AMC will cover all equipment peripherals (IN & VoMS, UPS, SMPS, Battery, Laptops, Desktops, Printers, switches/routers, SRP etc.) supplied with the IN.

1.3 During the period of AMC/warranty the Successful Bidder (herein after called Supplier) shall:

- (i) Diagnose the hardware and software faults wherever required;
- (ii) Rectify the hardware/software faults detected. The faulty hardware is to be replaced immediately from the spare pool to be maintained by the supplier in respective site of BSNL as per defined herein in the terms and conditions;
- (iii) Repair/replace the faulty PCB / cards / modules / sub modules / accessories / subassembly /components or any other part of the Equipment/ network;.
- (iv) Upkeep the software periodically;
- (v) Upgrade the software to latest version;
- (vi) Create customized reports (around 15 to 20) from the system, including those stipulated by TRAI /DoT from time to time;.
- (vii) Provide full & time bound assistance in integrating the IN/VoMS and associated systems with any other NMS/ Billing or similar system as required by BSNL at a later date, without any additional cost.
- (viii) Provide API's of systems supplied by it against the Purchase Order for sharing with other NMS, or similar systems supplied for the purpose of integration.
- (ix) Provide all kind of support including the telephone support/ /assistance for making changes / modifications in GSM/UMTS system database.
- (x) Induction/invoking of new features/services, which the successful vendor may develop and can be offered on the same platform has to be made available
- (xi) Extending assistance / help to BSNL in issue of Guidelines / application note / procedure etc in a time bound manner.
- (xii) To provide training to BSNL staff (at least two officers of respective circles) at the time of any Software/ Hardware upgrade, indicating the present features and the new features invoked thro' such upgrades.
- (xiii) To provide training to BSNL staff for preventive maintenance and help BSNL to frame preventive maintenance schedule.
- (xiv) Provide the AMC support for the tools and testers supplied as well.
- (xv) To enter into back to back AMC with OEM or software providers which were used in the solution provided by bidder.

1.4 All the obligations/scope defined herein shall also be applicable during the Warranty Period.

2. TERMS AND CONDITIONS :

2.1 The Supplier shall, at the time of providing service /maintenance, associate BSNL's maintenance staff.

- 2.2 AMC / warranty of the installed equipment shall continue even after redeployment / relocation of the equipment by BSNL or any other vendor. BSNL shall ensure that relocation is done matching the parameter of previous location. In case the equipment of the Supplier is redeployed then such redeployed sites will be attended under AMC of the supplier immediately after re-deployment.
- 2.3 The Bidder shall establish Service Support Centre at Pune, Maharashtra or wherever their equipment is installed/ordered within a period of 7 months from the date of P.O to comply with warranty / AMC obligations. The Bidder shall also establish one Second level National Service Support Centre in the country within 7 months. The infrastructure planned to be created by the Bidder to meet his obligations under warranty and AMC and his action plan to deal with the various situations arising out of hardware and software faults shall be clearly indicated in the Bid. The Bidder shall, as part of the Bid, shall submit the details of the locations of the Service Support Centers planned and how Bidder proposes for carrying out repair and provide technical support to fulfill the terms and conditions during warranty and AMC.
- 2.4 The spares shall be provided by the Supplier at no additional cost to the Purchaser during the currency of the warranty and AMC and are to be kept at each core network elements locations in the custody of BSNL. BSNL shall arrange space for the same. The spares shall be genuine and sourced from OEMs or their authorised agencies. The minimum number of the spares to be supplied are given below –

SI No.	Item name	Quantity	Remarks
1	SMPS module for core equipment power plants (MSC-S/MGW/IN/B&CCS etc.)	Min. two No. of power supply module for each type/make of power plant supplied.	100A or 200A as per the supply. To be stocked at each location. This is in addition to the spare module supplied as per requirement of DTR/GR
2	Power Supply Cards for Core Network Elements MSC-S/MGW/IN	At each location minimum 10% of each type of power supply cards as part thereof.	To be stocked at respective core network locations.
8	Spare of all other network elements.	Quantity of each such critical Item to be suggested by the vendor	To be stocked at respective network locations.

- 2.5 Supplier will replace the faulty units from the stock available wherever possible and attend to the fault. However, should there be a problem vendor shall arrange telephonic support in diagnostic of the fault and also in replacing the card. In any case such fault could not be attended to, the support team of the Supplier shall be responsible to arrange rectification of the fault at site within stipulated time frame.
- 2.6 The date of expiry of warranty shall be extended by the no. of days there is delay in supplying such spares at all these sites.
The quantity of spares specified above, is the minimum quantity. Based on the past fault history, the actual quantity of spares to be supplied will be equal to 3 months requirement of BSNL. i.e. the actual quantity of spares to be made over to BSNL will be equal to 3 months requirement of BSNL or the quantity stated in clause 2.5 above, which ever is higher. Thus the actual quantity of spares required will be reviewed by BSNL after every 6 months and supplier will be required to supply the same accordingly. The spares supplied will be

in BSNL's custody for use by BSNL as per BSNL's requirement. In case requisite spares are not available in a circle, then BSNL will be free to transfer spares from other circle to that circle with due intimation to supplier and record keeping.. Apart from the above, at any point of time, if required by BSNL, the spares will be ordered based on the prices quoted in the detailed bill of material against the concerned item in the SOR.

- 2.7 BSNL shall release the APO for the AMC around 2 months before the expiry of warranty obligations. Soon on expiry of the warranty period the contract for comprehensive AMC is required to be signed at Circle level. The performance bank guarantee deposited at the relevant Circle office initially along with acceptance of main APO against this Tender shall be then reduced to the value of the AMC amount after confirmation from the circles that the concerned vendors have signed AMC.
- 2.8 The agreement for AMC shall initially be signed for Five/ seven years after the expiry of warranty, and the extension of this agreement beyond seven years shall be negotiable depending on the performance of the Supplier during the term of the agreement for AMC.
- 2.9 The Supplier shall have to undertake repair work of any or all of the faulty CARDS/ UNITS offered irrespective of geographical location of the equipment. There will be no minimum or maximum limit on the number of faulty cards to be repaired under the contract.
- 2.10 The Supplier shall be responsible for provisioning of on-going support - services through a single point of contact to resolve emergency, non critical day to day assistance, repair of cards, updating / up-gradation and subsequent implementation in all the GSM/UMTS equipments supplied and installed under the contract. The supplier will provide system health check utility (for hardware & software).
- 2.11 The Supplier shall prepare the half yearly preventive maintenance schedule for each site where equipment is installed and submit the same to BSNL field units in advance. Supplier shall ensure presence at least two qualified engineers on site during the period of AMC.
- 2.12 The Supplier shall provide all global software updates to BSNL as part of the AMC and provide maintenance support for these upgrades as well.
- 2.13 Induction / invocation of all feature/ services shall be done by the Supplier as per the GR / tender against which equipment is supplied.
- 2.14 The Supplier shall be solely responsible for the maintenance, repair and up-gradation of the systems' hardware and software. BSNL shall not be liable to interact with any of the partners/ collaborators or subcontractors of the Supplier.
- 2.15 BSNL shall be free to add/delete any equipment from the scope of AMC after a minimum period of 2 years of AMC by giving a three month advance notice to the Supplier. However, the advance notice period for deletion of those 3rd Party items which are well defined, will be 1 year. The AMC charges would be revised on a pro-rata basis accordingly.
- 2.16 All faults will be booked via Password protected website provided by the supplier. In case of emergency / unavoidable circumstances, faults will be intimated to the supplier via other means of communication as well however the same will be entered into the said website subsequently. There will be a unique docket number for each fault booked. The password protected website will be approved by BSNL. Further , supplier will be required to make changes in the said website once in 6 months, if required by BSNL. Supplier will only give his comments / action taken on the fault booked. Acceptance of solution provided / closure of fault will be the sole authority of BSNL and decision of BSNL will be final and binding on the supplier. Details of all faults

booked and action taken thereupon will be available in the said platform and should be retrievable as and when required by BSNL from time to time. The reports from the said fault booking system will be available on line as and when required by BSNL from time to time. BSNL may modify the number of reports required and the format of each report once in every six months and this will include addition / deletion of fields in the database of the said platform / website.

- 2.17 There will be automatic system for escalation of dockets to the highest level in the supplier organization. . The level to which the fault has been automatically escalated should be available on the said website along with his contact details (name, address, phone no. , mobile no. and email id) of each escalation level.. The escalation timelines will be as finalized by BSNL from time to time.
- 2.18 Copy of commitment duly signed by the supplier and 3rd party Supplier / OEM should be provided to each of the concerned Circles of BSNL for support for the entire period of warranty and AMC as per this tender within 1 month of placement of PO. This should be provided for each of the third party suppliers.
- 2.19 Arrangement of all tests and measuring instruments required for successful completion of entire scope of work under Warranty and AMC will be the responsibility of the supplier.
- 2.20 First line maintenance is the responsibility of BSNL (More elaboration is required). In case of faults where Vendor is required to provide spares to BSNL for fault rectification and the same is already available with BSNL in the stock of spares provided by the supplier against this tender, then the responsibility of the supplier will be limited to the identification of the required spare and rectification of fault in case BSNL is not able to rectify the same using the said spares. The broad responsibility matrix is as below:

BSNL	Vendor
Traffic monitoring	Detailed analysis of service request including taking necessary logs/traces from the system and further diagnosis & correction.
Alarms monitoring	Root cause analysis submission to Purchaser.
Hardware alarm Monitoring.	Alarm analysis to enable proactive preventive actions..
System healthcheck Monitoring	Hardware fault diagnosis and replacement.
Stack and Link Monitoring	hardware/software upgradation, patch implementation, firmware upgradation.
Configuration of services, Tariff plan, top-up /STV, provisioning in IN & VoMs	New service development and deployment.
Voucher Management & provisioning	Integration of any new network element with IN.
Service request (docket) generation	Stack and Link Monitoring & diagnosis.
	Trace capture as and when required.
	Preventive Maintenance and system audit.

3. PERFORMANCE BANK GUARANTEE :

3.1 The Performance Bank Guarantee ("PBG") shall be **equivalent to the five years AMC amount valid for a period of five and a half years from the date of start of AMC** with scope for extension for the 6th and 7th years (at the applicable prices), should BSNL decide to enter into AMC for those years. Accordingly the PBG amount submitted along with the APO for the project shall be adjusted from the date of commencement of AMC. It shall be submitted in the prescribed judicial paper with stamps of proper value and should contain full address of the issuing branch of the bank with its telephone, FAX number. If for any reason AMC period is extended, the Supplier shall extend the PBG accordingly covering one year over and above the AMC period.

3.2 The Purchaser shall have the absolute right to forfeit the PBG for unsatisfactory performance of the Supplier or for any non-compliance of any of the conditions of this Agreement.

3.3 The bank guarantee shall be discharged after successful completion of Supplier's performance obligations under the AMC agreement and subsequent extension if any.

3.4 In the event of any default in the execution of AMC agreement by the Supplier under the Contract, the PBG shall be invoked either in part or in full. The proceeds of the PBG shall be payable to BSNL as compensation for any loss resulting from the contractor's failure to complete its obligation under the AMC agreement.

4. SERVICE SUPPORT CENTRE :

4.1 The Supplier shall have service support Centres at Pune. The Supplier shall furnish the name, location, complete postal address, at least two telephone numbers, one mobile number, one email address and a FAX number for technical support Center at least two months in advance of start of warranty period for registering the faults etc.. Such lists shall also become part of the AMC agreement.

4.2 The Supplier shall also provide the name of alternate contact person or Technical Support Center with address & telephone /FAX no. which may be contacted by BSNL staff for support in case of no response/poor response from the designated Circle Service support center. This, however, shall not preclude BSNL from imposing penalties, if any, as applicable as per the terms & conditions of this agreement.

4.3 Any change in Address, Phone number, FAX Number etc shall have to be intimated in writing by the Supplier to the concerned In-charge of the BSNL Station as well as the concerned GM CMTS O&M of the Circle and BSNL Corporate Office at the earliest. If the station in charge of the BSNL is unable to report the faults to the normally assigned Service support Centre due to the change of phone number etc. the fault will be reported to the National level service support centre and the Supplier shall be responsible for rendering all the maintenance support services to the affected station as per the terms and conditions of this Agreement.

5. RESPONSIBILITIES OF SERVICE SUPPORT CENTER:

5.1 The Supplier shall ensure that all the Service Support Centres are manned by fully competent and responsible Engineers and are:

- (i) Capable of giving all types of necessary technical guidance/assistance over phone to the respective station in-charge of BSNL sites, for fast restoration of faults and
- (ii) Capable of attending the faults at the BSNL sites whenever needed by deputing competent technical expert.

5.2 The Supplier shall also ensure that Service Support Centres are manned 24X7 and are able to provide service to BSNL round the clock, all the seven days of the week throughout the year. The level of service provided to BSNL shall not degrade during the night time or due to any day being holiday, or for any other reason.

- 5.3 The Service support Centres shall receive the faulty cards/units/PCBs from BSNL sites and repair / replace them with good cards during the period of warranty as well as AMC. For the purpose of receiving the faulty card/unit and sending the repaired/replaced cards/units to the BSNL sites the supplier shall designate a courier service/agency at each SSA headquarter, where supplier's equipment is installed. The date of handing over faulty unit to such courier service/agency shall be construed as handing over the same to the supplier concerned. It is envisaged that the faulty card will be handed over by BSNL to the authorised courier agency of the vendor who will be having presence at all the SSA head quarters, at the least. The necessary packing shall be the responsibility of the Bidder which can be got done through the authorised courier agency or through any arrangement deemed fit, by the supplier. Any defect due to improper packing shall be the responsibility of the vendor.
- 5.4 The Supplier however shall set up the National Service Support Centre in India within 6 months of the date of placement of A.P.O. of supply and installation, in case such a facility is not existing as on that date. This centre shall have adequate facilities and resources including technical manpower for repair of all types of modules/units/equipment supplied by the supplier. For third party equipment like Server Hardware , RAS/Routers, it shall be at the option of the Supplier to either carryout the repair on its own or through the facilities of third party. In all cases, however, BSNL shall interact only with the Supplier.
- 5.5 The Service Support Centre shall regularly obtain feedback about the health of the systems under its jurisdiction from the station in-charge of BSNL site on monthly basis (or even more frequently) and maintain a proper record of such feedback. The feedback being given to the supplier on the health shall also be maintained at BSNL by the station incharge. These shall be made available to the technical experts nominated by the Supplier for analysis and such technical expert in turn shall give adequate and proper guidance / technical advise to the BSNL's station in-charge for taking necessary preventive measure to prevent re-occurrence of such faults. This, however, shall not absolve the Supplier from fulfilling his obligations under this agreement.
- 6. TECHNICAL SERVICE SUPPORT PROCEDURE:**
- 6.1 The following procedure shall be followed for Technical support:
- 6.1.1 In case of any fault, abnormality in the system, partial or total failure of the system, the officer in charge of the BSNL station will immediately contact the designated Service Support Center of the Supplier and give information about the nature of fault over phone / FAX / e-mail.
- 6.1.2 The details of the faults reported shall be recorded in a prescribed format, called the "FAULT – DOCKET" format of the same will be decided in mutual consultation. Subsequent Changes in the "FAULT – DOCKET" may be incorporated for better reporting and recording reconciliation of the faults at BSNL station and also at Service Support Centers of the Supplier by mutual agreement and understanding.
- 6.1.3 Even if the fault is reported over phone to the Service support Center, a copy of the "Fault Docket" duly filled in by the station incharge of BSNL shall be sent by mail/fax and also by post to the Service support Center of the Supplier for records. The time of occurrence of fault as recorded in the fault docket shall only be taken into consideration for calculating the actual duration of faults.
- 6.1.4 Similarly, after rectification of fault a fresh Fault- Docket duly filled in and after recording the time of restoration and total duration of fault, will be sent by station In charge of BSNL to the Technical support Center, by mail /FAX/post for records. Such arrangement can also be developed through a web based application on mutual consultation, if it suits to the supplier/BSNL

- 6.1.5 In case of any dispute arising regarding duration of fault etc, the Fault Docket as maintained at the BSNL station shall be the guiding documents to be agreed by both parties.
- 6.1.6 The "Fault Docket" shall be filled with utmost care, giving all the details of the faults and other information as prescribed in the Fault Docket and the entries made shall be authenticated by signature of the station In charge of the station concerned.
- 6.1.7 Technical instructions shall be given to the BSNL staff of the concerned station, over phone. If the fault is restored by following the instructions given over phone, the concerned station In charge / duty officer at site will close the Fault Docket after making suitable entries and after satisfying himself of the proper restoration of the fault. A copy of the Fault Docket duly filled in shall be sent to the Service Support Center for records.
- 6.1.8 The Supplier shall also ensure visits of the expert and competent technical staff of the Supplier in case the fault is not rectified to the satisfaction of BSNL even after following the telephonic instructions and advices.
- 6.1.9 Once the fault has been rectified and the system & services were restored to normalcy, the visiting engineer of the Supplier shall record in the station Log Book, the details of the works done by him for restoration of the faults and also record the details of steps to be taken and procedures to be followed for not only restoration of similar faults by BSNL staff but also for preventing the occurrence of similar faults in future. Similar entries shall be made in the fault docket also.

7. REPAIRS AND MAINTENANCE:

7.1 PREVENTIVE MAINTENANCE:

- 7.1.1 The supplier shall ensure a six monthly visit to each site for routine health check up of the system for effective system maintenance during the entire period of contract for preventive maintenance, checking with software test programs and removal of faults, if any, including removal of functional disorder of the systems.
- 7.1.2 Salient features of Activities to be carried out during routine health check are:
 - (i) Software conformity test
 - (ii) Complete system / status checkup including battery/power plant/ earthing / lightening arrestor/antenna mount / antenna orientation/transmission system or links etc.
 - (iii) Alarm status checkup & removal of alarm.
 - (iv) Check up of the correctness of the backup by taking backup of any or some of the units and by regenerating the unit with the backup tape(at all sites except BTS/NodeB).
 - (v) Check up of the correctness of the backup by taking backup of any or some of the units and by regenerating the unit with the backup tape.
 - (vi) Check working of the hot standby units.
 - (vii) Check working of the cold standby (spare) units wherever advisable without causing interruption in services.
 - (viii) Attending to the observations about system performance given by the station in charge/duty officer.
 - (ix) If the Supplier observes any anomaly regarding maintenance of system, the same should be conveyed to the site in-charge/duty officer and should be resolved.
 - (x) Guidelines / briefing to the system in-charge about the new software/ hardware inducted in the system during currency of AMC or any other specific query on the same by the system in-charge(typically the Divisional Engineer in charge).
- 7.1.3 BSNL personnel shall carry out all the routine, day-to-day activities pertaining to the first level maintenance of GSM system.

- 7.1.4 The Supplier during the course of attending the fault or during the course of six monthly health check, notices requirement of any spare part (s), it shall replace such parts and clear the fault at the site of the equipment. Replacement of parts shall be done in the presence of BSNL station in-charge/ duty officer at site and a record shall be maintained in the log-book/ history sheet at the respective sites.
- 7.1.5 The Supplier shall also, make an analysis of major problems based on trouble reports and conduct technical audit of the network once a year to coincide with one of the six monthly health check for any other maintenance related activities.
- 7.1.6 The Supplier shall prepare the schedule of six monthly health check ups and visits therefore, ensuring that all GSM/UMTS installations in each Circle are scheduled in a cyclic manner. The schedule shall be submitted to BSNL at least a month in advance at the beginning of a year and shall be made applicable after mutual agreement.
- 7.1.7 On no account, equipment or its accessories shall be allowed to be taken out of its normal installed location. Only replacement of sub assemblies of the whole unit on a like-by-like or later version basis will be permissible and the replacement of such assemblies should be done in the presence of station in charge/ duty officer of BSNL.
- 7.1.8 The Supplier shall submit a service slip to BSNL system I/C after each replacement of parts during preventive as well as corrective maintenance, showing the parts removed and parts installed with full details of the part name, type, model No, Sl. No. etc. and a record shall be maintained in the history sheet/ Logbook.
- 7.1.9 The Supplier shall ensure that normal service of the GSM/UMTS systems is not affected during health check and technical audit.
- 7.1.10 The report of health checks and technical audit shall be jointly signed by the BSNL system in-charge and the site engineer of the Supplier.

7.2 CORRECTIVE MAINTENANCE:

- 7.2.1 The Supplier shall repair all types of cards at its proposed manufacturing premises/repair centres. The cards, which may have to be repaired in their parent companies abroad will have to be specified and only such cards may be got repaired.
- 7.2.2 The faulty cards shall be sent to the repair centre of the Supplier by the site in charge through Courier or any other agency appointed by Supplier in the SSA headquarter concerned. The transportation including packing, forwarding and insurance of cards from the respective station to repair center and vice versa shall be the sole responsibility of the Supplier at their cost.
- 7.2.3 Road permits shall be arranged by BSNL, wherever required.
- 7.2.4 Card shall be repaired and returned to the respective spare centre / site within 21 days (turn around time) of handing over of the card by the BSNL system in charge.
- 7.2.5 Any card required to be sent abroad for repairs shall be the responsibility of the Supplier. However, replacement shall be provided to BSNL within a turn around time period specified above.
- 7.2.6 If a card handed over to BSNL after repair, is found to be unattended/faulty within 30 days time, and intimated to the Supplier, such cards shall be sent back to Supplier through courier appointed by the Supplier; and the turn around time shall be reckoned from original date of receipt of card excluding the period for which the PCB was with BSNL.
- 7.2.7 The decision of BSNL system - I/C of the particular site shall be final on the functional acceptability of the repaired cards.
- 7.2.8 Average efficiency of the cards /PCBs shall be 98.5% of the total cards sent for repair from the system under AMC i.e. not more than 1.5% of the total cards sent in a year for repair will be declared as RNP (Repair not possible) by the Supplier under the contract.

- 7.2.9 The obsolescence of components shall not be taken as an excuse for declaring faulty cards as RNP (Repair not possible).
- 7.2.10 While calculating the number of RNP cards /PCBs/components, the fractions shall be rounded off to the nearest integer.
- 7.2.11 All RNP declared cards/PCBs/components shall be replaced by new/equivalent cards/PCBs/components by the Supplier within Turn Around Time (TAT) period. The reconciliation of RNP cases for all PCBs/cards /components shall be done at the year-end. The cost of upto 1.5% of such replaced cards/units shall be payable by BSNL. The cost of cards shall be as per latest approved price through the Tender or as per the PO under which this AMC is operative whichever is lower.
- 7.2.12 There will be no reduction in capacity of the GSM / UMTS network for want of repair/replacement of cards and in case of any critical card going faulty, affecting performance and capacity of the GSM / UMTS network, the Supplier shall replace the same immediately, pending repair of the card.
- 7.2.13 BSNL shall review progress in quarterly meetings with the Supplier.
- 7.2.14 Repair/replacement of all hardware units as mentioned above like hard disks, optical disks, modules, tools and testers, etc. have to be carried out by the Supplier with in a maximum turn around time of 21 days.
- 7.2.15 Any consumable item like Floppies, Ribbons, CD-ROMs, toner Cartridges/ drums, Cassettes, etc of the peripherals to the network shall not be covered under the contract.
- 7.2.16 Any card/module/unit becoming faulty due to lightening shall be repaired / replaced by the supplier as a part of AMC.

8. MAINTENANCE OF HISTORY SHEET AND LOG BOOKS:

- 8.1 The Supplier shall supply elaborate maintenance procedures and pro-forma of the history sheet to every BSNL site, where its (the Supplier's) equipments are installed.
- 8.2 The officer In charge of the BSNL shall fill up the history sheet containing the statistics about the health of the equipments installed at the concerned site and send a report to the Circle Service Support Centre and National Service Support Centre of the Supplier on monthly basis. Based on the History sheet report, the Supplier shall analyze the health record of each site and if something alarming or unusual is noticed, shall advise the field staff of BSNL to take necessary actions for preventive maintenance of such equipments. These instructions for preventive maintenance shall be passed on to BSNL staff of the concerned station in writing and by sending experts to the respective stations when felt necessary. BSNL reserves the right to make changes in the proforma proposed by the Supplier.
- 8.3 History sheet proforma shall become part of the AMC agreement and to be mutually devised between BSNL and the supplier at the time of signing of the agreement.

9. FAULTS: SEVERITY LEVELS & RESTORATION TIME :

- 9.1 The following are the severity levels along with the fault definitions and restoration times for the non infra items:

Severity level	Fault Definition	Restoration Time
1A	Failure/ Malfunction of critical element IN and VOMS / or associated servers and any other H/W or S/W causing non availability of any of the services delivered by the system to 20 % or more of the subscriber equipped capacity (to be taken as subscriber base)	2 Hours.
	Failure /Malfunction of Servers/ routers/other system components etc causing non availability of any of the services delivered by the IN/VoMs system, to less than 20 % of the subscriber equipped capacity of IN (to be taken as subscriber base)	4 Hours.
	System unable to restore automatically at IN/VoMS location. Reduction in the grade of service by 25 % or more on voice links and data links in the network including	6/8 Hours for IN VOMS respectively.
2 A	Failure of stand by card/ unit /server not affecting the service to the customer in any way. Slow response of the local or remote client terminals.	72 Hours for repair/ replacement. 72 Hrs.
2 B	Required report (s) not being produced by the OMC or any other system. Operation and maintenance personnel of BSNL not able to interact with the system with the help of Man Machine commands. External OSS or NMS unable to fetch information	48 Hours.
2 C	Any fault / malfunction / event not covered under fault definition / severity level as mentioned above, having no impact on services to the customer.	72 Hours.
2 D	Detection of non-conformity with GR / tender requirement cases of any operational function or maintenance failure.	2 weeks.
2 E	Delay in up gradation to latest S/W version	3 months of the availability of upgraded version.

9.2 For the infra items, the following are the severity levels along with fault definitions and restoration times:

Severity level	Fault Definition	Restoration Time
1	i) Failure of an infrastructure element(s) at a IN and VOMS site which causes total failure of the site	2 Hours.
2	ii) Failure/ Malfunction of infrastructure element(s) at a IN and VOMS site which causes partial failure of the site or degradation in services (including any of normal and stand by), failure of more than one unit of power modules etc.	8 Hours.
3	iii) Failure of standby power system which may not immediately result in outage, but may result in loss of service in case of failure of power or working system(eg: fault in battery bank, ELCB fault etc.)	12 Hours

4	(i) Failure of stand by system like stand-by processors, power plant modules	1 week
5	(ii) Any fault / malfunction / defect/ event not covered under fault definition / severity level as mentioned above, having no impact on services to the customer.	2 weeks
6	(iii) Detection of non-conformity with GR / tender requirement cases of any operational function or maintenance failure.	2 weeks.
7	(iv) Delay in up gradation to latest S/W version	3 months of the availability of upgraded version.

9.3 Travel time of the Suppliers engineer is included in the restoration time indicated above.

9.4 The decision of BSNL in respect of classification of any given fault into any of the categories listed above will be final.

10. PENALTIES:

10.1 Penalties for delay in corrective maintenance

10.1.1 For various faults as defined under severity level 1A to 2C and as detailed in clause no. 8 for non infra items, any delay beyond what is prescribed under restoration time in the said clause, following penalties shall be applicable.

SI No	Severity Level	Penalty for delay in fault restoration at INand VOMS locations per occasion
1	1A	Rs 50,000/- per 2 hour delay or part thereof.
2	2A	Rs 10,000/- per 24 hour delay or part thereof.
3	2B	Rs 3,000/- per 8 hour delay or part thereof.
4	2C	Rs 2,500/- per 8 hour delay or part thereof.
5	2D	Rs 1,000/- per 7 days delay or part thereof.
6	2E	Rs 10,000/- per 7 days delay or part thereof.

10.1.2 FOR THE INFRA ITEMS, THE FOLLOWING PENALTIES SHALL BE APPLICABLE:

SI No	Severity Level	Penalty for delay in fault restoration per occasion
i)	1	Rs 25000/- per each hour of delay or part thereof
ii)	2	Rs 10000/- per 8 hour delay or part thereof
iii)	3	Rs 10000/- per 12 hour delay or part thereof
iv)	4	Rs 10000/- per 48 hour delay or part thereof
v)	5	Rs 10000/- per 72 hour delay or part thereof
vi)	6	Rs 10000/- per 72 hour delay or part thereof
vii)	7	Rs 10000/- per 72 hour delay or part thereof

10.1.3 In view of the exigencies of services it is possible that BSNL may restore the services other in full or in part through its own resources. However, for the purpose of measurement of restoration time and applicable penalties, if any, in terms of this agreement, fault will be deemed to have been restored only after the faulty unit/card etc. has been supplied to the concerned site or the engineer of the supplier has visited the site and removed the pending partial fault, as the case may be.

- 10.1.4 Penalty in case of repeated faults (i.e. same fault occurs in same equipment repeatedly) In such case, if the fault occurs third time or more in any six months billing cycle for reasons pertaining to supplier, then restoration time allowed (time allowed to repair / rectify / remedy such faults) will be Zero for the third time onwards and penalty will be calculated accordingly. Decision of BSNL will be final and binding in this regard.
- 10.1.5 Based on the experience of remedy / rectification of software faults/ bugs the supplier will take necessary proactive steps to avoid such occurrence in similar other network elements supplied. (steps including intimation of root cause analysis (RCA) to BSNL in all other locations where the network element has been supplied by the supplier in BSNL and implement requisite software changes in all such network elements supplied). In case such fault occur in other network element during six month billing cycle then restoration time allowed (time allowed to repair / rectify / remedy such faults) will be zero and penalty will be calculated accordingly

10.2 PENALTY FOR REPAIR OF CARDS:

- 10.2.1 The penalty stipulated herein includes cards of all the network elements including power plant modules.
- (i) If a card is received duly repaired/replaced within 21 days time, no penalty charges shall be levied.
 - (ii) For the delay up to one week, penalty charge of Rs. 1000/- per card per week or part thereof shall be imposed.
 - (iii) For delay beyond one week and up to four weeks, penalty charges of Rs. 2000/- per card per week shall be imposed.
 - (iv) For delay beyond four weeks, penalty charges of Rs. 3000/- per card per week shall be imposed.
 - (v) If a card is neither received nor declared RNP within 90 days, an amount equal to 1.5 times the cost of the card or the penalty calculated as per provisions or 10.2.2 to 10.2.4, whichever is higher shall be deducted from the AMC charges.
 - (vi) If any PCB/card is damaged during the course of repair, Bidder shall replace the PCB with a good one, free of cost.
 - (vii) The imposition of penalties shall start from the 22nd day of the handing over the card to the courier/ agency designated by the Supplier.
 - (viii) In case a supplier refuses to repair any card/unit on the plea of obsolescence of components, an OK tested card/unit shall be replaced by the Supplier free of cost within the stipulated time of 21 days from the date of dispatch of card/unit by BSNL failing which penalty prescribed in paras 10.2.2 to 10.2.5 above will be levied.
 - (ix) If hardware version of any card/unit is changed then the supplier shall have to repair cards of both the versions.
 - (x) System of dispatch and receipt of challans shall be worked out between BSNL and the supplier within three months of the placement of Purchase order in order to account for the time taken in repair and transit. Decision of BSNL in this regard shall be final.
 - (xi) AMC penalty per annum shall be capped at 12% of the annual AMC charges without prejudice to other remedies available to BSNL. However penalty against any capacity/ service effecting fault will not be included for capping on penalty. In case the penalty imposed is 12% in two consecutive six months period then the penalty capping for the next two six months period will be 25%..

10.2.2 FAILURE TO CARRY OUT PREVENTIVE MAINTENANCE VISIT:

- (i) If the Supplier fails to perform yearly health check and technical audit visit, penalty charges of 10 % of yearly AMC cost of that circle(over and above the 12% as specified in 10.2.11) shall be levied.

10.2.3 PENALTY FOR NOT STOCKING ADEQUATE QUANTITY OF SPARES:

- (i) In case the services are affected partially or in full due to non-availability of spare card/ unit out of the spares stocked by the supplier at MSC/BSC site, penalty at the rate of Rs. 2000/- per day shall be levied. This shall be in addition to the penalty applicable corresponding to the severity level of fault.
- (ii) There after such card shall be stocked at all the MSC or BSC sites as the case may be, where the equipment supplied by the same supplier is working in the same Circle, with in a period of 30 days of the rectification of fault at location as mentioned above failing which a penalty of Rs. 1000/ per week per location shall be levied.

11. AMC CHARGES AND PAYMENT :

11.1 The annual charges for the AMC are to be quoted by the Bidder in the price schedule for seven years in terms of the percentage of the quoted equipment cost. The Bidder while quoting the AMC as a percentage of the ordered cost may indicate under the SoR any sub item as that may be associated with the activity along with the associated applicable tax components. However, the charges actually payable will be limited to the respective approved percentage of the ordered cost.

11.2 For the service rendered during the half-year, the payment shall be made at the end of half year at the level of GM incharge of CMTS operations of respective circles, within a period of 21 days from the date of submission of bills duly certified by the respective maintenance incharge. The maintenance incharge shall carry out certification normally within a period of 7 days from the date bills are made available to them.

11.3 Following procedure shall be adopted for making AMC payments to the Supplier:

11.3.1 Towards fulfillment of contractual obligations, pre-receipted half yearly bill, for the preceding half-year, duly completed and certified by a designated officer in charge and countersigned by a DET level officer authorized, shall be submitted to the GM Nodal, WZ, Pune. The details of outages and restorations in the network with time stamps and details of preventive actions taken during the period are required to measure the SLAs achieved.

11.3.2 Based on the performance during the period, SDE/DET incharge shall, send their recommendations for penalties to be deducted, on Bi-monthly basis.

11.3.3 After accounting for such bimonthly recommendations from field units, the GM Nodal, WZ, Pune shall make payments, after deducting penalties recommended, if any. Such penalties shall be adjusted from the next half yearly bill, if for any reason penalty is not deducted the same shall be deducted from the subsequent bills.

11.3.4 BSNL shall not pay any charges in advance.

11.3.5 No charges other than the AMC charges shall be payable. Supplier shall not claim separate charges for the visits for attending to faults/ repairs/ supply of spare parts or any other pretext.

12. TERMINATION OF AMC :

12.1 In case the performance of the Supplier during AMC is not satisfactory, BSNL shall be free to terminate the AMC during its currency either in full or in part, after giving three months notice to the Supplier and en-cash and forfeit the performance bank guarantee. However, the Supplier shall continue to provide the services during the intervening period.

13. DISPUTES & ARBITRATION :

13.1 In the event of any question, dispute or difference arising under this agreement or in connection there-with (except as to matter the decision of which is specifically provided under this agreement), the same shall be referred to sole arbitration of

the respective CGMs of the respective circle, BSNL, or in case his designation is changed or his office is abolished then in such case to the sole arbitration of the officer for the time being entrusted (whether in addition to his own duties or otherwise) with the functions of the respective CGMs of the Concerned Circle, BSNL or by whatever designation such officers may be called (hereinafter referred to as the said officer) and if the respective CGMs of the concerned circle, BSNL or the said officer is unable or unwilling to act as such the sole arbitration of some other person appointed by the respective CGMs of the concerned Circle, BSNL or the said officer. The agreement to appoint an arbitrator will be in accordance with the Arbitration and Conciliation Act, 1996.

13.2 There will be no objection to any such appointment on the ground that the arbitrator is BSNL Servant or that he has to deal with the matter to which the agreement relates or that in the course of his duties as BSNL Servant he has expressed views on all or any of the matter under dispute. The award of the arbitrator shall be final and binding on the parties to the agreement. In the event of such arbitrator to whom the matter is originally referred, being transferred or vacating his office or being unable to act for any reasons whatsoever the respective CGMs of the concerned circle, BSNL or the said officer shall appoint another person to act as arbitrator in accordance with terms of the agreement and the person so appointed shall be entitled to proceed from the stage at which it was left out by his predecessors.

13.3 The arbitrator may from time to time with the consent of parties enlarge the time for making and publishing the award. Subject to aforesaid Arbitration and Conciliation Act, 1996 and the Rules made there-under, any modification thereof for the time being in force shall be deemed to apply to the arbitration proceeding under this clause.

13.4 The venue of the arbitration proceeding shall be the Office of the respective CGMs of the concerned circle BSNL or such other Places as the arbitrator may decide.

13.5 Any party shall not use any information obtained from other party during the course of dispute resolution process under this clause for any purpose other than to resolve the dispute and such information shall not be used in any litigation.

13.6 Both parties shall use their best efforts in good faith and best intention to resolve disputes by mutual negotiation and consultation and shall settle amicably any dispute that may arise or relate to this agreement or a breach thereof. Pending resolution of a dispute, the Supplier shall continue to fulfill its obligations under this agreement.

14. SET OFF :

14.1 Any sum of money due and payable to the Supplier (including security deposit refundable to him) under the AMC agreement may be appropriated by the Purchaser or the BSNL or any other person or persons contracting through the BSNL and set off the same against any claim of the Purchaser or BSNL or such other person or persons for payment of a sum of money arising out of this contract or under any other contract made by the Supplier with the Purchaser or BSNL or such other person or persons contracting through BSNL.

15. FORCE MAJEURE :

15.1 Neither the BSNL nor the Supplier shall be liable to the other for any delay in or failure of performance of their respective obligation under the agreement caused by occurrences beyond the control of BSNL or the system maintenance firm (as the case may be) including but not limited to fire (including failure or reductions), acts of God viz. floods, earthquakes, etc, acts to the public enemy, was, insurrections, riots, strikes, lockouts, sabotage, any law, status or ordinance, thereof of any other local authority, or any compliance therewith or any other causes, contingencies of circumstances similar to the above. Either party shall promptly but not later than twenty days thereafter notify the other of the commencement, and cessation of

such contingencies, and if such contingencies continue beyond three months. Both parties agree upon the equitable solution for termination of this agreement or otherwise decide the course of action to be adopted.

15.2 On the date of the expiry of annual maintenance contract, it is the responsibility of the Supplier to ensure that all the network elements and spares in stocks are fault free. The final instalment of AMC shall be payable on certification of same by operation wing of mobile unit of the circle.

15.3 On Site Support requirement

15.4 The successful bidder shall ensure on-site availability of two engineer, during on all working days for the IN & VoMS. The said resources shall be from respective OEM with adequate training in O&M aspects, configuration, trouble shooting etc with a minimum of two years experience on the respective platform. This shall be done during warranty and AMC phases of the project. Any absence of the said availability for a prolonged duration will be liable to imposed with a penalty of Rs 3000/- per manday of absence. DGM in charge can waive off the penalty in case of genuine reasons.

SECTION 6**SCHEDULE OF REQUIREMENTS (SOR)**

Note: The Hardware and Software configuration for each of the items in the SoR shall be as per the relevant specifications as given in the Section 5 Part B, Annexure I to Section 5Part B(DTR) and Annexure II to Section 5 Part B.

S. No	Sub Package	Description	Unit	Quantity	SoR Remarks
1		Intelligent Network Sub Package			
1.1		SCP/IN (Pre Paid) Main site			
1.1.1		SCP/IN (Pre Paid) (H/W) – Total capacity	40mn BHCC	1	
1.1.2		SCP/IN (Pre Paid) (S/W) – Total Capacity	40mn BHCC	1	
1.2		SCP/IN(Pre-Paid) Mated site			
1.2.1		IN H/W - Total Capacity	40mn BHCC	1	
1.2.2		IN S/W -Total capacity	40mn BHCC	1	
1.3		VOMS Main site			
1.3.1		VOMS Total Capacity H/W	200 Mn Vouchers	1	
1.3.2		VOMS Total Capacity S/W	200 Mn Vouchers	1	
1.4		Centralized O& M H/W & S/W	Per unit	1	
1.5		Man hour rate for developing features/capabilities as per BSNL's requirements	1 hour	3000	
1.6		UPS [1+1]	Per Unit	2	Along with requisite battery backup(1+1) to be ordered as per site requirement at Main and DR locations Capacity to decided by vendor
1.7	IN	SMPS	Per unit	4	Along with requisite battery backup(1+1) to be ordered as per site requirement at Main and DR locations Capacity to decided by vendor. Two output to be provided to each site for redundancy of power
2	Services IN and associated elements				
2.1		IN - Main	Per Unit	1	
2.2		IN – Mated	Per Unit	1	

2.3		VOMS - Mains	Per Unit	1	
2.4		UPS [1+1]	Per Unit	2	
2.5		SMPS	Per Unit	4	
2.6		Centralised O& M H/W & S/W	Per unit	1	
3		Annual Maintenance Contract			
3.1		1st Installment to be paid for 1st year of AMC			
3.2		2nd Installment to be paid for 2nd year of AMC.			
3.3		3rd Installment to be paid for 3rd year of AMC.			
3.4		4th Installment to be paid for 4th year of AMC.			
3.5		5th Installment to be paid for 5th year of AMC.			
3.6		6th Installment to be paid for 6th year of AMC.			Optional for BSNL
3.7		7th Installment to be paid for 7th year of AMC.			Optional for BSNL

Note:- BSNL reserve the right to opt for DR functionality .In case BSNL does not opt for DR functionality then all features shall be available from main site.

SECTION-7
LIST OF TEC GRs

SI No.	Name of the Product	IR/GR/SR/Standard No.
	India Mobile Personnel Communication System	G/PCS-01/02.JUL99
	1/10/16 Pairs Screened PCM cable for Digital equipment wiring to work upto 2 M bits/sec.	G/WIR-04/02 NOV 2001
	Monitoring of VRLA batteries Guidelines	GL/BAT-03/01 JUN 2003
	Value Regulated Lead Acid (VRLA) Batteries with amendment -1 dated 05.01.2005	GR/BAT-01/03 MAR 2004
	Value Regulated Lead Acid (VRLA) Batteries for high rate of discharge (UPS) application	GR/BAT-02/02 MAR 2006
	Optical Router	GR/DCA-22/02 FEB-2006
	Digital Distribution Frame (with Amendment-1 dt. 13.11.2006)	GR/DDF 01/04.SEP.05
	GR on Firewall System	GR/FWS-01/02 SEP 06
	GR on Intrusion Detection System for IP Network Security Amendment No. 1 dated 26.10.2004	GR/IDS-01/02.OCT 07
	Intelligent Network System and Service description for GSM and WCDMA Networks	GR/ING-01/02.MAY2007
	Intelligent Network System And Service Description	GR/INS-01/04.MAR2006
	Inverters Systems (1 To 48KVA)	GR/INV-01/04 MAY 2005
	Intrusion Prevention System	GR/IPS-01/01.NOV 06
	Monitoring Equipment for lawful interception of PSTN/PLMN	GR/LIM-01/02.MAR2005
	Requirements of Switching Systems and Mediation Equipment for lawful interception and Monitoring	GR/LIS-01/02.MAR2005
	Lawful Interception System for GSM Network	GR/LIS-02/01.MAR 2004
	Local Area Network Switch	GR/LSW-01/03.SEP07
	Layer 4 to Layer 7 IP Switch	GR/LSW-02/01 FEB 2005
	Network Switching Sub-system of IMPCS	GR/NSS-01/01.MAR 2004
	GR of Signaling Gateway	GR/SG/SGW-001/02/MAR09
	Intelligent Peripheral-Specialized Resource Point (IP-SRP)	GR/SRP-01/01.SEP2005
	Synchronous Supply Unit	GR/SSU 01/03.OCT 09
	Stand-Alone Signaling Transfer Point (STP)	GR/STP-01/02.MAY2007
	Integrated Signaling Transfer Point (STP)	GR/STP-02/02.MAY2007
	Universal Mobile Telecommunication System-Core Network (Release 4)	GR/UCN-01/01.MAY2005
	Uninterrupted Power Supply (UPS) System	GR/UPS-01/03 MAY 2006
	Universal Mobile Telecommunication System Terrestrial Radio Access Network- Rel 7	GR/WS/UTR-001/02 MARCH 2011
	Voucher Management and Roaming Recharge Service for Mobile Networks	GR/VOM-01/01.FEB 2006

	BGP/MPLS Virtual Private Network Amendment No. 1 dated 05.10.04 & No. 2 dated 26.10.2004	GR/VPN-01/02.FEB04
	GSM Subscriber Identity Module (SIM) Card	GR/WS/SIM-001/03.JAN 10
	Universal Subscriber Identity Module (USIM)	GR/WS/SIM-003/02.JAN2010
	Interface Requirements for Routers.	IR/TCP-01/03.DEC2004
	National CCS7 Standards for MTP and ISUP(Amendment No.1 dated 14/08/2000, Amendment No.2 Dated 22/03/2001) (Addendum No. 1 dated 30/07/2002)	SD/CCS-02/03.JAN2000
	National SCCP Standards	SD/CCS-03/03.MAR 06
	National TCAP Standards	SD/CCS-05/01.MAY03
	National Standards for H.248	SD/GCP-01/02 AUG.2008
	ISP Traffic Legal Intercept and Monitoring System	SD/IMC-01/01. MAR 04
	Intelligent Network Application Protocol (INAP) National Standards	SD/INP-01/02.MAY2007
	Standard on NMS	SD/NMS-002/01 FEB 05
	Standard on Network Management System for Telecommunication Networks	SD/NMS-02/01.FEB2005
	National Q3 Interface Standards	SD/NQS-01/01.MAR2000
	National Common Channel Signaling Plan	SD/NSP-01/01.SEP92
	National Standards for SIP	SD/SIP-01/01 SEP.2008
	Standard For Environmental testing of Telecommunication Equipment.	SD:QM-333 Issue : March 2010
	GR on NMS Platform for Next Generation Network	TEC/GR/IT/NMS-001/01. MAR 09
	Router	TEC/GR/SA/TCP-01/03.MAR09
	Video Ring Back tone	TEC/GR/SA/VRT-001/01 MAR 2010
	Element Management System	TEC/GR/SW/EMS-001/02/NOV.2009
	Fraud Management and Control Centre	TEC/GR/SW/FMC-001/03/MAR-2010
	IP Multi Media System Based on TISPAN Architecture	TEC/GR/SW/ITA-001/02/MAR-2010
	SIP Application Server	TEC/GR/SW/SAS-001/02 NOV-2009
	Session Border Controller	TEC/GR/SW/SBC-001/03/NOV.2009
	Fibre Distribution Frames	TEC/GR/TX/FDF-01/02/MAY-2010
	Unified Threat Management	TEC/I/UTM/2009-10/01/430/JAN 2011
	Billing & Customer Care System for Cellular Mobile System	GR/BCS-01/02.MAR2006

SECTION- 8
UNDERTAKING & DECLARATION
PART A

Undertaking for understanding the terms & condition of Tender & Spec. of work

This Deed of Undertaking executed on this _____ day of ----- Two thousand and ----- by (Name of authorized representative of the Bidder) -----
 ----- S/O -----residing at-----
 -----on behalf of said M/s ----- (Name of the Company,.) having its office at-----and duly authorized to sign, file and verify present undertaking by the said -----
 (Name of the Company,) in favour of Bharat Sanchar Nigam Limited, a Government of India Undertaking having its Registered Office at Bharat Sanchar Bhavan, Harish Chandra Mathur Lane, Janpath Road, New Delhi-110 001 New Delhi and local office at -----
 ----- (hereinafter called BSNL which terms shall mean and include its successors, administrators, heirs and assigns).

Whereas BSNL invited bids for -----, I/We participated in the bidding process and emerged as Successful Bidder with respect to Tender No.-----
 -----.

I/ We ----- acknowledge that I/We -----
 -----have fully understood and are aware of the terms & conditions of the Tender Document/ Contract & offer to execute the work at the rates quoted by us in the Bid and do hereby unequivocally and unconditionally undertake and declare that :

- (i) I/ We -----shall comply with all the rules/ regulations/ Laws/ Government instructions/ status etc. that are applicable/ will be made applicable and or are aimed to protect the interest of the workers/ employees engaged by me / us in the past and during the course of performance of the contract with BSNL.
- (i) I/We shall fully protect, indemnify and hold harmless BSNL and its employees, officers, Directors, agents or representatives from and against any and all liabilities, losses, actions, judgments, damages, fines, penalties and costs (including legal costs and disbursements) arising from or relating to:
 - (a) Any breach/ violation of any direction, order from any governmental authority any provisions of the labour laws or any other laws, statute or regulation that are 'or' will be aimed to protect the interest of the workers/ laborers engaged by the contractor in past and during the course of this contact

OR

- (b) Any other payments, claims 'or' liability that may arise for ensuring compliance of the provisions of any of the labour laws or any other laws, etc.

OR

- (c) Any other claim made by any third party in connection with any violation of any of the laws, guidelines, instruction, etc.

In witness whereof this undertaking has caused on the -----

Day-----Month of -----Year .

Date:

Place:

(Signature:-----)

Name :-----

Designation:-----

WITNESS : 1.

2.

SECTION 8**PART-B****NEAR-RELATIONSHIP CERTIFICATE:**

(Format of the Certificate to be given as per the clause 34 of Section-4 Part-A by the bidder in respect of status of employment of his/ her near relation in BSNL)

DECLARATION FORMAT FOR NON EMPLOYMENT OF RELATIVE IN BSNL**(DECLARATION TO BE GIVEN BY VENDOR)**

" I _____ S/o _____ r/o _____ hereby certify that none of my relative(s) as defined in the tender document is/are employed in BSNL unit as per details given in the tender document. In case at any stage, it is found that the information given by me is false/incorrect. BSNL shall have the absolute right to take any action as deemed fit/without any prior intimation to me".

Name of the Vendor :

Signature :

Office Stamp:

SECTION 8**PART-C****UNDERTAKING & DECLARATION**

For understanding the terms & condition of Tender & Spec. of work

a) Certified that:

1. I/ We have read, understood and agree with all the terms and conditions, specifications included in the tender documents & offer to execute the work at the rates quoted by us in the tender form.
2. If I/ We fail to enter into the agreement & commence the work in time, the EMD/ SD deposited by us will stand forfeited to the BSNL.

b) The tenderer hereby covenants and declares that:

1. All the information, Documents, Photo copies of the Documents/ Certificates enclosed along with the Tender offer are correct.
2. No addition / deletion / corrections have been made in the downloaded tender document being submitted and it is identical to the tender document appearing on the website.
3. If anything is found false and/or incorrect and/or reveals any suppression of fact at any time, BSNL reserves the right to debar our tender offer/ cancel the LoI/APO/ Purchase/ work order if issued and forfeit the EMD/ SD/ Bill amount pending with BSNL. In addition, BSNL may debar the contractor from participation in its future tenders.

Date:

.....

Signature of Tenderer

Place:

Name of Tenderer

Along with date & Seal

Signature of Bidder

SECTION- 9
PROFORMAS

9 (A)

PROFORMA FOR THE BID SECURITY/ EMD GUARANTEE

(To be typed on Rs.100/- non-judicial stamp paper)

Sub: Bid Security/EMD guarantee.

Whereas M/s R/o
(Hereafter referred to as Bidder) has approached us for giving Bank Guarantee of Rs./- (hereafter known as the "B. G. Amount") valid up to/...../ 20.... (hereafter known as the "Validity date") in favour of A.G.M.(CPC-I), BSNL, O/o the CGM.Maharashtra Telecom Circle, Mumbai (Hereafter referred to as BSNL) for participation in the tender of work of vide tender no.

Now at the request of the Bidder, We BankBranch having (Address) and Regd. office address as (Hereinafter called "the Bank") agrees to give this guarantee as hereinafter contained:

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 BSNL stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the BSNL by reason of breach by the said bidder(s) of any of terms or conditions contained in the said Agreement or by reason of the bidder (s) failure to perform the said Agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee where the decision of the BSNL in these counts shall be final and binding on the bank. However, our liability under this guarantee shall be restricted to an amount not exceeding the "B. G. Amount".
3. We undertake to pay to the BSNC any money so demanded notwithstanding any dispute or disputes raised by the bidder(s) in any suit or proceeding 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 valid discharge of our liability for payment there under and the bidder(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 agreement and that it shall continue to be enforceable till all the dues of the BSNL under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till BSNL Certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said bidder(s) and accordingly discharge this guarantee. Unless a demand or claim under this guarantee is made on us in writing or before the expiry of Validity date from the date hereof, we shall be discharged from all liability under this guarantee thereafter.
5. We the Bank further agree with the BSNL that the BSNL 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 bidder(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the BSNL against the said bidder(s) and to forbear or enforce any of the terms and conditions relating to the

said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Bidder(s) or for any forbearance, act or omission on the part of the BSNL or any indulgence by the BSNL to the said bidder(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. Notwithstanding anything herein contained ;
 - (a) The liability of the Bank under this guarantee is restricted to the "B. G. Amount" and it will remain in force up to its Validity date specified above.
 - (b) The guarantee shall stand completely discharged and all rights of the BSNL under this Guarantee shall be extinguished if no claim or demand is made on us in writing on or before its validity date.
7. In case BSNL demands for any money under this bank guarantee, the same shall be paid through banker's Cheque in favour of **"AO (F&A), BSNLMH Telecom Circle,Mumbai-400054"** payable at Mumbai.
8. The Bank guarantees that the below mentioned officer who have signed it on behalf of the Bank have authority to give this guarantee under its delegated power.

Place:

Date:

(Signature of the Bank Officer)

Rubber stamp of the bank

Authorized Power of Attorney Number:

Name of the Bank officer:

Designation:

Complete Postal address of Bank:

.....

Telephone Numbers

Fax numbers

9 (B)**FOR THE PERFORMANCE GUARANTEE**

(To be typed on Rs.100/- non-judicial stamp paper)

Dated:.....

Sub: Performance guarantee.

Whereas M/s R/o
 (Hereafter referred to as Bidder) has approached us for giving Bank Guarantee of Rs./- (hereafter known as the "B. G. Amount") valid up to/...../ 20.... (hereafter known as the "Validity date") in favour of A.G.M.(CPC-I), BSNL O/o the CGM, Maharashtra Telecom Circle, Mumbai (Hereafter referred to as BSNL) for participation in the tender of work of vide tender no.

Now at the request of the Bidder, We BankBranch having (Address) and Regd. office address as (Hereinafter called 'the Bank') agrees to give this guarantee as hereinafter contained:

2. We, "the Bank" do hereby undertake and assure to the BSNL that if in the opinion of the BSNL, the Bidder has in any way failed to observe or perform the terms and conditions of the said agreement or has committed any breach of its obligations there-under, the Bank shall on demand and without any objection or demur pay to the BSNL the said sum limited to P.G. Amount or such lesser amount as BSNL may demand without requiring BSNL to have recourse to any legal remedy that may be available to it to compel the Bank to pay the same.
3. Any such demand from the BSNL shall be conclusive as regards the liability of Bidder to pay to BSNL or as regards the amount payable by the Bank under this guarantee. The Bank shall not be entitled to withhold payment on the ground that the Bidder had disputed its liability to pay or has disputed the quantum of the amount or that any arbitration proceeding or legal proceeding is pending between Bidder and BSNL regarding the claim.
4. We, the Bank further agree that the guarantee shall come into force from the date of its issue and shall remain in full force and effect up to its Validity date.
5. The Bank further agrees that the BSNL shall have the fullest liberty without the consent of the Bank and without affecting in any way the obligations hereunder to vary any of the terms and conditions of the said agreement or to extend the time for performance of the said agreement from any of the powers exercisable by BSNL against the Bidder and to forebear to enforce any of the terms and conditions relating to the said agreement and the Bank shall not be relieved from its liability by reason of such failure or extension being granted to Bidder or through any forbearance, act or omission on the part of BSNL or any indulgence by BSNL to Bidder or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of relieving or discharging the guarantor.

6. Notwithstanding anything herein contained ;
- (a) The liability of the Bank under this guarantee is restricted to the P.G. Amount and it will remain in force up to its Validity date.
- (b) The guarantee shall stand completely discharged and all rights of the BSNL under this Guarantee shall be extinguished if no claim or demand is made on us in writing on or before its validity date.
7. In case BSNL demands for any money under this bank guarantee, the same shall be paid through banker's Cheque in favour of **"AO (F&A), BSNLMH Telecom Circle,Mumbai-400054"** payable at Mumbai.
8. The Bank guarantees that the below mentioned officer who have signed it on behalf of the Bank have authority to give this guarantee under its delegated power.

Place:

Date:

(Signature of the Bank Officer)

Rubber stamp of the bank

Authorized Power of Attorney Number:

Name of the Bank officer:.....

Designation:

Complete Postal address of Bank:

.....

Telephone Numbers

Fax numbers

Signature of the Bidder.

9 (C)**FOR LETTER OF AUTHORIZATION FOR ATTENDING BID OPENING EVENT.**

(To be typed preferably on letter head of the company)

Subject: Authorization for attending Bid opening

I/ We Mr. /Ms. have submitted our bid for the
 tender no. in respect of
 (Item of work) which is due to open on
 (date) in the Meeting Room, O/o

We hereby authorize the following person, whose signatures are attested
 below, to attend the bid opening for the tender mentioned above on our behalf.

Order of preference	Name	Specimen signature	Contact No.
I			
II (Alternate Representative)			

Above Signatures Attested:

Signature of bidder

or

Officer authorised to sign the bid
 documents on behalf of the bidder.

Note 1: Only one representative will be permitted to attend the Bid opening

2. Permission for entry to the hall where bids are opened may be refused in case authorization as prescribed above is not received.

9 (D)**INTEGRITY PACT AGREEMENT**

To be signed on plain paper by
Both BSNL and the Bidder

This **Integrity Pact Agreement** is made on ___ day of ___, 2011, by and between:
 Bharat Sanchar Nigam Limited (BSNL) (hereinafter referred to as "The Principal")
 And

..... (hereinafter referred to as "The Bidder/Contractor")

Each of the Principal and the Bidder shall be individually referred to as the "Party" and collectively as the "Parties".

Preamble

A. The Principal intends to award, under laid down organizational procedures, contract/s for..... ("Tender"). The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s.

B. In order to achieve these goals, the Principal will appoint an Independent External Monitor (as hereinafter defined) who will monitor the Tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of the Principal

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

1.2 No employee of the Principal, personally or through family members, will in connection with the Tender for, or the execution of a contract, demand, take a promise for or accept, for him/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.

1.3 The Principal will, during the Tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

1.4 The Principal will exclude from the process all known prejudiced persons.

If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Corporate Vigilance Office of BSNL ("**Corporate Vigilance Office**") and in addition can initiate disciplinary actions.

2.1 **Section 2 – Commitments of the Bidder(s)** The Bidder(s) commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the contract execution.

2.2 The Bidder(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

2.3 The Bidder(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

- 2.4 The Bidder(s) will not commit any offence under the relevant applicable laws include the anti-corruption laws of India; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.5 The Bidder(s)/ will, when presenting his Bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 2.6 The Bidder(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from Tender process and exclusion from future contracts

If the Bidder(s) before award of the Contract or during execution of the Contract has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the defined procedure.

Section 4 – Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder(s) from the Tender process prior to the award of the Tender, according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Bid Security.
- 4.2 If the Principal has terminated the Contract in accordance with Section 3, or if the Principal is entitled to terminate the Contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor the amount equivalent to Performance Security in addition to any other payments as per terms and conditions of the Tender Document.

Section 5 – Previous transgression

- 5.1 The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the anti-corruption approach or with any other public sector enterprise in India that could justify his exclusion from the Tender process.
- 5.2 If the Bidder makes any incorrect, contrary to the provisions of this Section 5, he can be disqualified from the Tender process or action can be taken as per the defined procedure.

Section 6 – Equal treatment of all Bidders/ Subcontractors

- 6.1 The Principal will enter into agreements with identical conditions as this one with all Bidders
- 6.2 The Bidder(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact Agreement.
- 6.3 The Principal will disqualify from the Tender process all Bidders who do not sign this Integrity Pact Agreement or violate its provisions.

Section 7 – Criminal charges against violating Bidder(s)/ Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, or Subcontractor, or of an employee or a representative or an associate of a Bidder, or Subcontractor, which constitutes a violation of the terms and conditions of stated herein, or if the Principal has substantive suspicion in this regard, the Principal will inform the Corporate Vigilance Office.

Section 8 – Independent External Monitor

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Integrity Pact Agreement ("**Independent External Monitor**"). The task of the Independent External Monitor is to review independently and objectively, whether

and to what extent the Parties comply with the obligations under this Integrity Pact Agreement.

- 8.1 The Independent External Monitor is not subject to instructions by the representatives of the Parties and performs his functions neutrally and independently. He reports to the CMD of the BSNL.
- 8.2 The Bidder(s) accepts that the Independent External Monitor has the right to access without restriction to all project documentation of the Principal including that provided by its sub-contractor. The Bidder will also grant the Independent External Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to the subcontractors of the Bidder. The Independent External Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Subcontractor(s) with confidentiality.
- 8.4 Notwithstanding anything contained in this Section, the Bidder(s) shall have no obligation whatsoever to provide any internal costing mechanisms or any internal financial or commercial data pursuant to any audit or review conducted by or on behalf of the Principal. Further, the Bidder(s) shall not be required to provide any data relating to its other customers, or any personnel or employee related data.
- 8.5 The Principal will provide to the Independent External Monitor sufficient information about all meetings among the Parties related to the project provided such meetings could have an impact on the contractual relations between the Principal and the Bidder. The Parties offer to the Independent External Monitor the option to participate in such meetings.
- 8.6 As soon as the Independent External Monitor notices, or believes to notice, a violation of this Integrity Pact Agreement, he will so inform the management of the Principal and request the management to discontinue or take corrective action, or to take other relevant action. The Independent External Monitor can in this regard submit non-binding recommendations. Beyond this, the Independent External Monitor has no right to demand from the Parties that they act in a specific manner, refrain from action or tolerate action.
- 8.7 The Independent External Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.
- 8.8 If the Independent External Monitor has reported to the CGM, BSNL, MHTC, a substantiated suspicion of an offence under Applicable Laws including relevant anti-corruption laws of India, and BSNL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Corporate Vigilance Office, the Independent External Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.9 The word Independent External 'Monitor' would include both singular and plural.

Section 9 – Term

- 9.1 This Integrity Pact Agreement shall commence upon the date of signature by BSNL and shall continue (a) for the Successful Bidder for a period of 12 months after the last payment has been made by the Principal to the Successful Bidder under the Contract, and (ii) for all other Bidders 6 months after the Contract has been awarded to the Successful Bidder ("**Term**").
- 9.2 If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this Integrity Pact Agreement as specified above, unless it is discharged/determined CGM, BSNL, MHTC.

Section 10 – Other provisions

- 10.1 This Integrity Pact Agreement is subject to the laws of India. The place of performance and jurisdiction is the registered office of the Principal, i.e. New Delhi.

The arbitration clause provided in the Tender Document / contract shall not be applicable for any issue /dispute arising under Integrity Pact Agreement.

- 10.2 Changes and supplements as well as termination notices need to be made in writing.
- 10.3 Should one or several provisions of this Integrity Pact Agreement turn out to be invalid, the remainder of this Intergity Pact Agreement remains valid. In this case, the parties will strive to come to an agreement to their original intention.
- 10.4 Capitalised terms not defined in the Integrity Pact Agreement shall have the meaning assigned to it in the Tender.

For the Principal

For the Bidder/Contractor

Place..... Witness 1 :

Date Witness 2 :

9 (E)**MODEL AMENDMENT LETTER INTIMATING CONDITIONS FOR EXTENSION OF DELIVERY PERIOD**

(Refer to clause 15.3 of Section-5 Part-A)

Registered A Due
Address of the purchaser-----

To

M/s

.....

Sub: This office P.O. no..... dated, T.E. No.Dtd. opened
on..... placed on you for supply of

Ref :Your letter no..... dated

We are in receipt of your letter, wherein you have asked for extension/ further extension of
time for delivery/ execution/ installation/ commissioning.

In view of the circumstances stated in your above referred letter, the time of delivery can be
extended from ____ (original/ last delivery period) to ____ (presently agreed
delivery period) subject to your unconditional acceptance of the following terms and
conditions:

1. That, liquidated damages shall be levied in accordance with agreed clause 16
Section-5 Part-A of terms and conditions of the tender/ PO.
2. That, notwithstanding any stipulation in the contract for increase in price on any
ground, no such increase, whatsoever, which takes place after current last date of
Delivery shall be admissible on such of the said goods as are delivered after the said
date as per clause 12 Section-5 Part-A.
3. That, the prices during this extended delivery period shall be provisional and shall
be governed as per agreed clauses 12 and 24 of Section-5 Part-A and shall be
finalized in accordance with the current PO price or the current PO price with latest
budget/ duty impact or the prices in the new tender (T.E. no.) from the date
of its opening, on whichever is lower basis.
4. An additional BG of Rs.____in accordance with clause 15.3, Section-5 Part-A of the
contract with validity up to _____.

5. An undertaking as required vide clause 24.3, Section-5 Part-A. Otherwise furnish the details as requisite in clause 24.4 Section-5 Part-A"

Please intimate your acceptance of this letter along with the additional BG, under taking as at (5) above and Copy of the last I/C issued by BSNL QA within ten days of the issue of this letter failing which the contract will be cancelled at your risk and expense without any further reference to you. This letter shall form part and parcel of the agreement/ contract/ APO/ PO and all other terms & conditions of the contract remain unaltered.

Yours faithfully,

(.....)

for and on behalf of.....

Note : The entries which are not applicable for the case under consideration are to be deleted.

Signature of Bidder

9 (F)**MODEL AMENDMENT LETTER FOR EXTENSION OF DELIVERY PERIOD**

(Refer to clause 15.3 of Section-5 Part-A)

Registered Acknowledgement Due
Address of the purchaser-----

To

M/s

Sub : This office P.O. no..... dated, T.E. No.Dtd. opened
on..... placed on you for supply of

- Ref : 1. Your letter no..... dated requesting DP extension
 2. This office letter no. dated intimating conditions for DP extension
 3. Your letter no..... dated accepting the conditions for DP extension

In your above letter under reference (1), you have asked for extension/ further extension of time for delivery/ execution/ installation/ commissioning. The terms and conditions for extension of delivery period were conveyed to you vide this office letter under reference (2). In view of the circumstances stated in your above referred letter, and upon your unconditional acceptance of the terms and conditions of this extension vide your letter under reference (3), the time of delivery is hereby extended from _____ (last delivery period) to _____ (presently agreed delivery period) on the terms and conditions in letter under reference (2) above and agreed by you vide letter under reference (3) i.e.:

- (a) Liquidated damages shall be levied in accordance with agreed clause 16 Section-5 Part-A of terms and conditions of the tender/ PO.
- (b) Notwithstanding any stipulation in the contract for increase in price on any ground, no such increase, whatsoever, which takes place after current last date of Delivery/ completion of work shall be admissible on such of the said goods as are delivered after the said date as per clause 12 Section- 5 Part-A.
- (c) The prices during this extended delivery period shall be governed as per clauses 12 and 24 of Section-5 Part-A and shall be finalized in accordance with current PO price or the current PO price with latest budget/ duty impact or the prices in the new tender (T.E. no.) from the date of its opening, on whichever is lower basis.

The letters under reference above and this letter shall form part and parcel of agreement/ contract/ APO/ PO and all other terms & conditions of the contract remain unaltered.

Yours faithfully,

(.....)

for and on behalf of.....

Copy to :

(All concerned)

Note:- The entries which are not applicable for the case under consideration are to be deleted.

Signature of Bidder

9 (G)
PROFORMA OF POWER OF ATTORNEY
(Refer Clause 15 of Section-4 Part-A)

Non-Judicial Stamp
POWER OF ATTORNEY

Be it known all to whom it concern that :-

1. Shri/Smt./Ku_____ S/o / W/o / D/o _____ residing at _____
2. Shri/Smt./Ku_____ S/o / W/o / D/o _____ residing at _____
3. Shri/Smt./Ku_____ S/o / W/o / D/o _____ residing at _____

I, the Proprietor/We all the Partners/Directors of M/s _____ (Name & Address) hereby appoint Shri/Smt./Ku._____ s/o / w/o / d/o _____ residing at _____ as my/our Attorney to act in my/our name and on behalf and sign and execute all documents/agreements binding the firm for all contractual obligations (including references of cases to arbitration) arising out of contracts to be entered into by the firm with the CGM,BSNL, MHT Circle, Juhu Road, Santacruz(W), Mumbai-54 in connection with their Tender Enquiry No. _____ dated _____ for the supply of _____ due for opening on _____. In short he is fully authorised to do all, each and everything requisite for the above purpose concerning M/s _____. And I/We hereby agree to confirm and ratify his all and every act of this or any documents executed by my/our said Attorney within the scope of the authority hereby conferred on him including references of cases to arbitration and the same shall be binding on me/us and my/our firm as if the same were executed by me/us individually or jointly.

Witness (with Address)

Signature of the Proprietor/Partners/Directors

- | | |
|------------------------|-------------------------|
| 1.Name_____ Sign._____ | 1.Name:_____ Sign._____ |
| (Address_____) | |
| 2.Name_____ Sign._____ | 2.Name:_____ Sign._____ |
| (Address_____) | |
| 3.Name_____ Sign._____ | 3.Name:_____ Sign._____ |
| (Address_____) | |

Accepted
 (Name & Signature of Signatory of Tender Offer of the firm)
 (with Designation, Address, Phone No., Mobile No. & Email)

ATTESTED
 Notary Public
 (Signature with Official Seal)

OR
 REGISTERED
 Before
 (SUB – REGISTRAR) (of concerned State)
 Signature with Official Seal

(Note :-Kindly refer Clause 15 of Section-4 Part-A for compliance same is reiterated as :-

- (i) *The Power of Attorney should be submitted and executed on the non-judicial stamp paper of appropriate value as prevailing in the respective states(s) and the same be EITHER attested by a Notary Public OR registered before Sub-Registrar of the states(s) concerned.*
- (ii) *The said Power of Attorney be executed by a person who has been authorized by the Board of Directors of the bidder in this regard, on behalf of the Company/Institution/Body corporate .Copy of the Board Resolution / authorization shall also be submitted along with POA*
- (iii) *In case of the bidder being a firm, the said Power of Attorney should be executed by all the partner(s) in favour of the said Attorney.)*

Signature of Bidder

9 (H)

PROFORMA FOR
IRREVOCABLE UNDERTAKING BY FRONT BIDDER
AND
IT'S TECHNOLOGY/CONSORTIUM PARTNER
On Rs. 100/- Non-Judicial Stamp

This is to certify that we, M/s..... (Name & full address) as the front Bidder of this tender and our technology / consortium partner, M/s..... (Name & full address) both shall be liable for due performance of the contract jointly and severally, failing which both of us shall be liable to be barred from having any business dealing with BSNL for a period of 2 (Two) years.

Signature:

Signature :

Name in Block letters :

Name in Block letters :

Status: Director/Manager/Partner/
Proprietor of the CompanyStatus: Director/Manager/Partner/
Proprietor of the Company[on behalf of the front bidder]
technology/consortium partner]

[on behalf of

Signature of the Bidder.

9 (I)**PROFORMA FOR OEM SUPPORT DOCUMENT**

An MOU between bidder & OEM containing clauses related to following duly authenticated by the authorized signatory of the bidder may be submitted:

- 1) Validity of MOU
- 2) Full Professional Services Support for installation, maintenance during warrantee & thereafter upto 3 years.
- 3) In case of failure of the bidder to fulfill warranty obligations or any other matter related to the performance of the product up to 3 years after warrantee period, OEM shall provide necessary support as per terms & conditions of the bid document, failing which both (bidder & OEM) shall be liable to be barred from having any business dealing with BSNL for a period of 3 years in addition to other financial consequences as applicable to the bidder.

Signature of Authorised Signatory of Bidder : _____

Name of Authorised Signatory in Block Letter : _____

[This Section shall be 'NOT APPLICABLE' in case of indigenous items.]

Signature of the Bidder.

9 (J)**PROFORMA FOR BREAK UP OF QUOTED RATE OF CUSTOM DUTY**

Sl.	Description	Percentage
1	(A) ASSESSABLE VALUE AS QUOTED UNDER COLUMN 5 OF PRICE SCHEDULE.	
2	(B) BASIC CUSTOM DUTY ON (A)	
3	(C) CVD (COUNTERVEILING DUTY) ON (A + B)	
4	(D) EDUCATIONAL CESS ON (C)	
5	(E) SECONDARY & HIGHER EDUCATIONAL CESS ON (C)	
6	(F) EDUCATIONAL CESS OF CUSTOMS ON (B + C + D + E)	
7	(G) SECONDARY & HIGHER EDUCATION CESS OF CUSTOMS ON (B + C + D + E)	
8	ADDITIONAL DUTY OF CUSTOMS TO COUNTERVEIL STATE TAXES / VAT ON (A + B + C + D + E + F + G)	
9	(I) OTHERS, IF QUOTED, PLEASE SPECIFY THE PARTICULAR HEAD	

The bidder submitting rate for imported product should furnish the above break up along with the price schedule. (Please refer clause-7 of Section-4 Part-B)

Signature of the Authorised Signatory
(with full name)

[This page shall be NOT APPLICABLE in case of indigenous item]

Signature of the Bidder.

9 (K)**Mutual Non-Disclosure Agreement**

This Agreement is made as of the2013 between BHARAT SANCHAR NIGAM LIMITED (BSNL) a Government of India Enterprise,, having its registered office at Bharat Sanchar Bhawan, H. C. Mathur Lane, Janpath, New Delhi – 110 001 hereinafter called BSNL which expression shall unless repugnant to the subject or the context mean and included its successors, nominees or assigns and M/s a company incorporated under the Indian Companies Act, 1956 and having its registered office at hereinafter called "....." which expression shall unless repugnant to the subject or the context mean and include its successors, nominees or assigns.

Whereas in order to pursue the mutual business purpose of the particular project as specified in Exhibit A (the "Business Purpose"), BSNL and M/s recognize that there is a need to disclose to one another certain information, as defined in para 1 below, of each party to be used only for the Business Purpose and to protect such confidential information from unauthorized use and disclosure.

In consideration of the other party's disclosure of such information, each party agrees as follows :

This Agreement will apply to all confidential and proprietary information disclosed by one party to the other party, including information listed in Exhibit A attached hereto and other information which the disclosing party identifies in writing or otherwise as confidential before or within thirty days after disclosure to the receiving party ("Confidential Information"). Information consists of certain specifications, designs, plans, drawings, software, prototypes and or technical information and the copies and derivatives containing such information that may be disclosed to one another for and during the purpose, which a party considers proprietary or confidential ("Information"). Information may be in any form or medium, tangible or intangible and may be communicated/disclosed in writing, orally, or through visual observation or by any other means to one party (hereinafter referred to as the receiving party) by the other party (hereinafter referred to as one disclosing party). Information shall be subject to this Agreement, if it is in tangible form, only if clearly marked as proprietary or confidential as the case may be, when disclosed to the receiving party or, if not in tangible form, its proprietary nature must first be announced, and it must be reduced to writing and furnished to the receiving party within thirty (30) days of the initial disclosure.

1. M/sand BSNL hereby agreed at during the Confidentiality Period :

a) The receiving party shall use Information only for the Purpose, shall hold Information in confidence using the same degree or care as it normally exercises to protect its own proprietary information, but not less than reasonable care, taking into account the nature of the Information , and shall grant access to Information only to its employees who have a need to know , but only to the extent necessary to carry out the business purpose of this project as defined in exhibit A, shall cause its employees to comply with the provisions of this Agreement applicable to the receiving party, shall reproduce Information only to the extent essential to fulfilling the Purpose, and shall prevent disclosure of Information to third

parties. The receiving party, may, however, disclose the Information to its consultants and contractors with a need to know; provided that by doing so, the receiving party agrees to bind those consultants and contractors to terms at least as restrictive as those stated herein, advise them of their obligations, and identify the disclosing party for any breach of those obligations.

b) Upon the disclosing party's request, the receiving party shall either return to the disclosing party all

Information or shall certify to the disclosing party that all media containing Information have been destroyed. Provided, however, that an archival copy of the Information may be retained in the files of the receiving party's counsel, solely for the purpose of providing the contents of the Information.

2. The foregoing restrictions on each party's use or disclosure of Information shall not apply to Information that the receiving party can demonstrate:

a) was independently developed by or for the receiving party without reference to the Information, or was received without restrictions;

or

b) has become generally available to the public without breach of confidentiality obligations of the receiving party;

or

c) was in the receiving party's possession without restriction or was known by the receiving party without restriction at the time of disclosure;

or

d) is the subject of a subpoena or other legal or administrative demand for disclosure; provided; however, that the receiving party has given the disclosing party prompt notice of such demand for disclosure and the receiving party reasonably cooperates with the disclosing party's efforts to secure an appropriate protective order;

or

e) is disclosed with the prior consent of the disclosing party;

or

f) was in its possession or known to it by being in its use or being recorded in its files or computers

or

other recording media prior to receipt from the disclosing party and was not previously acquired by the receiving party from the disclosing party under an obligation of confidence;

or

g) the receiving party obtains or has available from a source other than the disclosing party without breach by the receiving party or such source of any obligation of confidentiality or non-use towards the disclosing party.

3) Each party agrees not to remove any of the other party's Confidential Information from the premises of the disclosing party without the disclosing party's prior written approval. Each party agrees to exercise extreme care in protecting the confidentiality of any Confidential Information which is removed, only with the disclosing party's prior written approval, from the disclosing party's premises. Each party agrees to comply with any and all terms and conditions and disclosing party may impose upon any such approved removal, such as conditions that the removed Confidential information and all copies must be returned by a certain date, and that no copies are to be made off of the premises.

4. Upon the disclosing party's request, the receiving party will promptly return to the disclosing party's Confidential Information all copies thereof.
5. Each party recognizes and agrees that all of the disclosing party's Confidential Information is owned solely by the disclosing party (or its licensors) and that the unauthorized disclosure or use of such Confidential Information would cause irreparable harm and significant injury, the degree of which may be difficult to ascertain. Accordingly, each party agrees that the disclosing party will have the right to obtain an immediate injunction enjoining any breach of this Agreement, as well as the right to pursue any and all other rights and remedies available at law or in equity for such a breach.
- 6) Access to Information hereunder shall not preclude an individual who has seen such Information for the purposes of this Agreement from working on future projects for the receiving party which relate to similar subject matters, provided that such individual does not make reference to the Information and does not copy the substance of the Information during the Confidentiality Period. Furthermore, nothing contained herein shall be construed as imposing any restriction on the receiving party's personnel under this Agreement, if such disclosure and use would be regarded by a person of ordinary skill in the relevant area as not constituting a disclosure or use of the Information.
- 7) As between the parties, all Information shall remain the property of the disclosing party. By disclosing Information or executing this Agreement, the disclosing party does not grant any license, explicitly or implicitly, under any trademark, patent, copyright, mask work protection right, trade secret or any other intellectual property right. THE DISCLOSING PARTY DISCLAIMS ALL WARRANTIES REGARDING THE INFORMATION INCLUDING ALL WARRANTIES WITH RESPECT TO INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS AND ALL WARRANTIES AS TO THE ACCURACY OR UTILITY OF SUCH INFORMATION. execution of this Agreement and the disclosure of Information pursuant to this Agreement does not constitute or imply any commitment, promise, or inducement by either party to make any purchase or sale, or to enter into any additional agreement of any kind.
- 8) Either party's failure to enforce any provision, right or remedy under this agreement shall not constitute a waiver of such provision, right or remedy.
- 9) This Agreement will be construed in, interpreted and applied in accordance with the laws of India.
- 10) That in case of any dispute or differences, breach & violation relating to the terms of the Agreement. The said matter or dispute, difference shall be referred to sole arbitration of Chief General Manager, Maharashtra Telecom Circle(CGM MHTC) or any other person appointed by him. That the award of the arbitrator shall be final and binding on both the parties. In the event of such Arbitrator to whom the matter is originally referred to is being transferred or vacates his office on resignation or otherwise or refuses to do work or neglecting his work or being unable to act as Arbitrator for any reasons whatsoever, the Chief General Manager, Maharashtra Telecom Circle(CGM MHTC) shall appoint another person to act as Arbitrator in place of out going Arbitrator and the person so appointed shall be entitled to proceed further with the reference from the stage at which it was left by his predecessor. The M/s will have No Objection in any such appointment, that arbitrator so appointed is employee of BSNL. The said Arbitrator shall act under the Provisions of the Arbitration and conciliation Act, 1996 or any statutory modifications or reenactment there of any rules made thereof.

11) This Agreement and Exhibit A attached hereto constitutes the entire agreement of the parties with respect to the parties respective obligations in connection with Information disclosed hereunder and supersedes all prior oral and written agreements and discussions with respect thereto. The parties can amend or modify this Agreement only by a writing duly executed by their respective authorized representatives. Neither party shall assign this Agreement without first securing the other party's written consent.

12) This Agreement will remain in effect for five years from the date of the last disclosure of Confidential Information, at which time it will terminate, unless extended by the disclosing party in writing.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement by their duly authorized officers or representatives.

M/s	BHARAT SANCHAR NIGAM LIMITED
Signature _____	Signature _____
Printed Name :	Printed Name :
Title :	Title :

Signature of Bidder

9 (L)
Exhibit - A

1. Business Purpose :

2. Confidential Information of M/s

3. Confidential Information of Bharat Sanchar Nigam Limited (BSNL) :

The files containing Information of _____

All information shared in oral or in written form by BSNL with M/s.....

BSNL :

M/s

Signed

Signed

Signature of the Bidder.

SECTION- 10**BIDDER'S PROFILE & QUESTIONNAIRE.**

Tenderer / Bidder's Profile & Questionnaire
(To be filled in and submitted by the bidder)

A) Tenderer's Profile

1. Name of the Individual/ Firm:
2. Present Correspondence Address
-
-
- Telephone No. E-mail FAX No. Web Site Address.....
3. Address of place of Works/ Manufacture
-
-
- Telephone No. FAX No.
4. State the Type of Firm: Sole proprietor-ship/partnership firm/
Pvt. limited Company/Public Limited Company.
(Tick the correct choice):
5. Name of the sole proprietor/ partners/ Director(s) of Pvt. Ltd Co./Directors
of Pub. Ltd. Co. [If applicable]:

S. No.	Name	Father's Name	Designation	Address	DIN No.	Phone No.	
						Office	Residence
1.							
2.							
3.							
4.							
5.							

6. Name of the person authorized to enter into and execute contract/
agreement and the capacity in which he is authorized (in case of
partnership/ private Ltd company):
.....
7. Details of the Bidder's Bank for effecting e-payments:
 - (a) Name of the A/C Holder
 - (b) Beneficiary account No.:.....
 - (c) Saving or Current Account
 - (d) IFSC code of beneficiary Branch.....
 - (e) Permanent Account No. (PAN) of Firm/Company :
.....
 - (f) Beneficiary Bank Name:.....
 - (g) Beneficiary branch Name:.....
 - (h) Branch Address
 - (i) Branch Tel.No. FAX No.
 - (j) Branch Serial No. (MICR No.):.....
 - (k) Tax details (CST & VAT) Registration No.....

8. Whether the firm has Office/ works in Mumbai? If so state its Address
.....
.....
.....
9. (a) Whether you are registered as MSE and eligible to avail benefit ? **YES / NO**
If yes, please enclose necessary certificate.
- (b) Whether you are registered as SC/ST category of MSE and eligible to avail benefit ? **YES / NO**
If yes, please enclose necessary certificate.

B) Questionnaire

1. Do you think any other detail/ material is required to complete the work specified in the specification? **YES / NO**
- 1.1 If Yes, Give details
.....
.....
2. Do you think any other item of work need be included in tender form to complete the work specified in the specification? **YES / NO**

2.1 If Yes, Give details

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

3. Suggestion for improvement of the tender document.

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

Place.....

Signature of contractor

Date

Name of Contractor

Signature of Bidder

SECTION- 11**PART-I****BID FORM****To****From,**.....
<complete address of the purchaser>
..........
<complete address of the Bidder>
.....

Bidder's Reference No:.....Dated.....

Ref: Your Tender Enquiry No.dated

1. Having examined the above mentioned tender enquiry document including amendment/ clarification/ addenda Nos. datedthe receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver in conformity with the said drawings, conditions of contract and specifications for the sum shown in the schedule of prices attached herewith and made part of the financial Bid.
2. Bid submitted by us is properly sealed and prepared so as to prevent any subsequent alteration and replacement.
3. We agree to abide by this Bid for a period of 150 days from the date fixed for Bid opening or for subsequently extended period, if any, agreed to by us. This bid shall remain binding upon us up to the aforesaid period.
4. We understand that you are not bound to accept the lowest or any bid, you may receive.
5. If our Bid is accepted, we will provide you with a performance guarantee from a Scheduled Bank for a sum **a sum @ 5% of the contract value** for the due performance of the contract.
6. If our Bid is accepted, we undertake to complete delivery of all the items and perform all the services specified in the contract in accordance with the delivery schedule specified in the Section-2 (Tender Information).
7. Until a formal Purchase Order of Contract is prepared and executed, this Bid together with your written acceptance thereof in your notification of award shall constitute a binding contract between us.
8. We have read and understood all technical, general & commercial conditions of this bid document and accept to comply them unconditionally.
9. We are not under any penal action of black listing and / or barred from participating in tender by any BSNL unit or any other Govt./Semi Govt./ Autonomous body/PSU.

Dated: day of 20...

Witness

Signature.....

Name

Address

Signature

Name

In the capacity of

Duly authorized to sign the bid for and on

behalf of

Signature of the Bidder.

SECTION 11 PART-II (A)

SAMPLE PRICE SCHEDULE FOR INDIGENOUS EQUIPMENT (INCLUDING PARTLY IMPORTED) & SERVICE COST

Tender Inviting Authority: G.M. (CPC-I), O/o The CGM, BSNL, MHTC, Mumbai-44																	
Name of Work: e-Tender for Planning, Engineering, Supply, Installation, Testing, Commissioning and annual maintenance of Intelligent Network and VOMS of West Zone.																	
Phase VII expansion of Intelligent Network and VOMS of West Zone																	
Contract No. : CGM-MITC/GPC/e-TENDER/ IN VOMS/2015-16/03 DATED:12/05/2015																	
Bidder Name: _____																	
<p>Price Schedule for Planning, Engineering, Supply, Installation, Testing, Commissioning and annual maintenance of Phase VII expansion of Intelligent Network and VOMS of West Zone.</p> <p>(This Bidding template must not be modified/replaced by the bidder and the same should be updated after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)</p> <p>Note:</p> <p>1. We hereby declare that in quoting the above prices, we have taken into account the entire credit on inputs available under the MODVAT SCHEME introduced w.e.f. 1st March 1988 and further extended on more items till date.</p> <p>2. We hereby verify that E.D/Customs Tariff Head shown in column 16 are correct & CENVAT Credit for the amount shown in column 14 above are admissible as per CENVAT Credit Rules 2004".</p> <p>3. The bidder submitted the offer with concessional E.D/sales tax shall submit the proof of applicable concessional E.D/Sales Tax.</p> <p>4. In case of Imported Item, Assessable Value (Per Unit CIF Price) may be given in Column No.5 & Custom Duty percentage may be given in Column No. 6. In addition details on Ex-Factory Unit Price & breakup of Custom Duty be submitted as per Section-9 Part-C.</p> <p>5. In case bidder wants to add Any Other Item, fill the name of Item and Quantity from Sl. No. 24 to 33 at Col. No. 17 & 18. The Quantity in column 3 for sl.no.17 to 23 are only indicative and have been entered due to limitations of e-tendering software. In case no other item are required, that already included in Price Schedule, Sl.No. 24 to 33 may be left blank.</p> <p>6. Since the evaluation matrix specified at Clause-38 of Section-5 Part-B & Clause 23 of Section-4 Part-A could not be implemented in the software of e-Tender, Vendors have to quote the unit rate at Column No. 2 of price schedule at Section-11 Part-I, the evaluation shall be done manually by TEC after financial bid opening as per Clause-38 of Section-5 Part-B & Clause 23 of Section-4 Part-A, therefore kindly ignore the Ranking L1, L2, etc. given by the e-Tender software.</p> <p>6. The bidder shall quote separately for hardware and software as per special conditions of the contract.</p>																	
Sl. No.	Item Description	Qty	Units	Assessable value (Per Unit CIF Price) / Ex-Factory Price(Basic Unit Price Exclusive of all levies & charges)	Custom Duty / Exise Duty(Includi ng Education Cess & Secondary & Higher Edu.Cess on ED.) in %	Custom Duty / Exise Duty(Includi ng Education Cess & Secondary & Higher Edu.Cess on ED.) in Amount	Sales/VAT Tax /Service TAX as applicable in %	Sales/VAT Tax /Service TAX as applicable in Amount	Freight, forwarding packing & insurance in %	Freight, forwarding packing & insurance in Amount	Any other levies & charges (excluding Central/Entry Tax/any bill/consumpti on Tax)in Amount	Unit Price (Inclusive of all levies & charges) (S+7+S+11+12)	Duties & Taxes CENVAT-able on unit price	Unit Price excluding Duties & Taxes CENVAT- able (13-14)	Custom / ED Tariff Head	Name of the any other Item (only applicable for Sl.No.26 to 34)	Quantity of the any other Item (only applicable for Sl.No.26 to 34)
1.00	SCP/IN (Pre Paid) (H/W)- Total Capacity (40mn BHCC) (Intelligent Network Sub Package) (Main Site)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
2.00	SCP/IN (Pre Paid) (S/V)- Total Capacity (40mn BHCC) (Intelligent Network Sub Package) (Main Site)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
3.00	IN H/W - Total Capacity (40mn BHCC) (SCP/IN (Pre Paid/Mated Site)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
4.00	IN S/V - Total Capacity (40mn BHCC) (SCP/IN (Pre Paid/Mated Site)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
5.00	VOMS - Total Capacity H/W (200mn Vouchers) for Main Site	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
6.00	VOMS - Total Capacity S/V (200mn Vouchers) for main site	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
7.00	Centralised O & M H/W & S/V	1.00	Unit	0.00		0.00		0.00		0.00		0.00		0.00			
8.00	Main hour rate for developing features / capacities as per BSNL's requirements (1+1)	3000.00	hour	0.00		0.00		0.00		0.00		0.00		0.00			
9.00	SMPS (1+1)	2.00	Unit	0.00		0.00		0.00		0.00		0.00		0.00			
10.00	SMPS	4.00	Unit	0.00		0.00		0.00		0.00		0.00		0.00			
11.00	Installation & Commissioning of IN - Main	1.00	Unit	0.00		0.00		0.00		0.00		0.00		0.00			
12.00	Installation & Commissioning of IN - Mated	1.00	Unit	0.00		0.00		0.00		0.00		0.00		0.00			
13.00	Installation & Commissioning of VOMS - Main	1.00	Unit	0.00		0.00		0.00		0.00		0.00		0.00			
14.00	Installation & Commissioning of UPS (1+1)	2.00	Unit	0.00		0.00		0.00		0.00		0.00		0.00			
15.00	Installation & Commissioning of SMPS	4.00	Unit	0.00		0.00		0.00		0.00		0.00		0.00			
16.00	Installation & Commissioning of Centralised O & M H/W & S/V	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
17.00	1st installment to be paid for 1st year AMC	1.00	Year	0.00		0.00		0.00		0.00		0.00		0.00			
18.00	2nd installment to be paid for 2nd year AMC	1.00	Year	0.00		0.00		0.00		0.00		0.00		0.00			
19.00	3rd installment to be paid for 3rd year AMC	1.00	Year	0.00		0.00		0.00		0.00		0.00		0.00			
20.00	4th installment to be paid for 4th year AMC	1.00	Year	0.00		0.00		0.00		0.00		0.00		0.00			
21.00	5th installment to be paid for 5th year AMC	1.00	Year	0.00		0.00		0.00		0.00		0.00		0.00			
22.00	6th installment to be paid for 6th year AMC	1.00	Year	0.00		0.00		0.00		0.00		0.00		0.00			
23.00	7th installment to be paid for 7th year AMC	1.00	Year	0.00		0.00		0.00		0.00		0.00		0.00			
24.00	Any other Item 1)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
25.00	Any other Item 2)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
26.00	Any other Item 3)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
27.00	Any other Item 4)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
28.00	Any other Item 5)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
29.00	Any other Item 6)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
30.00	Any other Item 7)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
31.00	Any other Item 8)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
32.00	Any other Item 9)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
33.00	Any other Item 10)	1.00	Nos	0.00		0.00		0.00		0.00		0.00		0.00			
***Total in Figures																	
***Total in Words																	
Rupees only																	

Signature of the Bidder.

SECTION 11
PART-II
SUMMARY OF PRICE SCHEDULE
(B)

A.	Total Price of Imported Equipments, Indigenous Equipment and Services (Excluding AMC) excluding CENVATable duties/ taxes (total of column 15 of price schedule for imported equipments)(i.e. SI.No.1 to 16 & SI.No.24 to 33)	
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AMC Prices

Year	AMC in %	AMC in amount	Discounting formula	Discounted AMC amount calculated as per formula in column B4
B1	B2	B3	B4	B5
AMC - year 1		= (A) *column D2	=column D3 / (1.12)^2	
AMC - year 2		= (A) *column D2	=column D3 / (1.12)^3	
AMC - year 3		= (A) *column D2	=column D3 / (1.12)^4	
AMC - year 4		= (A) *column D2	=column D3 / (1.12)^5	
AMC - year 5		= (A) *column D2	=column D3 / (1.12)^6	
AMC - year 6		= (A) *column D2	=column D3 / (1.12)^7	
AMC - year 7		= (A) *column D2	=column D3 / (1.12)^8	
B.	Total			
C	A+B			

Note:

1. The prices quoted above shall include combined quote for Network sub Package and IN sub package
2. The total Package value arrived at '**C**' shall be furnished by the bidder in electronic form as mentioned in clause 4.1 of Section 4 Part B.
3. The AMC amount of each year quoted in Col. **B3** above should match with the AMC amount for that year as mentioned in Column 5 of price schedule in Section 11 Part II (A)

Section 12
LIST OF DOCUMENTS

Following documents are required to be submitted as a part of the Bid:

Note: Electronic Envelope 1 = Technical and Commercial bid / Electronic Envelope 2 = Financial bid

S. No	Particulars	Page/Section Reference	To be submitted in Envelope (Electronic Envelope 1 = 1; Electronic Envelope 2 = 2; Physical Form Envelope offline = 3)
BID SECURITY			
1.	Bid Security	Section 9(A)	1+3
ELIGIBILITY CRITERIA (Techno Commercial and Financial)			
2.	Certificate of Incorporation of the Bidder	Clause 10.1 (i) of Part A of Section 4	1
3.	Memorandum and Articles of Association of the Bidder	Clause 10.1 (ii) of Part A of Section 4	1
4.	Registration certificate from State Director of Industries or from the Secretariat for Industrial Approval (SIA), Ministry of Industries, Government of India (if applicable)	Clause 10.1 (iii) of Part A of Section 4	1
5.	Approval from Reserve Bank of India/SIA in case of foreign collaboration	Clause 10.1 (iv) of Part A of Section 4	1
6.	Latest and valid NSIC certificate duly certified by NSIC (if applicable)	Clause 10.1 (v) of Part A of Section 4	1
7.	Type Approval Certificate given by Telecom Engineering Centre (TEC)/TSEC issued by Quality Assurance Circle of BSNL of products such as power plants, battery etc.	Clause 10.1 (vi) of Part A of Section 4	1
8.	Certificate indicating that the bidder has no present partnership/equity stake with any cellular operator in the mobile segment (except MTNL) and has no intention for the same for 2 years from the Tender Opening Date.	Clause 4.1 (ii) of Section 1	1
9.	Certificate stating references of experience in 2G and 3G, signed by a senior official of a network operator with its company seal (along with name, designation, telephone number, fax numbers and email ID of the signatory of the network operator and the company) of existing networks in operation.	Clause 4.2 of Section 1	1

10.	Undertaking by bidders for the network elements to support the 2G and 3G technologies for the next 7 years with a product portfolio and road map till 3GPP R10 for deliveries and its implementation of the network.	Clause 4.3 of Section 1	1
11.	Undertaking by the bidder to set up necessary infrastructure in all circles for project implementation, O&M support and annual maintenance contract within	Clause 4.4. of Section 1	1
12.	Audited Financial Reports of the Bidder for Financial Years (i) 2011-2012 and (ii) 2012-2013. This is to be substantiated by the Audited Profit and Loss Account	Clause 4.5 of Section 1	1
13.	Latest Annual Report of the Bidder	Clause 10.2 (i) of Part A of Section 4	1
14.	Certificate from the bankers of the Bidder that it has the financial capability to provide the goods and services as envisaged under the Tender Document	Clause 10.2 (i) of Part A of Section 4	1
15.	Documentary evidence about the technical and production capacity necessary to provide the goods and services as envisaged under the Tender Document/Detailed description of goods with essential technical and performance characteristics	Clause 10.2 (ii) of Part A of Section 4/Clause 11.2 (a) & (b) of Part A of Section 4	1
16.	A signed undertaking from authorised signatory of the bidder that shall certify that all components/parts/assembly/software used in the Desktops and Servers like Hard disk, Monitors, Memory etc. shall be original, new components/parts/assembly/software and that no refurbished/duplicate/second hand components/parts/assembly/ software are being used or shall be used.	Clause 10.7 of Part A of Section 4	1
17.	For supply of any software i.e. operating system or any applications software the bidder shall submit a Certificate of Authenticity (COA), signed by authorised signatory stating that all software supplied are authentic and legal copy is/are being supplied	Clause 10.8 of Part A of Section 4	1
DOCUMENTS ACCOMPANYING TENDER BIDS			
16.	Declaration under the bidder's digital signature that no addition/deletion/corrections have been made in the downloaded Tender Document and it is identical to the Tender Document appearing on the Website	Clause 11.1 of Section 1	1
17.	Undertaking that the Tender Document has been read and understood and shall be duly complied with	Section 8(A)	1
18.	Bidder's Profile duly filled and signed	Section 10	1

19.	Near Relation Certificate	Section 8(B)	1
20.	Integrity Pact	Section 9(D)	1+3
21.	Tender Bid Form	Section 11	1
22.	Price Schedule	Clause 9 of Section 4 Part-A/Part II of Section 11	2
23.	Quality Manual	Clause 30.1(i) of Part A of Section 4	1
24.	Power of Attorney in favor of the authorized signatory & Attestation of Specimen Signature POA holder by Company's / Firm's Banker	Clause 15 of Section 4, Part A.	1+3
25	The documentary evidences of the conformity of the Goods and Services to the Tender Document, may be, in the form of literature, drawings, data etc. and the bidder shall furnish : (a) Detailed description of goods with essential technical and performance characteristics; (b) A list, giving full particulars including available sources and current prices of all spare parts, special tools, etc., necessary for the proper and continuous functioning of the goods for a period of eight years following commencement of use of the goods by the Purchaser.	Clause 11.2 (a) and (b) of Part A of Section 4	1
26.	List of spares and notification along with the details for arriving at the price	Clause 9.1 of Section 5 Part A	1
27	Details of collaborator, technical literature, brand, model no.	Clause 23 of Section 5 Part A	1
28	Security requirements to be followed.	Clause 26 of Section 5 Part A and Section 13	1
29	Technology transfer, MoU details, RBI clearance	Clause 12 of Section 5 Part B	1
30	Space, power and ac requirement for each element	Clause 15 of Section 5 Part B	1
31	Space requirement for ID and OD to be submitted in the bid	Clause 16 of Section 5 Part B	1
32	Make model, typically one for each circle, two for towers. Max. two sources for antenna in the bid	Clause 22.1 of Section 5 Part B	1
33	Any other item(s) required to complete the project is to be indicated	Clause 27 of Section 5 Part B	1

34	Detailed equipage along with legend to be submitted in the bid to verify dimensioning	Clause 29 of Section 5 Part B	1
35	Mark up price	Clause 30 of Section 5 Part B	1
36	PERT/CPM chart along with dependencies	Clause 37 of Section 5 Part B	1
37	undertaking regarding Fraudulent representation during the bidding	Clause 53.2 of Section 5 Part B	1
38	SW support center details to be submitted	Clause 54.6 of Section 5 Part B	1
39	AT test schedule		
40	Sequence of supplies to be indicated	Clause 58 of Section 5 Part B	1
41	No. of resource Persons for O&M to be indicated	Clause 59 of Section 5 Part B	1
42	AMC fault control centers, spares and various responses to the problems to be specified	Clause 62.5 of Section 5 Part B	1
43	Unpriced BOQ/BOM	Clause 28 of section 5 Part B	1
44	Breakup of Custom Duty for Imported item	Clause 9.2(2) of Section-4 Part A	2
45	Card Level Priced BoM	Clause 28 of Section-5 PartBA	2
DEVIATION STATEMENT			
46	Deviation/Exception Statement clearly bringing out the extent its offer deviates/excludes from the requirements of the Purchaser's technical specifications and commercial terms and conditions	Clause 11.2 (c) (ii) of Part A of Section 4	1

SECTION 13
DRAFT AGREEMENT WITH REGARD TO SECURITY REQUIREMENTS

This **AGREEMENT** is made and entered into at New Delhi on this the _____ day of _____, 2015

BY AND BETWEEN

Bharat Sanchar Nigam Limited, a company incorporated under the Companies Act, 1956 and having its registered office at 2nd Floor, Bharat Sanchar Bhawan, HC Mathur Lane, Janpath, New Delhi 110001 (hereinafter referred to as "**BSNL**" or the "**TSP**", which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns) of the **FIRST PART**;

AND

[●], a company incorporated under the Companies Act, 1956 and having its registered office at [●] (hereinafter referred to as the "**Supplier**" or the "**Vendor**", which expression shall, unless repugnant to the context or meaning thereof, include its successors, and permitted assigns) of the **OTHER PART**.

(BSNL/TSP and the Supplier/Vendor shall be collectively called as the "**Parties**" and individually a "**Party**".)

RECITALS

A. The Vendor has been awarded the Tender bearing no [●] for the planning, engineering, supply, installation, testing, commissioning and annual maintenance of [●] million lines for Phase VII expansion of GSM/UMTS based cellular mobile network in the North/ East/ South Zone(s) ("**Tender**").

B. Pursuant to the provisions of Clause [●] of Part [●] of Section [●] of the Contract, the Parties are executing this Agreement, subject to the terms and conditions as provided hereinafter.

NOW THEREFORE, IN CONSIDERATION OF MUTUAL REPRESENTATIONS, COVENANTS AND OTHER VALUABLE CONSIDERATION, THE RECEIPT AND SUFFICIENCY OF WHICH IS HEREBY ACKNOWLEDGED, THE PARTIES HEREBY AGREE AS FOLLOWS:

1. Definition & Interpretation

1.1 Definitions

Unless the context otherwise requires, the different terms and expression used in this Agreement shall have the meaning assigned to them for the purpose of this Agreement :

"Access" shall mean the interconnection with TSP Systems or access to or use of TSP Information stored on TSP Systems through interconnection with TSP Systems or access to or use of TSP Information stored on Vendor Systems.

"Applicable Laws" shall mean any law, statute, ordinance, rule, regulation, guideline, policy or other pronouncement having the effect of law of any Governmental Authority as interpreted and administered including any modifications or amendments thereto.

"Authorised" shall refer to the approval by TSP of the Access as part of the authorisation process and the Vendor Security Contact has a record of this authorisation. The term "Authorisation" shall be construed accordingly.

"Contract" means Purchase Order or PO or the order placed by the purchaser on the supplier signed by the purchaser including all attachments and appendices thereto and all documents incorporated by reference therein.

"Commencement Date" shall mean the date when the Agreement is executed

“Contract Personnel” means dedicated resources of the Vendor in terms of employees, subcontractors including employees of sub contractors and agents including agent’s sub contractors and their employees engaged for the purpose of this Agreement.

“End Date” shall have the meaning assigned to it in Clause 16.1.

“Escrow Information” shall have the meaning assigned to it in Clause 7.11 (a).

“Governmental Authority” shall mean any governmental authority, statutory authority, government department, ministry, secretariat, agency, commission, board, tribunal, court or other law, rule or regulation making body/ entity having or purporting to have jurisdiction on behalf of the Republic of India or any other government having or purporting to have jurisdiction over a Party, or any state or other subdivision thereof or any municipality, district or other subdivision thereof including, without limitation, the Chairman, Department of Telecommunications, Ministry of Communications, Government of India and/or any other telecom regulatory authority, including Telecom Engineering Center, having competent jurisdiction; and/or Chairman, Telecom Regulatory Authority of India, and includes any officer empowered by them to perform all or any of the functions of such a governmental authority.

“Information” shall mean technical, financial and commercial information and data relating to Party’s respective businesses, finances, planning, facilities, products, techniques and processes and shall include, but not limited to, discoveries, ideas, concepts, know-how, techniques, designs, specifications, drawings, blueprints, tracings, diagrams, models, samples, flow charts, data, computer programs, disks, diskettes, tapes, marketing plans, customer names and other technical, financial or commercial information and intellectual properties, whether in written, oral or other tangible or intangible forms.

“Licensor” shall mean the Department of Telecommunications, Ministry of Communications & IT, Government of India.

“Personal Data” shall comprise of customer details and Call Detail Record(CDR) records.

“Sensitive Information” shall mean any TSP Information marked as classified as per TSP’s data classification policy or deemed business critical. This also includes any other data, or element of information, notified as such by the Government (e.g. IT Act 2000).

“Security Standards” shall mean all the relevant contemporary standards associated with national and international security standard related to IT & Telecom equipment hardware and software and those related to information & communication security, including but without limitation to ISO 27000 series, ISO/IEC 15408, 3GPP, 3GPP2, WiMAX etc. and as evolved from time to time

“Subcontractor” shall mean any person, partnership or corporation with whom the Vendor places a contract and/or an order for the supply of any equipment, item, service or for any work in relation to the purpose of this Agreement. The term "Subcontract" shall be construed accordingly.

“Supplies” shall mean all components, materials, plant, tools, test equipment, documentation, hardware firmware, software, spares parts, services and all the things & items to be provided to TSP pursuant to the Agreement together with all Information and work the Agreement requires to be supplied or performed for TSP.

“Term” shall mean the term of this Agreement starting from the Commencement Date upto the End Date

"TSP" shall mean Bharat Sanchar Nigam Limited who has been issued the CMTS license under section 4 of Indian Telegraph Act 1885 by the Licensor, Government of India

"TSP Group Security" shall mean the security organisation based within the TSP.

"TSP Information" shall mean all data including data, text, image, sound, voice, codes, circuit diagrams, core & applications software and database, intellectual property as well as personal, public, operational and services data in TSPs custody which is received by and/or which are supplied/ shared with Vendor for the purpose of this Agreement or are obtained by the Vendor on behalf of TSP.

"TSP Items" shall mean all items provided by TSP to the Vendor and all items held by the Vendor which belong to TSP.

"TSP Regulatory Contact" shall mean in-charge of TSP Regulatory operations or such other person whose details shall be notified by TSP to the Vendor from time to time.

"TSP Security Contact" shall mean in-charge of TSP security operations centre or such other person whose details shall be notified by TSP to the Vendor from time to time.

"TSP Systems" shall mean any TSP computer, application, databases, network infrastructure, network elements and appliances, core and applications software or such other systems as may be agreed in writing from time to time between TSP and the Vendor.

"Vendor" shall mean the vendor who supplies equipment, software to the TSP for the purpose of installation, testing, commissioning of the TSP's networks under the Contract.

"Vendor Security Contact" shall mean such person whose details shall be notified by the Vendor to TSP from time to time for such purpose.

"Vendor Regulatory Contact" shall mean such person whose details shall be notified by the Vendor to TSP from time to time for such purpose.

"Vendor Systems" shall mean any Vendor owned computer hardware or software, application database or network elements / appliance or such other systems as may be agreed in writing from time to time by TSP and the Vendor, which are used by the Vendor to comply with its obligations under the Contract.

1.2 Interpretation

Unless otherwise stated or unless the context otherwise requires, in this Agreement:

- (a) the headings, whether of Clauses or other parts of the Agreement, are for ease of reference only and shall not be relevant to interpretation;
- (b) the references to the Recitals, Clauses, Schedules and Annexures shall be references to the recitals, clauses, schedules and annexures of this Agreement;
- (c) words importing the singular shall include plural and vice versa;
- (d) words denoting any gender shall include all genders;
- (e) where a word or phrase is defined, other parts of speech and grammatical forms of that word or phrase shall have corresponding meanings;

(f) references to statutes or statutory provisions include references to any orders, or regulations made there under and references to any statute, provision, order or regulation include references to that statute, provision order or regulation as amended, modified, re-enacted or replaced from time to time whether before or after the date thereof.

2. Scope

This Agreement sets out the provisions under which the Vendor will be able to supply equipments and services and be granted Access to TSP Systems, network, equipments, data and facilities and TSP Information including Sensitive Information for the purpose of the planning, engineering, supply, installation, testing, commissioning and annual maintenance of [●] million lines for Phase VII expansion of GSM/UMTS/LTE based cellular mobile network in the West Zone as per the Contract. [...](#)

3. International Security Standard Certification

The Vendor shall have contemporary relevant Security standard certification and shall comply with the provisions of security standards certification with respect to Telecom & IT equipment hardware and software and those related to information & communication security management, such as ISO 15408 standards as applicable to IT and IT related products, ISO 27001 for Information Security Management System, standards used by other relevant standard formulation bodies for Telecom equipment like 3GPP, 3GPP2, ITU standard etc or equivalent acceptable international standards or certification. Based on the requisite testing to be conducted at their labs, Vendors will certify their own equipments as required under this clause. IT related elements in the telecom networks of the concerned OEMs, which are already ISO 15408 certified will be accepted as certified. Vendor will submit a relevant Self certificate based on test reports in this regard.

4. Security Requirements:

The Vendor shall comply with following security policies:

4.1 General

4.1.1 The Vendor shall be Authorised to access only TSP Systems and Information in accordance with the provisions of this Agreement and only during the Term of this Agreement -

4.1.2 The Vendor shall identify to the TSP, details of Vendor Security Contact at the Commencement Date who will act as a single point of contact for TSP, such as a senior manager or CIO responsible for security, for any security issues. This responsibility shall be detailed within his/her job description. It is clarified that the Vendor Security Contact shall be a security cleared Indian national. The security clearance for the Vendor Security Contact will be applied , within one month of date of submission of necessary document by the vendor to TSP.

4.1.3 As part of the Authorisation process, details of Vendor's Contract Personnel that need Access will be requested by TSP. The Vendor Security Contact shall at all times ensure that only Contract Personnel who have a need to Access in order to fulfill the purpose of this Agreement are Authorised. This Authorization and any changes in the Contract Personnel would be notified by the Vendor for the information and for the approval (wherever applicable) of the TSP.

4.1.4 Pursuant to Clause 4.1.3 above, the Vendor acknowledges that only the Contract Personnel having requisite training, (i.e. the Contract Personnel should have requisite training and self certification in this regard to be provided by the Vendor] , are Authorized to access the TSP System.

4.1.5 The Vendor shall have a well defined Information Security policy compliant with ISO/IEC 27001:2005 or have equivalent standards.

4.1.6 The Vendor shall ensure that they have information security organization in place to

implement the provisions of TSP's information security policies. The Information Security responsibilities of all Vendor employees working for TSP shall be defined and communicated.

4.1.7 The Vendor shall establish and maintain contacts with special interest groups to ensure that the understanding of the information security environment is current, including updates on security advisories, vulnerabilities and patches .

4.1.8 The Vendor, may conduct a Risk Analysis and ensure that all risks due to it own and subcontractors' operations with TSP are identified, measured and mitigated as per the TSPs requirements. The Risk Assessment report may be required to be shared with the Chief Security officer/CISO of TSP.

4.2 Physical Security

4.2.1 All Contract Personnel including sub contractors and their employees, agents and their employees of the Vendor working on TSP premises shall be in possession of a TSP Identification or Electronic Access Control ("TSP ID/EAC") card. This card is to be used as a means of identity verification on TSP premises at all times and as such the photographic image displayed on the TSP ID/EAC card must be clear and be a true likeness of the Contract Personnel. If the TSP has any advanced identity verification systems the same would also apply. TSP and Vendor will mutually agree to re-define such verification measures from time to time.

4.2.2 All Contract Personnel including sub contractors and their employees, agents and their employees of the Vendor accessing premises (sites, buildings or internal areas) , where TSP Information is stored or processed, shall be in possession of an Identification or Electronic Access Control ("ID/EAC") card. This card is to be used as a means of identity verification on these premises at all times and as such the photographic image displayed on the ID/EAC card must be clear and be a true likeness of the Contract Personnel or the Subcontractor or the Vendor's employees, subcontractors and agents. If the TSP has any advanced identity verification systems the same would also apply. TSP and Vendor will mutually agree to re-define such verification measures from time to time

4.2.3 The Vendor shall not (and, where relevant, shall require that any Contract Personnel shall not) without the prior written Authorisation of the TSP Security Contact connect any equipment, device or software to any TSP System and where it is not intended to be connected at a point in the TSP system.

4.2.4 The Vendor shall be able to demonstrate that it has put proper procedures in place to deal with security threats directed against TSP whilst safeguarding TSP Information.

4.2.5 The Vendor and/or its Contract Personnel shall not access TSP's electronic systems without first obtaining the written consent of the TSP Security Contact.

4.2.6 The Vendor's Access to sites, buildings or internal areas where TSP Information is stored or processed, shall be as Authorised and the Vendor and all its Authorised personnel shall adhere to robust processes and procedures as mutually agreed upon to ensure compliance.

4.2.7 The Vendor shall not conduct recording, photography or videography at TSP premises that captures any TSP Information , without prior authorization from the TSP Security Contact.

4.2.8 If already available at the TSP Premises, CCTV security systems and their associated recording medium shall be used by the TSP/Vendor either in response to security incidents, as a security surveillance tool, as a deterrent or as an aid to the possible apprehension of individuals caught in the act of committing a crime. As such, these systems shall be Authorised by appropriate TSP Security

Contact when used by Vendor.

4.2.9 The Vendor shall maintain a controlled record of all assigned TSP physical assets and assigned TSP Items to them

4.2.10 The local area surrounding the Vendor's facilities at TSPs premises over which Vendor has authorized control shall be physically inspected for security risks and threats by the Vendor in case of any abnormal activity / incident found / observed shall report the same to TSP.

4.2.11 The Vendor shall disable the Access immediately if any Contract Personnel no longer require Access or has changed roles for any reason whatsoever or whose integrity is suspected or considered doubtful or as may be notified by TSP in accordance with clause 4.3.1

4.3 Logical Security

4.3.1 The Vendor shall notify TSP immediately if any Contract Personnel no longer requires Access or changes role for any reason whatsoever thus enabling TSP to disable or modify the Access rights.

4.3.2 The Parties shall, implement agreed security measures across all supplied components and materials including software & data to ensure safeguard and confidentiality, availability and integrity of TSP Systems and TSP Information , Parties shall prepare documentation in relation to the implementation of logical security and shall ensure that it has such security as:

- (a) Prevents unauthorised individuals e.g. hackers from gaining Access to TSP Systems; and
- (b) Reduces the risk of misuse of TSP Systems or TSP information, which could potentially cause loss of revenue or service (and its Quality) or reputation, breach of security by those individuals who are Authorised to Access it; and
- (c) detects any security breaches that do occur enabling quick rectification of any problems that result and identification of the individuals who obtained Access and determination of how they obtained it.

4.4 Information Security

4.4.1 The Vendor shall not use TSP Information for any purpose other than for the purposes for which they were provided to the Vendor by TSP and only to the extent necessary to enable the Vendor to perform as per this Agreement .

4.4.2 The Vendor shall ensure that all information security requirements in this Agreement are communicated including in writing to all Contract Personnel in relation to their role.

4.4.3 The Vendor shall ensure procedures and controls are in place to protect the exchange of information through the use of emails, voice, facsimile and video communications facilities.

4.5 Contract Personnel Security

4.5.1 The Vendor shall ensure that the TSP Information provided under this Agreement is used only to the extent necessary to enable the Vendor to perform its obligations as per the terms of this Agreement. All Contract Personnel shall sign a confidentiality agreement either as part of their initial terms and conditions of employment or when they start working in TSP buildings or on TSP Systems and TSP Information. These confidentiality agreements shall be retained by the Vendor

and shall be made accessible to TSP, if required.

4.5.2 The Vendor shall deal with breaches of security policies and procedures, including interfering with or otherwise compromising security measures, through a formal disciplinary process.

4.5.3 The Vendor shall provide a 'whistleblower' facility, available to all staff, with all TSP related issues reported back to the TSP Security Contact to the extent permissible by the law in a location in India where the Vendor is providing the services. . For the avoidance of doubt, this facility shall be used by the Contract Personnel if TSP's employee, agent or contractor instructs Contract Personnel to act in an inconsistent manner in violation of the Agreement.

4.5.4 The Vendor shall ensure that in respect to any Contract Personnel assigned to this Agreement, it shall carry out recruitment checks in accordance with its policies.

4.5.5 The Vendor shall ensure that all Contract Personnel maintain a clear-desk and a clearscreen policy to protect TSP Information, as per its internal policy.

4.5.6 The Vendor shall ensure that an auditable process is developed for the ongoing control and management of Contract Personnel access profiles.

4.5.7 The Vendor shall, and shall procure that if a Contract Personnel's job or role has been changed or terminated, such Contract Personnel shall securely destroy any TSP Information received in a recorded form from TSP (or has recorded received TSP Information) in accordance with its internal policy. Vendor may retain one copy of such information for archival policy provided it does so in a secure manner..

4.5.8 The vendor may perform the above activities as per its internal policy, which shall be shared with BSNL from time to time.

4.6 Additional Security Policies

4.6.1 The Vendor shall have documented operating procedures to discharge the security requirements detailed within this Agreement and provide TSP with access to such documentation in accordance with "Access to Vendor systems" as stipulated in this Agreement.

4.6.2 The Vendor shall implement a controlled exit procedure in respect of the individual Contract Personnel to ensure the return of any TSP assets or TSP Items or TSP Information in the possession of the individual when any of the Contract Personnel who have Access, leave the employment of the Vendor or are no longer engaged for the purpose of this Agreement. Such controlled exit procedure shall include a written communication by the Vendor Security Contact to TSP Security Contact of this removal.

4.6.3 The Vendor shall inform the TSP Security Contact immediately upon its becoming aware of any actual or suspected unauthorised Access or misuse of TSP Systems or TSP Information or breach of any of the Vendor's obligations under this Agreement.

4.6.4 The Vendor shall maintain integrity of the software build including upgrades, operating systems and applications from factory to desk. The Vendor shall demonstrate that the software build (both proprietary and off-the-shelf) delivered to TSP is the same as the software build agreed with TSP. The software as provided by Vendor should not have any known viruses or malware which could hamper security including any unauthorized leakage of TSP Information including Sensitive

Information.

4.6.5 Any change of location by the Contract Personnel or Vendors support centers shall be notified to TSP.

4.6.6 Where Vendor uses subcontractors,, TSP may require that the associated security risks are clearly identified and assessed by TSP Group Security or the appropriate TSP line of business security team. This will ensure that any unacceptable security risks are identified and addressed. This in anyway shall not reduce the Vendor from being responsible to TSP for its obligations to be performed under this Agreement relating to security.

4.6.7 Where Vendor uses subcontractors, formal contracts containing all necessary security requirements shall be put in place between the Vendor and its subcontractor before the Subcontractor or its personnel can access TSP Systems and TSP Information or occupy space in TSP's buildings or space in the Vendor's building that is used to access, hold or process TSP Information.

4.6.8 TSP may update from time to time, security related policies, guidelines, standards and requirements. TSP will incorporate such updates by reference which shall be notified in writing by TSP to the Vendor promptly. If the Vendor has an issue with such updates, the Vendor shall promptly detail its concerns to TSP in writing.

4.6.9 The Vendor shall record and maintain detailed information of all Contract Personnel who are authorised to Access TSP Systems or TSP Information.

5. Access to TSP Systems

5.1 Subject to the provisions of this Agreement, the TSP allows (so far as it can and is able to do so) the Vendor, to have Access solely for the purpose as contemplated herein during the Term of this Agreement.

5.2 In relation to Access, the Vendor shall (and, where relevant, shall require that all Contract Personnel shall):

- a) ensure each individual Contract Personnel has a unique user identification and password known only to such user for his/her sole use.
- b) ensure Contract Personnel never share user identification, passwords or security tokens.
- c) promptly provide to TSP such agreed reports as TSP shall from time to time require concerning the Vendor's use and security of Access and any related matters to Access.
- d) ensure onward bridging or linking to TSP Systems is prevented unless authorised by TSP.
- e) use all reasonable endeavors to ensure no viruses or malicious code like malware, spyware, key logger, bots (as the expressions are generally understood in the computing industry) are introduced, and that there is no corruption or modification or compromisation of TSP Systems or TSP Information, while meeting out the obligations under the Contract.
- f) use reasonable endeavours to ensure that personal files which contain information, data or media with no relevance to the purpose, are not stored on TSP building servers or TSP centralised storage facilities or TSP Systems.

5.3 If TSP has provided the Vendor with Access to the Internet/Intranet, the Vendor shall, and shall ensure that the Contract Personnel, access the Internet/Intranet appropriately. It is the Vendor's responsibility to ensure that practical guidance on internet and email abuse (as amended) is communicated to the Contract Personnel from time to time.

5.4 The Vendor shall ensure that all Contract Personnel, subject to the Clauses headed "Regulatory Matters" and "Confidentiality" comply with classifying and handling of Information.

5.5 Any security software procured by the Vendor shall be used by the Vendor without modification, unless there is an essential need to do so, in which case appropriate controls shall be applied and the agreement of TSP Group Security sought

6. Access to Vendor Systems

6.1 If Contract Personnel is granted Access to Vendor Systems having bearing on TSP data, information or network, the Vendor shall:

- a) ensure each individual has a unique user identification and password known only to such individual for his/her sole use.
- b) promptly provide to TSP such agreed reports as TSP shall from time to time require, concerning the Vendor's use and security of access to Vendor Systems.
- c) allow Access required only to enable the Contract Personnel perform their duties.
- d) allow Access using a secure login process.
- e) establish and implement formal procedures to control the allocation and de-allocation of Access rights.
- f) ensure that the allocation and use of enhanced privileges and access to sensitive tools and facilities in Vendor Systems are controlled and limited to only those users who have a business need.
- g) ensure that the allocation of user passwords to Vendor Systems that hold or access TSP Information is controlled through a formal auditable management process.
- h) provide processes to demonstrate that remote and home working activities are only permitted subject to appropriate security controls within the Vendor's organisation including but not limited to remote Access by users being subject to strong authentication.
- i) demonstrate that users follow security best practice in the management of their passwords.
- j) implement a password management system which provides a secure and effective interactive facility that ensures quality passwords.
- k) ensure that user sessions are terminated after a defined period of inactivity.
- l) ensure that audit logs are generated to record user activity and security-relevant events and securely managed and retained with nil ability on the part of the Vendor to allow any unauthorised access or amendment to the audit logs. Such audit logs must be maintained for future reference for a period of at least one year.
- m) ensure that monitoring of audit and event logs and analysis reports for anomalous behaviour and/or attempted unauthorised access are performed by Vendor's staff independent of those users being monitored.

- n) make available audit logs where required by TSP for review.
- o) ensure all systems holding, processing or accessing TSP Information shall be hardened as per industry standards.
- p) ensure that to the extent possible, development, test and live environments are segregated from each other and the other work areas in Vendor buildings.
- q) implement reasonable controls to detect and protect against malicious software and ensure that appropriate user awareness procedures are implemented.
- r) ensure that Vendor has in relation to all Vendor Systems formal security incident management procedures with defined responsibilities.
- s) ensure that any unauthorised software is identified and removed from Vendor Systems holding, processing or accessing TSP Information.
- t) ensure that Access to diagnostic and management ports as well as diagnostic tools are securely controlled to TSP's reasonable satisfaction.
- u) ensure that Access to Vendor's audit tools shall be restricted to Relevant Contract Personnel and their use is monitored.
- v) Ensure that data gathered after running audit tool is properly protected.
- w) perform enhanced independent code reviews (including penetration testing) on all Vendor Systems, as a part of the Vendor's security development lifecycle (SDL)..

6.2 The devices which use proprietary encryption technique should not be used for holding TSP information.

6.3 To the extent the servers are used to fulfill the purpose of this Agreement, Vendor's servers shall not be deployed on un-trusted networks without appropriate security controls.

6.4 Changes to individual Vendor Systems shall be controlled and subject to formal change control procedures. All documentation relating to Vendor Systems shall be protected from unauthorized Access or amendment.

6.5 Security procedures and controls shall be used to secure equipment holding, accessing or processing TSP Information in Vendor Systems.

7. Conditions for Equipment Vendors

7.1 Conformance to Security Standards and Policies

The Vendor shall ensure and certify that the supplied equipment has been subjected to penetration testing and all addressable vulnerabilities have been mitigated and the equipment is 'Safe to Connect' in the Telecom Network as per the latest standards and recommendations on the subject from ITU/ISO/IETF/IEC etc. . This applies to all telecom network elements and IT equipment used in the network.

The Vendor shall also ensure that the equipment supplied has all the contemporary security related features, facilities, hardware, software etc for the purpose of Interception, Monitoring, Analysis etc for use by the law enforcement agencies and provide complete information to enable these features and facilities before the supply of the equipment or the procedure of enabling these, if these are to be enabled after the commissioning of the network. The Vendor shall also submit a test report on these features and facilities and also a certificate that all contemporary features and facilities of this category exist in the equipment supplied.

Vendors will be allowed to certify their own equipments based on the testing at the labs which are capable of such testings. IT related elements in the telecom networks which are already ISO 15408 certified will be accepted as certified. Vendor can submit a relevant Self certificate based on test reports in this regard.

7.2 Equipments Configuration Guide

Two sets of equipment configuration guide should be supplied which detail the configuration required to meet the policies and standards at least in respect of following:

Network Element security policies:

- Generic OS
- Technical Standard for Switches and Routers
- Management Standard for Switches and Routers

7.3 Reports

A report on the susceptibility to the attacks on mobile networks shall be provided by the Vendor to the TSP in the following manner:

- (a) Mobile Network like GSM equipment and its network are susceptible to several attacks. A few of the known attacks with their description are given in **Appendix II**. The Vendor will ensure that whatever mitigation was possible as per the current available technologies, techniques, configuration have already been used and adopted by them before the supply of the equipment.

7.4 Security from Malware

There are no known cases of malware disrupting telecom services, yet. However, malware can cause information leaks and can result in the leak of private user information. However, some viruses, worms and Trojans can infect devices and spread malware via text messages or Bluetooth connectivity. This network-based service will also block Denial of Service attacks and restrict network traffic based on source, destination, IP ports and applications. It will also allow enterprise IT managers to lock and/or delete data on lost or stolen devices. The connectivity could affect platforms if adequate firewalls, IDPs are not strong. Therefore Vendors would provide adequate firewall and IDPs with the supply of equipment.

7.5 Cryptography Related Security Issues:

Vendors will take suitable measures to deal with cryptography related vulnerabilities and submit a report of the measures along with a relevant certificate(s) that they have taken adequate measures to deal with these vulnerabilities.

- i. Attacks on COMP-128 algorithm
- ii. Compromised cipher key
- iii. Key recovery allowing SIM cloning
- iv. Hijacking outgoing calls in networks with encryption disabled

- v. Hijacking outgoing calls in networks with encryption enabled
- vi. Hijacking incoming calls in networks with encryption disabled
- vii. Hijacking incoming calls in networks with encryption enabled
- viii. Suppressing encryption between the target user and the intruder
- ix. Suppressing encryption between target user and the true network

7.6 Data Flow Attacks

Many sophisticated attacks disguise themselves in data flows across sessions and ports—the more traffic there is, the harder it is to identify the threats. Vendors may ensure that they are aware of this and submit compliance on the same.

7.7 Additional Interfaces

Many of the problems in the data intensive infrastructure may come to increased number of interfaces additionally for data than those were present for voice only initial 2G systems, hence, the Vendors must give special attention to interfaces and their related vulnerability. Such Vendors may ensure that they provide additional notes that they have taken care of the same and the test mechanism and methodology adopted by them with adequate evidence. Some of these interfaces are listed below:

- Gi: Exposed to Internet and corporate networks
- Gp: Primary interconnection pt. between operator's n/w and un-trusted external networks
- Gc: Allows access (via HLR) to key user info. from remote network during roaming
- Vulnerable Interfaces
- Gi: Exposed to all threats from Internet: viruses, DoS, and malicious network traffic
- Gp: Connection hijacking, overbilling from a roaming network during handover
- Gn: Not encrypted by default

7.8 Security against Remote Access

The Vendor shall submit a written undertaking to the TSP clearly identifying all known means of remote control/ remote access/remote command and control in the supplied equipment as well as suitable mitigation means to close such access mechanisms.

7.9 Software and Hardware Design Surety :Vendor may choose one of the following Options for Software and Hardware Design Surety

7.9.1 Option 1:

(a) The Vendor shall at TSP's request enter into an escrow deposit arrangement in respect of all Information and documentation in relation to Supplies in respect of Hardware, executable Software/source code/gold build etc, High Level Designs (HLD), Detail Design Documents (DDD), listings and programmer's notes) ("the **Escrow Information**") as would enable TSP to complete any outstanding obligations of the Vendor under this Agreement, including, without limitation, obligations that would have existed (including the requirement to fulfill any orders that TSP would have otherwise placed under this Agreement) had this Agreement not been terminated by TSP before the expiry of its Term.

(b) Without affecting any other rights it may have, TSP shall have the right, free of charge, to use the Escrow Information, after its release, in order to use or maintain (including to upgrade) the software, to modify or have modified the software, and to authorize such modified software to or have it maintained by third parties, in case Vendor refuses to do so as per the Agreement.

(c) The Vendor shall ensure that the Escrow Information deposited in accordance with Clause 7.11 (a) is and will be maintained as sufficient to allow a reasonably skilled programmer or analyst to maintain, modify and correct the hardware and software without the help of any other person or reference, and the Vendor further undertakes to keep the Escrow Information fully upto-date throughout the Term.

(d) On the occurrence of any event permitting the release of the Escrow Information, the Vendor shall immediately provide, at its cost and expense, to TSP for a reasonable period, such advice, support assistance, data, information, access to Vendor's personnel or any key personnel of legal owner of the [Hardware and/or] Software for the purpose of understanding, maintaining (including upgrading), modifying and correcting any of the Hardware and/or Software. The softwares and codes written only in English language shall be acceptable. The code/softwares shall be proven to be operational and correct version and to be certified that it does not have self-destructing programmes. This may be ensured by using the same at least once for loading the system initially before being deposited.

7.9.2 Alternative to option 1 is Option 2 as below::

- (i) Gold software copy or the Executable copy of the software at the discretion of vendor.
- (ii) Dumb hardware can be loaded with software by the TSP or under the supervision of TSP from Gold software copy or from the executable copy after checking that hardware is free from any software and ensuring that there are no harmful malware into the hardware. Alternatively, vendors will submit a certificate to BSNL that the supplied hardware is free from harmful malware based on the above test.
- (iii) Upgradation of software for a period of as agreed in the Contract .
- (iv) Design of network (network diagram of Vendor Implemented equipment under the Contract) in digital form and/ or in hard copy

7.10 Penalty

In the event that the Vendor is unable to comply with its obligations under this Agreement, as a result of which the Licensor imposes any sanction on the TSP, which results in any financial and other liabilities on the TSP, the Vendor shall be liable to make good such loss. In addition to the above, in case of any inadequate measures, act of intentional omissions, deliberate vulnerability left into the equipment or in case of deliberate attempt for a security breach by the Vendor, the Licensor may at its discretion blacklist the Vendor from entering into any supply deals with any Indian telecom operators. The TSP shall give the vendor the opportunity to defend any claim prior to imposing any penalty or blacklisting the vendor on account of security breach being attributable to it..

7.11 Inspection

The Vendor must allow the TSP , Licensor/DoT and/or its designated agencies to inspect the hardware, software, design, development, manufacturing facility and supply chain and subject all software to a security/threat check at the time of procurement of equipment and upto two more times every year until the supplies under the Contract have been completed, at the sole discretion of the TSP. . All the documents should be in English and handed over to the visiting team of the TSP at least 4 weeks ahead of the visit.

7.12 Language of Supplies

All the software codes, firmware, operating system, hardware details should be in **English** only.

8. Data Protection

8.1 The Parties acknowledge that, in respect of all Personal Data and processed by the Vendor for the purpose of the provision of supplies under the Contract, TSP alone as data controller shall determine the purposes for which and the manner in which such Personal Data will be processed by the Vendor.

8.2 Other than at TSP's request, or where required by law to provide the supplies, the Vendor shall not disclose or allow access to any Personal Data other than, subject to Clause 8.4(f) to a person placed by the Vendor under the same obligations as contained in this clause who is employed or engaged by the Vendor or within the control of the Vendor in the performance of the Agreement.

8.3 The Vendor shall not use Personal Data for any purpose other than the provision of the supplies and shall return any Personal Data to TSP immediately upon request at any time providing such return does not prevent the Vendor from fulfilling its obligations under this Agreement and the Contract. The Vendor shall retain Personal Data no longer than is necessary for the provision of the supplies, in accordance with the relevant Applicable Law and such instructions as TSP may provide from time to time. Upon expiry or termination of this Agreement for whatever reason, the Vendor shall immediately return to TSP all Personal Data and certify that no copies have been made or retained by the Vendor or any third party acting on its behalf.

8.4 The Vendor shall:

- (a) process Personal Data only on the instructions of TSP and to the extent necessary for the performance of this Agreement;
- (b) not modify, amend or alter the contents of the Personal Data except as required or permitted by this Agreement or with TSP's prior written consent;
- (c) implement the appropriate technical and organisational measures to protect Personal Data against accidental or unlawful destruction or accidental loss, alteration, unauthorised disclosure or access, and against all other unlawful forms of processing, which measures are set out in more detail in Clause 4 and provide to TSP with a written description of the measures taken when requested by TSP;
- (d) comply with all relevant provisions of any TSP codes of practice notified to the Vendor from time to time and the Applicable Law ,
- (e) keep all personal data secure and confidential, act only on TSP's instructions with respect to it, and comply with such further reasonable requirements from time to time of TSP for the security of it;
- (f) ensure that, of the Vendor's staff, only those of the Contract Personnel who need to have access to the Personal Data are granted access to the Personal Data only for the purposes of the performance of this Agreement and the Contract Personnel are informed of the confidential nature of the Personal Data and comply with the obligations set out in this Clause 8;
- (g) notify TSP forthwith, and in any event, no later than 12 hours from the time it comes to the Vendor's attention, that Personal Data transferred by TSP to the Vendor has been the subject of accidental or unlawful destruction or accidental loss, alteration, unauthorised disclosure or access, or any other unlawful forms of processing; and

(h) notify TSP in the event that it receives a request or notice from any person subject to having access to that person's Personal Data held by it and will provide TSP with full co-operation and assistance in relation to any complaint or request including providing TSP with any relevant Personal Data it holds within the timescales provided by the request or notice or as otherwise required by TSP.

8.5 In respect of transfer of Personal Data the following conditions shall apply:

(a) obtain TSP's prior written consent before transferring Personal Data to any Subcontractors in connection with the provision of the supplies;

(b) prior to any transfer of personal data, enter into or procure that any Subcontractor delivering the supplies will enter into contracts for the transfer of Personal Data. In respect of Personal Data transferred by TSP to the Vendor or acquired by the Vendor from TSP's systems to a country outside of India shall be on the basis of Applicable Laws , or such other data protection model contract terms as may be agreed between the Parties from time to time, except where the relevant Applicable Laws provides for a derogation from this requirement.

8.6 Any breach of this Clause 8 by the Vendor shall be deemed to be a material breach of the Agreement and the Vendor shall indemnify TSP from the against any costs, losses, damages, proceedings, claims, expenses or demands incurred or suffered by TSP which arise as a result of such breach.

8.7 The Vendor shall, upon TSP giving reasonable notice, allow TSP or its nominated representatives such access to its premises, Information and records and those of its agents subsidiaries and sub contractors, as may be reasonably required by TSP from time to time to assess the Vendor's and/or Contract Personnel's compliance with this Clause 8.

9. Regulatory Matters

9.1 The Vendor shall

(a) comply with all regulatory matters under Applicable Laws including, without limitation, any actions that TSP may require in connection with any regulatory matter, that are notified to the Vendor Regulatory Contact from time to time by the TSP Regulatory Contact in so far as they relate to the performance by the Vendor under the Agreement.

(b) within 14 days of the Commencement Date, ensure that the Vendor Regulatory Contact contacts the TSP Regulatory Contact to establish the nature and extent of communication between them, to assist them in meeting all regulatory requirement relevant to the Contract, as set by the Licensor or any Governmental Authority or any other person nominated by Licensor

(c) ensure that the Vendor and its Contract Personnel have undergone the proper and adequate training for the purpose of performing its obligations under this Agreement and promptly provide such information to TSP as shall be necessary for TSP to respond fully and to the timescale required to any request or requirement for information from any Governmental Authority , to the extent that such information relates to the performance of the obligations by the Vendor under the Agreement.

10. Confidentiality

10.1 In this Clause, "**TSP Information**" which TSP from time to time identifies to the Vendor as being commercially confidential, or is by its nature commercially confidential or defined by TSP as

confidential, or confidential as per the Applicable Law. The term "**Information**" shall mean and include all or any communication(s), Information(s) or data disclosed, whether written, visual or oral and other material supplied to or obtained by the Party ("**Recipient**") from the other Party ("**Disclosing Party**") during the course of the Agreement.

10.2 Except with TSP's consent, the Vendor shall not disclose TSP Information to any TSP employee, not authorized to receive such information

10.3 Subject to the Clause 11, either Party receiving Information from the other shall not without the other's prior written consent use such Information except for Contract purposes or disclose such Information to any person other than TSP's employees, agents and contractors or Contract Personnel who have a need to know and who are bound by equivalent obligations of confidentiality. Any breach of such obligations by Contract Personnel or TSP's employees, agents or contractors (as the case may be) shall be deemed to be a breach by the Vendor or TSP respectively.

10.4 Clause 10.2 and Clause 10.3 shall not apply to Information that is:

- (a) published except by a breach of the Contract; or
- (b) lawfully known to the Recipient at the time of disclosure and is not subject to any obligations of confidentiality; or
- (c) lawfully disclosed to the Recipient by a Vendor without any obligations of confidentiality; or
- (d) replicated by development independently carried out by or for the Recipient by an employee or other person without access to or knowledge of the Information.

10.5 Each Party shall not publicize this Agreement without other Party's prior written consent and shall ensure that any subcontractor is bound by similar confidentiality terms to those in this clause.

10.6 Either Party that has during the course of this Agreement received confidential Information in a recorded form from the other (or has recorded received confidential Information) shall return or such destroy in a complete irrecoverable mode (at the option of the disclosing party) records upon:

- (a) expiry or termination of this Agreement; or
- (b) upon earlier request unless such records are part of the supplies.

10.7 This clause shall survive termination / expiry of this Agreement.

10.8 The obligations of confidentiality shall also be governed by the Non-Disclosure Agreement dated [●] ("**DA**"), entered into between the TSP and the Vendor. In the event of any conflict between this Clause 10 and the NDA, the provisions of the NDA shall be applicable.

11. Intellectual Property

11.1 Each Party will retain its right, title and interest in its respective trademarks, service marks and trade names as well as rights in respect of any patent, copyright, trade secrets or other intellectual property used during the performance of this Agreement. Both Parties recognise that except as otherwise expressly provided herein or agreed between the Parties, they shall have no right, title, interest or claim over the others' intellectual property.

11.2 The Vendor agrees that it shall defend, at its own expense, all proceedings, suits and claims against and/or affecting the TSP or any of their officers, directors or employees ("**Indemnitees**") with respect to infringement, breach or violation of any patent, trademark, copyright, trade secret, mark or other intellectual property rights of any third party in the course of performance of its obligations under

this Agreement. The Vendor agrees that it shall indemnify the Indemnitees for all sums, costs, expenses and liabilities including, without limitation, all reasonable attorneys' fees and other costs, incurred by Indemnitees in connection with or otherwise arising out of any such proceeding, suit or claim.

If in any such suit so defended, all or any part of the equipment or any component thereof or the use thereof is held to constitute an infringement or violation of third party intellectual property rights and its use is enjoined, or if in respect of any claim of infringement or violation the Vendor deems it advisable to do so, the Vendor shall at its sole cost and expense take one or more of the following actions: (a) procure the right to continue the use of the same without interruption for the TSP; or (b) replace the same with non-infringing Equipment that meets the technical specifications stipulated under the Contract; or (c) modify the said equipment or any component thereof so as to be non-infringing; provided, that (i) the equipment or any component thereof as modified complies with all of the technical specifications as stipulated under the Contract; and (ii) Vendor shall fully indemnify the TSP for any costs associated with any such action.

12. Security Review

The Vendor shall:

- (a) give to (or procure the giving to) TSP (or any person authorised by TSP) such access at all reasonable times to the Vendor's and any Subcontractor's records and premises related to this Agreement as TSP may require from time to time to assess the Vendor's compliance of these policies in this Agreement;
- (b) such assessments may include assessments of all elements of physical and logical audits, penetration testing of the Vendor's Systems. The Vendor shall facilitate this assessment by permitting TSP to collect, retain and analyse information to identify potential security risks including trace files, statistics, network addresses and the actual information or screens accessed or transferred; and
- (c) provide such reports to TSP and attend such meetings as may be reasonably required by TSP.

13. Network Audit, Test and Certification:

The process of networks audit and certification should be performed by the test and certification agencies to include following activities and Vendor shall extend necessary support for the same::

- (a) **Network forensics** to identify existing unwanted running processes\ malwares\ backdoors etc. on all networks' elements. The operation includes sniffing of live traffic to identify unwanted redirection and interception of traffic.
- (b) **Network Hardening** to map all networks elements and to calibrate them to optimized secured state.
- (c) **Network penetration test** to assure system durability against any kind of attack.
- (d) **Risk assessment** to understand what actions should be taken to minimize future damage to carrier and what risks are inevitable.
- (e) **Actions** to fix found problems by setting systems to default or acquiring relevant IT security technologies to prevent such problems from reoccurring.

An available list of Test and Certification Agencies (Third Parties) in various countries who may take up the regular Technical Audit of Networks and Security Certification is given at Appendix I. The TSP may

engage the services of any other Network Audit and Security Certification agency also.

14 Investigation:

14.1 If TSP believes that there has been a security breach by the Vendor of the provisions of this Agreement, TSP will inform the Vendor Security Contact. The Vendor shall cooperate with TSP fully in any ensuing investigation. The Vendor shall provide list of Contract Personnel who have had access to TSP Systems and TSP Information to TSP and/or any law enforcement agency

14.2 The Vendor shall report to TSP Security Contact promptly of any potential misuse of TSP Information or improper or unauthorised access to TSP Systems and TSP Information. Upon request, the Vendor shall promptly provide to TSP a written report with details of the potential misuse of TSP Information or improper or unauthorised access to TSP Systems and TSP Information.

14.3 If any audit or investigation reveals that there is a potential risk to the confidentiality, integrity or availability of TSP Information in the Vendor's processes or Vendor Systems, Vendor shall promptly correct any security risk in the Vendor's processes or Vendor Systems promptly

14.4 During investigation, the Vendor shall co-operate with TSP, providing reasonable access, space, facilities and assistance to all Vendor Systems as reasonably necessary to investigate the breach of the provisions of this Agreement including permitting interview of any sales, engineering or other operational personnel of Vendor upon prior reasonable written notice.

15. Limitation of Liability

The aggregate liability of the Vendor to the TSP in respect of any breach of obligations under this Agreement shall not exceed the sum of Rs. 50,00,00,000 (Rupees Fifty Crores only) per breach, provided that such limitation shall not apply to claims arising pursuant to Clauses 10 and Clause 11.2 or pursuant to any other Clause where such limitation is expressly excluded.

16. Term and Termination

16.1 This Agreement shall be effective from the Commencement Date .Notwithstanding anything contained herein or in the Contract, this Agreement shall survive till any equipment is working, which is supplied and served by the Vendor under this Contract or for a period of ten years after signing of this Agreement whichever is later ("**End Date**").

16.2 This Agreement may also be terminated in the event it is so determined by the Licensor or under Applicable Laws.

16.3 The termination of this Agreement shall be without prejudice to the rights and obligations of the parties which have accrued up to the date of termination.

17. Indemnity

17.1 The Vendor shall indemnify and hold harmless the TSP and its employees, agents, shareholders, directors, representatives, against any claims or penalty or consequence arising out of breach of the security related terms of the license granted by the Licensor as a result of breach or non-compliance by the Vendor with its obligations in this Agreement.

17.2 It is clarified that any expenditure incurred by the TSP for complying with security related provisions as prescribed under Applicable Law shall be borne by the Vendor. In the event there is a breach of the security related provisions as prescribed under Applicable Laws, any penalty

imposed by the DoT on the TSP shall be paid by the Vendor to the TSP. Further, any testing of Vendor's equipment including requirement of testing equipment shall be met by Vendor at his own cost.

18. Governing Law

This Agreement shall be governed by laws of India and the Parties agree to the exclusive jurisdiction of the Indian courts where the registered office of the TSP is situated.

19. Arbitration

19.1 In the event of any question, dispute or difference arising under this Agreement or in connection there-with, the same shall be referred to the sole arbitration of the CGM, BSNL, MHTC or in case his designation is changed or his office is abolished, then in such cases to the sole arbitration of the officer for the time being entrusted (whether in addition to his own duties or otherwise) with the functions of the CGM, BSNL, MHTC or by whatever designation such an officer may be called (hereinafter referred to as the said officer), and if the CGM, BSNL, MHTC or the said officer is unable or unwilling to act as such, then to the sole arbitration of some other person appointed by the CGM, BSNL, MHTC or the said officer. The agreement to appoint an arbitrator will be in accordance with the Arbitration and Conciliation Act 1996. There will be no objection to any such appointment on the ground that the arbitrator is a government servant or that he has to deal with the matter to which the agreement relates or that in the course of his duties as a government servant he has expressed his views on all or any of the matters in dispute. The award of the arbitrator shall be final and binding on both the parties to the agreement. In the event of such an arbitrator to whom the matter is originally referred, being transferred or vacating his office or being unable to act for any reason whatsoever, the CGM, BSNL, MHTC or the said officer shall appoint another person to act as an arbitrator in accordance with terms of the agreement and the person so appointed shall be entitled to proceed from the stage at which it was left out by his predecessors.

19.2 The arbitrator may from time to time with the consent of both the Parties enlarge the time frame for making and publishing the award. Subject to the aforesaid, Arbitration and Conciliation Act, 1996 and the rules made there under, any modification thereof for the time being in force shall be deemed to apply to the arbitration proceeding under this clause.

19.3 The venue of the arbitration proceeding shall be the office of the CGM, BSNL, MHTC, Corporate Office, New Delhi or such other places as the arbitrator may decide.

20 Notices

20.1 Any notice, documents, information, direction and any other communications required or permitted to be (or such other addresses as specified in writing by the respective Party from time to time) hereunder shall be sent in writing and sent by registered post, courier and or by facsimile transmission or delivered personally by hand or sent by email addressed to the other Party to the relevant addresses set out below at the following addresses:

If to the TSP:

Bharat Sanchar Nigam Limited
2nd Floor, Bharat Sanchar Bhavan
HC Mathur Lane
New Delhi 110001
Attention: [●] Fax: [●]
Email: [●]

If to the Vendor:

[Name] [Address} Attention: [●] Fax: [●] Email: [●]

20.2 Any such notices and other documents shall:

(a) if delivered by hand, be deemed to have been given and received at the place of receipt on the date of delivery;

(b) if mailed by post or couriered, be deemed to have been given and received at the place of delivery on the date of delivery.

(c) if given by facsimile transmission be deemed to have been given and received, at the place of receipt on the date as shown in the facsimile transmission report; and

(d) if given by e-mail be deemed to have been given and received at the place mentioned in Clause 19 above on the same day.

20.3 Either Party shall inform the other of any change in its address above through a notice in writing to the other Party in the manner set forth above.

I WITNESS WHEREOF THE PARTIES HAVE CAUSED THESE PRESENTS TO BE EXECUTED ON THE DAY, MONTH AND YEAR HEREIN BELOW WRITTEN TO BE EFFECTIVE FROM THE DATE FIRST MENTIONED ABOVE

SIGNED for and on behalf of

Bharat Sanchar Nigam Limited

..... Signature

..... Name

..... Position

..... Witness Signature

.....

.....

SIGNED for and on behalf of [●]

..... Signature

..... Name

..... Position

..... Witness Signature

.....

Name & Address...

.....

Name & Address

Appendix I**List of Test and Certification Agencies (Third Parties) in various countries who may take up the regular Technical Audit of Networks and Security Certification.**

The List is indicative and TSP may use the services of other Network Audit and Security Certification agency also.

CC Evaluation Labs**Australia and New Zealand**

1. *Computer Sciences Corporation (CSC)*
http://www.csc.com/security/offerings/26694-common_criteria_at_csc
Contact: Andrew Coggle
212 Northbourne Avenue
Braddon ACT 2612
Tel: +61 2 6246 8000
Fax: +61 2 6246 8181
E-mail: aisef@csc.com.au
Web: <http://www.csc.com/commoncriteria>
2. *Logica*
<http://www.logica.com.au/>
Contact: Bruce Legge
1 Torrens Street
BRADDON ACT 2612
Tel: +61 2 6246 1900
Fax: +61 2 6262 8827
E-mail: aisef.au@logica.com
Web: <http://www.logica.com/au>
3. *Startsec*
<http://www.stratsec.net/Home>
Contact: Aleks Lubiejewski
Unit 1, 50 Geils Court
DEAKIN ACT 2600
Tel: +61 2 6260 8878
Fax: +61 2 6260 8828
E-mail: lab@stratsec.net
Web: <http://www.stratsec.net>

Germany

1. *CSC Deutschland Solutions GmbH*
Contact: Herrn Dr. Goswin Eisen
Sandstr. 7-9
80335 München
Telefon: +49 89.5908.6504
Fax.: +49 89.5908.6503
E-Mail: geisen@csc.com
Web: http://www.csc.com/security/ds/11371/15880-german_laboratory_experience
2. *atsec information security GmbH*
<http://www.atsec.com/us/addresses-contact.html>
Contact: Gerald Krummeck
Steinstr. 70
81667 München

Telefon: 089 44249-830
Fax: 089 44249-831
E-Mail: gerald@atsec.com
Web: <http://www.atsec.com>

United Kingdom

1. EDS
<http://h10134.www1.hp.com/>
2. Logica
www.logica.com
3. SiVenture
<http://www.siventure.com>

USA

- 1 *Arca Common Criteria Testing Laboratory*
<http://www.savvis.net/en-US/Pages/Home.aspx>
Contact: Pete Feeney
45901 Nokes Boulevard
Sterling, VA 20166
Tel: +1 703-667-6684
Fax: +1 509-691-7440
Mobile: +1 703-999-1075
E-mail: arca-cctl@savvis.net
- 2 *Cygnacom Solutions' Security Evaluation Laboratory*
<http://www.cygnacom.com/labs/common-criteria/index.htm>
Contact: Ms. Nithya Rachamadugu
7925 Jones Branch Drive, Suite 5200
McLean, VA 22102-3305
Tel: +1 703.270-3563
Tel: +1 858-509-0180
Fax: +1 703-848-0985
E-mail: selinfo@cygnacom.com
Web: <http://www.cygnacom.com>
- 3 *SAIC Common Criteria Testing Laboratory*
<http://www.saic.com/infosec/testing-accreditation/common-criteria.html>
Contact: Robert L. Williamson
Ctr. for Information Security Tech. SAIC
7125 Columbia Gateway Drive, Suite 300
Columbia, MD 21046
Tel: +1 410-953-6819
Fax: +1 410-953-7001
E-mail: robert.l.williamson.jr@saic.com
Web: <http://www.saic.com>
- 4 Computer Sciences Corporation (CSC)
http://www.csc.com/security/offerings/26694-common_criteria_at_csc
Contact: Charles Nightingale
7231 Parkway Drive

Hanover, Maryland 21076
Tel: 443.445.8400
Fax: 443.445.8002
E-mail: STCL@csc.com
Web: <http://www.csc.com/commoncriteria>

- 5 *Booz Allen Hamilton Common Criteria Testing Laboratory*
900 Elkridge Landing Road, Suite 100, Linthicum, MD 21090
<http://www.boozallen.com/doingbusiness/contractvehicles/gmacs/alliant/alliant/3844966/38470558>
- 6 *COACT Inc. CAFE Laboratory*
9140 Guilford Road
Suite N, Columbia, MD 21046-2585
<http://www.coact.com/>
7 DSD Information Assurance Laboratories (DIAL)
1160 Johnson Ave.
Suite 101, Bridgeport, WV 26330
<http://dsdial.com/>
- 8 InfoGard Laboratories, Inc.
709 Fiero Lane
Suite 25, San Luis Obispo, CA 93401
<http://www.infogard.com/>

Taiwan (not from CC portal)

1. Telecom Technology Center, Taipei, Taiwan
http://www.ttc.org.tw/english/its_e.asp
http://www.ttc.org.tw/english/its_e_01.asp

The Netherlands

1. *BrightSight IT Security Evaluation Facility*
Contact: Mr. Dirk-Jan Out
Delftechpark 1
2628 XJ Delft
The Netherlands
Telefon: +31 15 269 25 00
Fax: +31 15 269 25 55
E-Mail: info@brightsight.com
Web: <http://www.brightsight.com>

Israel

1. ALTAL Security Consulting, Israel
<http://www.altalsec.com/index.php?langpage=eng&&language=eng>

Canada

1. Electronic Warfare Associates (EWA), Canada
<http://www.ewa-canada.com/>

Routers Tested as per CC:**1. Cisco Routers**

Cisco Systems Routers (800, 1700, 1800, 2600XM, 2800, 3700, 3800, and 7200 running Cisco IOS Release 12.4(11)T2; 7300, 7400, and 7600 running Cisco IOS Release 12.2(18) SXF8; 10000 and 12000 running 12.0(32)s7) and Cisco Secure ACS version 4.1.2.12

TOE evaluation was sponsored by Cisco Systems, San Jose

Evaluation was carried out by: "Arca Common Criteria Testing Laboratory"

<http://www.savvis.net/en-US/Pages/Home.aspx>

Contact: Pete Feeney

45901 Nokes Boulevard

Sterling, VA 20166

Tel: +1 703-667-6684

Fax: +1 509-691-7440

Mobile: +1 703-999-1075

E-mail: arca-cctl@savvis.net

2. Juniper Routers

Juniper Networks J-Series Family of Service Routers running JUNOS 7.3R2.14

ST was prepared by:

Science Applications International Corporation(SAIC)

Common Criteria Testing Laboratory

7125 Columbia Gateway Drive, Suite 300

Columbia, MD 21046

<http://www.saic.com/>

Evaluation was carried out by:

Science Applications International Corporation(SAIC)

Common Criteria Testing Laboratory

7125 Columbia Gateway Drive, Suite 300

Columbia, MD 21046

<http://www.saic.com/>

VoIP equipments tested as per CC:**1. AVAYA VoIP PBX System**

ST prepared by:

CSC Deutschland Solutions GmbH

Contact: Herrn Dr. Goswin Eisen

Sandstr. 7-9

80335 München

Telefon: +49 89.5908.6504

Fax.: +49 89.5908.6503

E-Mail: geisen@csc.com

Web: http://www.csc.com/security/ds/11371/15880-german_laboratory_experience

Evaluated by:

CSC Deutschland Solutions GmbH

Contact: Herrn Dr. Goswin Eisen

Sandstr. 7-9

80335 München

Telefon: +49 89.5908.6504

Fax.: +49 89.5908.6503

E-Mail: geisen@csc.com

Web: http://www.csc.com/security/ds/11371/15880-german_laboratory_experience

Some of the known types of attacks on GSM and CDMA networks**1. Eavesdropping**

This is the capability that the intruder eavesdrops signalling and data connections associated with other users. The required equipment is a modified MS.

2. User Impersonation

An intruder sends signalling and/or user data to the network, in an attempt to make the network believe they originate from the target user. The required equipment is again a modified MS.

3. De-registration spoofing

An attack that requires a modified MS and exploits the weakness that the network cannot authenticate the messages it receives over the radio interface. The intruder spoofs a de-registration request (IMSI detach) to the network. The network de-registers the user from the visited location area and instructs the HLR to do the same. The user is subsequently unreachable for mobile terminated services.

4. Location update spoofing

An attack that requires a modified MS and exploits the weakness that the network cannot authenticate the messages it receives over the radio interface. The user spoofs a location update request in a different location area from the one in which the user is roaming. The network registers in the new location area and the target user will be paged in that new area. The user is subsequently unreachable for mobile terminated services.

5. Passive Identity Caching

A passive attack that requires a modified MS and exploits the weakness that the network may sometimes request the user to send its identity in cleartext.

6. Active Identity Caching

An active attack that requires a modified BTS and exploits the weakness that the network may request the MS to send its permanent user identity in cleartext. An intruder entices the target user to camp on its false BTS and subsequently requests the target user to send its permanent user identity in cleartext perhaps by forcing a new registration or by claiming a temporary identity mismatch due to database failure.

7. Impersonation of the network

This is the capability whereby the intruder sends signaling and/or user data to the target user, in an attempt to make the target user believe they originate from a genuine network. The required equipment is modified BTS.

8. Camping on a false BTS

An attack that requires a modified BTS and exploits the weakness that a user can be enticed to camp on a false base station. Once the target user camps on the radio channels of a false base station, the target user is out of reach of the paging signals of the serving network in which he is registered.

9. Camping on false BTS/MS

An attack that requires a modified BTS/MS and exploits the weakness that a user can be enticed to camp on a false base station. A false BTS/MS can act as a repeater for some time and can relay some requests in between the network and the target user, but subsequently modify or ignore certain service requests and/or paging messages related to the target user.

10. Man-in-the-middle

The intruder puts itself in between the target user and a genuine network and has the ability to eavesdrop, modify, delete, re-order, replay, and spoof signaling and user data messages exchanged between the two parties. The required equipment is modified BTS in conjunction with a modified MS.

11. Compromising authentication vectors in the network

The intruder possesses a compromised authentication vector, which may include challenge/response pairs, cipher keys and integrity keys. This data may have been obtained by compromising network nodes or by intercepting signalling messages on network links.

12. Overbilling Attack

Involving a malicious user hijacking a subscriber's IP address and then using that connection to initiate fee-based downloads or simply use that connection for their own purposes. In either case, the legitimate user is billed for activity which they did not authorize or actually conduct.

13. Spoofed PDP context

Exploiting the weakness in the GTP (GPRS Tunneling Protocol)

14. Spoofed delete PDP context packets

Which would cause service loss or interruption for end users

15. Spoofed create PDP context packets

Which would result in unauthorized or illegal access to the Internet or customer data networks

16. GTP packet floods

Which is a type of Denial of Service attack.

17. Vulnerabilities with SIP-based VoIP systems

That might allow hackers to:

- (a) Reconfigure VoIP settings and gain access to individual users' account information
- (b) Eavesdrop on VoIP communications
- (c) Hijack a user's VoIP subscription and subsequent communications.

SECTION-14

Broad List of Network Node Details of WZ

Equipment	Make	Unit (in numbers)	Quantity (number) as on date									
			Ph I & II	Ph IV (1M)	Ph IV + (3M)	Ph IV ++ (2M)	Ph V	SE	PH VII	Total	Working	Remarks
IN System	ALIL	1(3 chains of Phase V + 2 chains of SE)	Equipment swapped with Phase V IN	Equipment swapped with Phase V IN	Equipment swapped with Phase V IN	Equipment swapped with Phase V IN	14M (Active) (18.2 M provisioning) (BHCA 50.4 M)	6M Active (7.8 M provisioning) (BHCA 21 M)		20M (Provisioning 26M) (BHCA 71.4M)	13M (BHCA 7.9M)	15.22 M provisioned
VOMS	ALIL	1	Equipment swapped with Phase V IN	Equipment swapped with Phase V IN	Equipment swapped with Phase V IN	Equipment swapped with Phase V IN	270 M	72 M (to be installed)			160 M	
SMSC	TeleDna		1476 K	1404 K	1440 K	-	2500K			6820 K	6820 K	Ph I & II+Ph IV(1M) 2880K logica got replaced with TeleDna.
SGSN - MH Circle	Alcatel			300 K	556 K	200 K	1500K	300 K		2556 K	2556 K	SE SGSN will replace 1M SGSN. It is under AT. TeleDna MMSC is under AT.
SGSN - GJ Circle	Alcatel	4	0	2 Nos			1 Nos. (For GERAN:PDP-2.25 Lac,Throughput-37.5 Mbps and For UTRAN: PDP-1.25 Lac,Throughput-30 Mbps)	1 Nos. (For GERAN:PDP-2.25 Lac,Throughput-37.5 Mbps and For UTRAN: PDP-1.25 Lac,Throughput-30 Mbps)		4 Nos	2	

GGSN	Alcatel			300K	900K	500K	-	-		1700K	1700K	
MMSC	Alcatel / TeleDna			60K	240K	100K	-	400K		400K	400K	SE MMSC of TeleDna will replace MMSC of Ph IV in full.
GMLC												
SMLC-GJ Circle	Alcatel	1	0	0	1	0	0	0		1	1	
UMS / VMS	Alcatel				400K	200K	-	600K			600K	
B&CCS	Comverse	1	Equipment swapped with Phase IV+	Equipment swapped with Phase IV+	3M	2M	9M	nil		16.1	15 M	1.42M postpaid (including CDMA)
OTA	Smarttrust				2.7M	2M	12M	-		16.7M	16.7M	
Backup HLR-GJ Circle	Alcatel	3	3.5 Million				4 Million	8 Million		0	1	Mated pair at Rajkot
LBA												
LBS												
WAP Gateway	Comviva		160tps				4000 tps			4000 tps	4000 tps	Phase I and II Wap Gateway replaced by Phase V WAP Gateway
PTT	Nokia					400 K				400 K	400K	Service not launched
SDP	TeleDna						15 M Customers			15 M Customers	15 M Customers	
ECDS												
VIG												

EIR												
FMCC	XALTED	2					2			2	2	
VGSS	DLITHIUM						2500 Sessions			2500 Sessions	2500 Sessions	
SS	DLITHIUM						1400 Sessions			1400 Sessions	1400 Sessions	
Welcome Message Server	TeleDna				32 SLC					32 SLC	32 SLC	Not in use now as it does not support sigtran
Missed Call Alert Server	cdot			8 lakh BHCA						8 lakh BHCA	8 lakh BHCA	
SMS MO	SMS MO gateway not avl. At present in West Zone											
NE/EMS	SMSC,SMS-CBC,OTA,ADPS,SMS-IVR,SDP,MMSC,Video gateway,Streaming Server,UMS,WAP Gateway,SGSN,GGSN,Border Gateway,Firewall											
RA	Hardware for RA supplied in West Zone for IN for 20 M active IN customers											
IVR Port	MH-5640,GJ-3420,MP-3130 & CG-960 IP-SPR ports											
VPN user capacity	VPN BHCA has not been defined Zonal wise as there is Central IN in Chandigarh to cater to VPN customers.											
SCP	As per Phase V Tender, 3 BHCC/user, at present 0.5 BHCC/user in West Zone IN with incoming trigerring off											
Slots of MPBN/MPLS	information attached in MH, GJ, MP, CG sheet.											
EIR & IMS	ZTE	1							15M BHIC			
SGSN CAT A	ZTE	1							4GBPS 800 KPDP			
GGSN	ZTE	1							34 GBPS			
PCRF	ZTE	1							6M PDP			
P2P SMSC	TeleDNA	1							5000 KBHSM			
SMS MO Gateway	ZTE	2							2500 KBHSM			
A2P SMSC	TeleDNA	1							10000 KBHSM			
VSMS	ZTE	1							417 Voice Ports			
MCA	ZTE	1							334 mca/sec			

WMS	PERTSOL	1							21 SM/Sec			
WAP Gateway	ZTE	1							1000 TPS			
SDP	H/W ZTE, S/W TeleDNA	1							700 TPS			
OBD	VOICE GATE	1							2084 Voice Ports			
ACB	ZTE	1							210 Ports			