

ERNET India, New Delhi

**Responses to the queries of prospective bidders are given below:**

Ref: Tender for the Procurement of items for ERNET India's VSAT Network (Tender No: EI-D/Tech/51-27/18 dated 09.07.2018)

Note:

1. Tender clause statement (written in the below table) can be full or partial statement. Thus, it's starting and end point shall be read carefully. Other parts/sub-parts of the clause shall remain unchanged.
2. The queries of the prospective bidders, which are not replied/given/addressed here, are not considered by ERNET India. Thus, such clauses remain unchanged.
3. Responses are given below Section wise. Thus, Sections shall be seen carefully.
4. After incorporating the modifications in the tender clauses due to queries of the prospective bidders, etc; the modified Tender is also uploaded on the web site. The prospective bidders are requested to consider this modified tender for submitting their bids.

| Section-B |                           |  |              |
|-----------|---------------------------|--|--------------|
| 1.        | Tender clause no. & Page  | Clause 10.7 (vi) and (v)   | Page 9 to 10 |
|           | Tender clause statement   | <p>(v) The benefits arising out of downward Exchange Rate Variation shall be passed on to .....in INR shall be applicable of supplier's invoice date.</p> <p>(vi) The benefits arising out of upward Exchange Rate Variation shall be passed on to the bidder..... in INR shall be applicable of supplier's invoice date.</p>  |              |
|           | Queries sought (in brief) | <p>The bidder submitted that as per their agreement with OEM, they can't expose the cost of the equipment. Thus, requested ERNET India to allow them to submit the Import Order as evidence whereas the prices would be masked.</p> <p>The bidder also requested to keep the validity of rates in RC as 6 months for ERV clause.</p>   |              |
|           | ERNET India's response    | The following clauses of the Tender have been modified as given below:   |              |
|           | Modified Clause 10.7 (v)  | <p>The benefits arising out of downward Exchange Rate Variation shall be passed on to ERNET India (i.e. Procuring Entity). The RBI reference rate printout from RBI web site shall be sufficient for claiming ERV benefits by ERNET India. For this, ERNET India will issue the PO on the bidder on 'INR Price of item quoted in the bid' by indicating that ERNET India will claim the benefit of Exchange Rate Variation and by enclosing the RBI reference rate printout from RBI website of PO's date. In this case, the payment by ERNET India to the bidder will be made on 'New INR Price of item' (i.e. B) by calculating its value with above mentioned formula.</p> <p>However, in case the bidder feels that Exchange rate has varied further at the time of item's import, then the bidder may further claim the benefit of this ERV clause. For this, the bidder shall provide (a) copies of the import order placed on the supplier (masking of rates &amp; amount is permitted), (b) copies of supplier's invoice for the relevant import order (masking of rates &amp; amount is permitted) and (c) the RBI reference rate printout from RBI web site of supplier's invoice date, to ERNET India. The copies of supplier's invoices shall be of dates within 08 weeks from the date of issuance of POs by ERNET India on the bidder. In case above will be qualified, ERNET India will issue the amendment in its initial PO only to give the benefits of ERV clause to the bidder after submission of above documents by the bidder with request to only provide the benefit of ERV clause. In this case, US\$ Exchange Rate in INR shall be applicable of supplier's invoice date.</p> |              |
|           | Modified Clause           | The benefits arising out of upward Exchange Rate Variation shall be passed on to the   |              |

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|    | 10.7 (vi)                 | <p>bidder (i.e. Selling Entity).</p> <p>For above, ERNET India will issue the initial PO on the bidder on 'INR price of item as quoted in the bid'. To claim the benefit of this ERV clause, the bidder shall provide (a) copies of the import order placed on the supplier (masking of rates &amp; amount is permitted), (b) copies of supplier's invoice for the relevant import order (masking of rates &amp; amount is permitted) and (c) the RBI reference rate printout from RBI web site of supplier's invoice date, to ERNET India. The copies of supplier's invoices shall be of dates within 08 weeks from the date of issuance of POs by ERNET India on the bidder. In case above will be qualified, ERNET India will issue the amendment in its initial PO only to give the benefits of ERV clause to the bidder after submission of above documents by the bidder with request to only provide the benefit of ERV clause. In this case, US\$ Exchange Rate in INR shall be applicable of supplier's invoice date.</p> |         |
| 2. | Tender clause no. & Page  | Clause 16.1 (i)  | Page 13 |
|    | Tender clause statement   | The bidder will submit Bank Guarantee (i.e. PBG-RC) of 2% (Two Percent) of the total equipment value of tender excluding services like AMC, etc for the period of rate contract to adhere its execution as well as other terms and conditions of tender. It will be submitted by the bidder to ERNET India before or at the time of signing of the rate contract.  |         |
|    | Queries sought (in brief) | PBG-RC may be taken as an annual PBG with rolling validity, i.e. it will be renewed every year before its expiry.  |         |
|    | ERNET India's response    | The modified clause of the Tender is given below:  |         |
|    | Modified Clause 16.1 (i)  | The bidder will submit Bank Guarantee (i.e. PBG-RC) of 2% (Two Percent) of the total equipment value of tender excluding services like AMC, etc for the period of rate contract to adhere its execution as well as other terms and conditions of tender. It will be submitted by the bidder to ERNET India before or at the time of signing of the rate contract. However, the bidder will be permitted to submit it as annual PBG with rolling validity, i.e. annual renewal PBG-RC shall be submitted in ERNET India at least 15 days before its expiry.   |         |
| 3. | Tender clause no. & Page  | Clause 19.2 (i)  | Page 15 |
|    | Tender clause statement   | <p>The Rate contract shall be valid for a period of eight and half (8 ½) years from the date of signing of the contract and the validity of purchase of items from this rate contract will be as below:</p> <p>(i) The rates of all items quoted by the bidder shall be valid for a period of two (02) years from the date of signing of contract. This two years period may be extended for a further period of one (01) year through mutual consent. ERNET India may purchase any of the items from the Bill of Material with maximum increase of 25% in its quantity during this period.</p>  |         |
|    | Queries sought (in brief) | Kindly Clarify, Rate contract is for 2 Years or 8 1/2 Years  |         |
|    | ERNET India's response    | <p>The Rate Contract will be used to (i) purchase items for establishing HC-SCPC VSATs and (ii) purchase of services to operate these VSAT links satisfactorily.</p> <p>The 'purchase of items for establishing HC-SCPC VSATs' shall be restricted for 2 year from the date of rate contract ( extendable by 01 year mutually ), while 'purchase of services, etc to operate these VSAT links satisfactorily' shall be valid for 8 ½ years from the date of rate contract.</p> <p>No change in the clause.</p>   |         |
| 4. | Tender clause no. & Page  | Clause 22.1  | page 16 |
|    | Tender clause statement   | The successful bidder shall complete the awarded contract (work) on turnkey basis as per terms and conditions of the tender. If the successful Bidder fails to complete awarded work in time, bidder shall pay to ERNET India without prejudice to any other rights or remedy as may be available to ERNET India, a compensation amount calculated @ 1% of the PO value per week subject to a maximum of 10% of particular PO value. In case of delay in execution and completion of work, ERNET India may consider to cancel the awarded work order at any point of time.   |         |
|    | Queries sought (in        | - LD should not be on total PO value but should be on value of undelivered portion   |         |

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|    | brief)                    | of PO.<br><ul style="list-style-type: none"> <li>- A cure period of 30 days may be offered to the bidder before terminating the contract on defaulting over contracted terms.</li> <li>- The termination due to delay in execution should come into play if the reasons are attributed to the bidder.</li> </ul>   |         |
|    | ERNET India's response    | <ul style="list-style-type: none"> <li>- The delays in execution of work, which are not on the part of the bidder, shall not be counted. It is already mentioned in the tender under Clause no. 23 and 27 of Section-B, Annexure-III and Annexure- VIII.</li> <li>- The LD will be on full PO value.</li> </ul> <p>The modified Tender clause statement is given below:</p>  |         |
|    | Modified Clause 22.1      | The successful bidder shall complete the awarded contract (work) on turnkey basis as per terms and conditions of the tender. If the successful Bidder fails to complete awarded work in time, bidder shall pay to ERNET India without prejudice to any other rights or remedy as may be available to ERNET India, a compensation amount calculated @ 1% of the PO value per week subject to a maximum of 10% of particular PO value. In case of delay in execution and completion of work exceeds 10 weeks from the defined time in Time Schedule, ERNET India may consider to cancel the awarded work order at any point of time.   |         |
| 5. | Tender clause no. & Page  | Clause 23.1  | Page 16 |
|    | Tender clause statement   | ERNET India may grant an extension of time limit set for the completion of the work in case the timely completion of the work is delayed by force majeure beyond the contractor's control, subject to what is stated in the following sub paragraphs and to the procedures detailed there is being followed. Force majeure is defined an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, tsunami etc.), the direct and indirect consequences of wars (declared or un-declared), national emergencies, civil commotions and strikes (only those which exceed a duration of ten continuous days). The successful Bidder's right to an extension of the time limit for completion of the work in above mentioned cases, is subject to the following procedures:  |         |
|    | Queries sought (in brief) | Transponder/ Satellite failure should be covered under Force Majeure   |         |
|    | ERNET India's response    | Modified clause is given below:  |         |
|    | Modified Clause 23.1      | ERNET India may grant an extension of time limit set for the completion of the work in case the timely completion of the work is delayed by force majeure beyond the contractor's control, subject to what is stated in the following sub paragraphs and to the procedures detailed there is being followed. Force majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, tsunami etc.), the direct and indirect consequences of wars (declared or un-declared), national emergencies, civil commotions, strikes (only those which exceed a duration of ten continuous days) and failure of satellite/transponder related to the assigned work of ERNET India. The successful Bidder's right to an extension of the time limit for completion of the work in above mentioned cases, is subject to the following procedures: |         |
| 6. | Tender clause no. & Page  | Clause no. 27.2  | Page 18 |
|    | Tender clause statement   | A delay by the bidder in the performance of its delivery obligations shall render the bidder liable to any or all of the following sanctions: forfeiture of its performance security, imposition of liquidated damages, and/or termination of the Contract for default.  |         |
|    | Queries sought (in brief) | The bidder requested that this clause shall be applicable if delay is on the part of bidder.   |         |
|    | ERNET India's response    | Modified clause is given below:  |         |
|    | Modified Clause no. 27.2  | A delay by the bidder in the performance of its delivery obligations (caused due to reasons at the part of bidder) shall render the bidder liable to any or all of the following sanctions: forfeiture of its performance security, imposition of liquidated damages, and/or termination of the Contract for default.  |         |
| 7. | Tender clause no. & Page  | Clause no. 29.1  | Page 18 |
|    | Tender clause             | ERNET India may, by written notice sent to the Bidder, terminate the Purchase Orders, in   |         |

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|                  | statement                 | whole or in part for any item at any time for its convenience. The notice of termination shall specify that termination is for ERNET India's convenience, the extent to which performance of work under the Purchase Order is terminated and the date upon which such termination becomes effective. The notice period in case of termination for convenience shall be 30 days.<br><br>In such termination, ERNET India shall make 100% payment for the delivered items as per the Purchase Orders subject to the following:<br><br><ul style="list-style-type: none"><li>- The full items should be delivered and installed as per the terms of PO/ rate contract.</li><li>- The items (only hardware) which are in transit stage on the date of written notice of ERNET India for the said termination shall be exempted from this clause, subject to that such items shall get delivered, installed and accepted by ERNET India as per the PO and rate contract.</li></ul><br>In case of remote VSAT AMCs, ERNET India may terminate the AMC of VSATs (either in whole or in part) at any time without mentioning any conditions and as per the convenience of ERNET India with a notice period of 30 days. |               |
|                  | Queries sought (in brief) | <ul style="list-style-type: none"><li>- One of the bidders requested to remove it.</li><li>- One of the bidders requested to replace 'full item' by 'item' and remove the condition of delivery, installation and acceptance by ERNET India as per the PO and rate contract.</li><li>- One of the bidders requested to increase the notice period of 30 days.</li></ul>  |               |
|                  | ERNET India's response    | Modified clause is given below:  |               |
|                  | Modified Clause no. 29.1  | In case ERNET India's user discontinues the VSAT services, then ERNET India shall terminate the AMC services of such VSATs with a notice period of 45 days.  |               |
| 8.               | Tender clause no. & Page  | Clause no. 30.1  | Page 18 to 19 |
|                  | Tender clause statement   | ERNET India may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the bidder, terminate the Contract and Purchase Orders (POs) in whole or in part:<br><br>(a) If the bidder fails to deliver any or all of the goods within the time period specified in the Contract/tender/POs, or any extension thereof granted by ERNET India. OR<br><br>(b) If the bidder fails to perform any other obligation(s) as stipulated in the rate contract/ tender /POs.  |               |
|                  | Queries sought (in brief) | The bidder requested to provide some advance notice/ cure period.  |               |
|                  | ERNET India's response    | Modified clause is given below:  |               |
|                  | Modified Clause no. 30.1  | ERNET India may, without prejudice to any other remedy for breach of contract, <b>by 20 days advance</b> written notice of default sent to the bidder, terminate the Contract and Purchase Orders (POs) in whole or in part:<br><br>(a) If the bidder fails to deliver any or all of the goods within the time period specified in the Contract/tender/POs <b>for reasons on the part of the bidder</b> , or any extension thereof granted by ERNET India. OR<br><br>(b) If the bidder fails to perform any other obligation(s) as stipulated in the rate contract/ tender /POs.   |               |
| <b>Section-C</b> |                           |  |               |
| 9.               | Tender clause no. & Page  | Clause 3.1   | Page 22       |
|                  | Tender clause statement   | ERNET India or its representative shall have the right to inspect and test the supplied items to confirm their conformity to the ordered specifications at any time even during first 06   |               |

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|     |                           | months of its warranty period. The bidder shall provide all reasonable facilities and assistance to the inspection team at no charge to ERNET India at the sites where equipments are installed. The bidder shall also depute their competent persons at the sites for such inspection. In case any inspected or tested goods fail to conform to the specifications, ERNET India may reject them and supplier shall either replace the rejected goods or make all alterations necessary to meet specification required, free of cost to ERNET India.  |         |
|     | Queries sought (in brief) | Inspection should be done at the time of delivery or before installation.   |         |
|     | ERNET India's response    | Modified clause is given below:   |         |
|     | Modified Clause 3.1       | ERNET India or its representative shall have the right to inspect and test the supplied items to confirm their conformity to the ordered specifications at any time even during <b>first 60 days of its warranty period</b> . The bidder shall provide all reasonable facilities and assistance to the inspection team at no charge to ERNET India at the sites where equipments are installed. The bidder shall also depute their competent persons at the sites for such inspection. In case any inspected or tested goods fail to conform to the specifications, ERNET India may reject them and supplier shall either replace the rejected goods or make all alterations necessary to meet specification required, free of cost to ERNET India. |         |
| 10. | Tender clause no. & Page  | Clause 4  | Page 22 |
|     | Queries sought (in brief) | The bidder requested to add the clause of limitation of liability.  |         |
|     | ERNET India's response    | No change in clause   |         |
| 11. | Tender clause no. & Page  | Clause 8.7  | Page 24 |
|     | Tender clause statement   | To pass the acceptance test, the VSAT, as a complete system, shall operate for fifteen (15) consecutive days, 24 hours a day, at 99.9% up-time efficiency. Up time is defined as productive and error-free time of the HUB equipment and VSAT equipment at remote sites using the Manufacturer's standard test procedures. Any un-utilized time, during the tests, will also qualify as up-time provided there are no hardware malfunctions.  |         |
|     | Queries sought (in brief) | This should only include hardware uptime as bandwidth, interference, weather conditions etc are not in control of bidder.   |         |
|     | ERNET India's response    | - Weather conditions may be discussed mutually during the test.<br><br>Modified clause is given below:  |         |
|     | Modified Clause 8.7       | To pass the acceptance test, the VSAT, as a complete system, shall operate for fifteen (15) consecutive days, 24 hours a day, at 99.9% up-time efficiency. Up time is defined as productive and error-free time of the HUB equipment and VSAT equipment at remote sites using the Manufacturer's standard test procedures. Any un-utilized time, during the tests, will also qualify as up-time provided there are no hardware malfunctions. <b>For this test, the satellite bandwidth free from interference shall be provided by ERNET India.</b>   |         |
| 12. | Tender clause no. & Page  | Clause 11 (ii)  | Page 27 |
|     | Tender clause statement   | <b>Payment towards items other than AMC and operations:</b> 100% of PO value of equipment, accessories, services, etc ordered and delivered after their acceptance (meeting all tender terms and conditions) shall be released subject to the submission of BGs (BG-1) as mentioned under Clause 16 of Section-B and as per the tender conditions.<br><br>On the request of bidder, ERNET India may also consider to release 30% of cost of equipments after delivery of items at ERNET India's site (s) subject to the submission of   |         |

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|  |                           | BG-2 of equivalent amount (i.e. 30% of cost) valid for a period of 3 months (the same shall be extended by the bidder till the successful acceptance of equipments). The bidder shall submit all documents related to delivery of all items as per PO at ERNET India's site (s).  |
|  | Queries sought (in brief) | As bidder requested release of 80% payment on delivery of items site-wise and balance 20% on installation & commissioning site-wise. The bidder requested to revise the payment term.<br><br>The bidder requested that payment shall be released in a cap of maximum 30 days after submission of invoices. Beyond 30 days, ERNET will pay interest@ SBI prime lending rates + 2%.   |
|  | ERNET India's response    | - Regarding the payment of invoices, ERNET India on best effort basis will release the payments within 60 days after submission of invoices and supporting documents.<br><br>Modified clause is given below:  |
|  | Modified Clause 11 (ii)   | <b>Payment towards items other than AMC and operations:</b> 100% of PO value of equipment, accessories, services, etc ordered and delivered after their acceptance (meeting all tender terms and conditions) shall be released subject to the submission of BGs (BG-1) as mentioned under Clause 16 of Section-B and as per the tender conditions.<br><br>On the request of bidder, ERNET India may also consider to release <b>50% of cost</b> of equipments after delivery of items at ERNET India's site (s) subject to the submission of BG-2 of equivalent amount (i.e. <b>50% of cost</b> ) valid for a period of 3 months (the same shall be extended by the bidder till the successful acceptance of equipments). The bidder shall submit all documents related to delivery of all items as per PO at ERNET India's site (s). |

## Section-E

|     |                                  |  |         |
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| 13. | Tender clause no. & Page         | Clause 2   | Page 30 |
|     | Tender clause statement          | Bidder must have (i) supplied, (ii) installed, (iii) maintained and (iv) operationalized at least 02 SCPC VSATs with same Make and Model of satellite modem as quoted against this tender in the country.  |         |
|     | Queries sought (in brief)        | Request to accept the experience for equivalent make and model instead of same make and model in order to give latest solution.  |         |
|     | ERNET India's response           | Modified Tender clause statement is given below:   |         |
|     | Modified Tender clause statement | Bidder must have (i) supplied, (ii) installed, (iii) maintained and (iv) operationalized at least 02 SCPC VSATs of same make as quoted against this tender in the country.   |         |
| 14. | Tender clause no. & Page         | Clause 3   | Page 30 |
|     | Tender clause statement          | Bidder must have at least five years of experience in the (i) VSAT Hub operations and (ii) VSAT Hub maintenance having at least 9 Meter VSAT Hub antenna and Network having at least 100 VSATs in the country. Also, the bidder should be engaged in providing these services in last five years continuously at bid submission date. (Captive network of the Bidder or its holding/ subsidiary company is permissible). |         |
|     | Queries sought (in brief)        | The bidder desires to know that experience of bidder's VSAT network or its holding company's VSAT network is also acceptable.<br><br>Also in this case self-declaration from bidder or its holding company for its network can be considered.  |         |
|     | ERNET India's response           | Yes, the experience of bidder's VSAT network or it's holding company's VSAT network is acceptable<br><br>However, the documentary proof of holding/ subsidiary company shall be provided by the bidder.  |         |
| 15. | Tender clause no. & Page         | Clause 6   | Page 30 |
|     | Tender clause statement          | The Bidder should have prior experience during last three financial years in successful execution of VSAT network implementations of at least 2 projects whose individual value  |         |

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|           |                                  | is not less than Rs. 200 lakh  |               |
|           | Queries sought (in brief)        | Kindly change this clause to Five years.   |               |
|           | ERNET India's response           | Modified Tender clause statement is given below:   |               |
|           | Modified Tender clause statement | The Bidder should have prior experience during last three financial years in successful execution of VSAT network implementations of at least 2 projects those individual value is not less than Rs. 200 lakh (OR) the Bidder should have prior experience during last three financial years in successful execution of VSAT network implementations of at least 3 projects whose individual value is not less than Rs. 150 lakh.  |               |
| 16.       | Tender clause no. & Page         | Clause 7   | Page 30       |
|           | Tender clause statement          | A list of purchasers of High capacity type SCPC VSATs (of the same type which are quoted against this tender) through the Bidder or through its OEM or its channel partners in the last three years along with quantity must be enclosed.<br><br>The list must show supply of at least 10 High capacity type VSATs (of the same type which are quoted against this tender) in the last three years with documentary proof in support (mandatory). If this is not provided, the bid stands disqualified.                  |               |
|           | Queries sought (in brief)        | Request to accept the experience for equivalent type instead of same type VSATs in order to give latest solution.  |               |
|           | ERNET India's response           | No change in the clause.   |               |
| 17.       | Tender clause no. & Page         | Clause 8   | Page 30 to 31 |
|           | Tender clause statement          | The average annual turnover of the Bidder for the last three financial years should be a minimum of Rs. 100 Crore from Indian Operations (i.e. total of 3 years divided by 3).The bidder should be profit making company in at least one of the last three financial years with positive net worth. (For this, the bidder shall also submit a certificate from a Practicing Chartered Accountant on his letter head confirming annual turnover, net profit, net worth and average annual turnover of last three years.). |               |
|           | Queries sought (in brief)        | Request to delete the requirement of positive net worth. Since audited balance sheets are shared for 3 years with revenue and profit details, request to delete the requirement of CA certificate.   |               |
|           | ERNET India's response           | No change in the clause.   |               |
| Section-F |                                  |  |               |
| 18.       | Tender clause no. & Page         | Clause no. 2.4 (b)   | Page 33       |
|           | Clause statement                 | Maintenance of Existing High Capacity SCPC VSATs (including its counterpart modem, etc at Hub side).   |               |
|           | Queries sought (in brief)        | The bidder desires that existing hardware condition needs to be verified.  |               |
|           | ERNET India's response           | Modified statement is given below:   |               |
|           | Modified Tender clause statement | Maintenance of Existing High Capacity SCPC VSATs (including its counterpart modem, etc at Hub side).<br><br>Note: In this case, the existing hardware shall be in working condition and functionality will be confirmed by providing (i) ping response between ERNET Hub and remote VSAT and (ii) data rate utilization graph of remote VSAT captured from ERNET Hub Location. Also, ERNET India will ensure that the hardware procured by ERNET India shall not be old by more than 2 years.                            |               |

## Annexure-I

|     |                           |   |         |
|-----|---------------------------|---|---------|
| 19. | Tender clause no. & Page  | Clause no. 2  | Page 42 |
|     | Clause statement          | The details of existing Hub side RF chain items are given below.  |         |
|     | Queries sought (in brief) | Are all items of existing Hub side RF chain in working condition?<br>If not, is bidder required to quote the cost of their repair?  |         |
|     | ERNET India's response    | All items of existing Hub side RF chain are in working condition and are under on-site comprehensive maintenance. There is no need to quote the cost of their repair and AMC. However, ERNET India has requested to quote the cost of new TWTs for existing TWTAs.<br><br>There is no change in the clause. |         |

## Annexure II-A

|                           |  |   |   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
|---------------------------|--|---|---|-----|----------------|----------------------------|----|------------------------------------|---------|----|------------------------------------|---------|----|-----------------------------------|---------|----|----------------|---------|
| 20.                       | Tender clause no. & Page   | Clause 5 (vi)   | Page 48   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
|                           | Clause statement   | The HC-SCPC VSAT links shall be configured with minimum 8PSK modulation and minimum FEC 3/4 with GSAT-18 parameters for its Normal C-band frequency spectrum and meeting TEC/IR requirements. The following minimum data rates shall be required: <table><tr><td>Sr.</td><td>Carrier detail</td><td>Minimum Data rate required</td></tr><tr><td>1.</td><td>Remote Transmit with 125 Watts BUC</td><td>15 Mbps</td></tr><tr><td>2.</td><td>Remote Transmit with 200 Watts BUC</td><td>20 Mbps</td></tr><tr><td>3.</td><td>Remote Transmit with 50 Watts BUC</td><td>10 Mbps</td></tr><tr><td>4.</td><td>Remote Receive</td><td>60 Mbps</td></tr></table> |   | Sr. | Carrier detail | Minimum Data rate required | 1. | Remote Transmit with 125 Watts BUC | 15 Mbps | 2. | Remote Transmit with 200 Watts BUC | 20 Mbps | 3. | Remote Transmit with 50 Watts BUC | 10 Mbps | 4. | Remote Receive | 60 Mbps |
|                           | Sr.  | Carrier detail  | Minimum Data rate required                                |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
|                           | 1.   | Remote Transmit with 125 Watts BUC  | 15 Mbps   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
| 2.                        | Remote Transmit with 200 Watts BUC   | 20 Mbps   |   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
| 3.                        | Remote Transmit with 50 Watts BUC  | 10 Mbps   |   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
| 4.                        | Remote Receive   | 60 Mbps   |   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
| Queries sought (in brief) | As per guidelines of TEC-2013 (DoT) and its para 5.3.1.2:- Satellite Bandwidth maximum allowed: 2 MHz for 2.4 Mtr & 4.5 MHz for 3.8 Mtr. Thus, as per regulatory, it will not be allowed to transmit from remote for the mentioned data rate. Kindly clarify   |   |   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
| ERNET India’s response    | Please refer para 5.3.1.2 (b) of TEC-2013 (DoT) guidelines which is for Star Network. In this case, 8 MHz is allowed from 3.8 meter antenna. With 8 MHz, the above remote transmit data rates are achievable.<br><br>For remote receive (i.e. Transmit from 9 meter Hub antenna), bandwidth is not the limiting factor. Thus, Remote receive of 60 Mbps is also achievable.<br><br>In case the bidder is unable to meet the above data rates, the reasons of not achieving it must be specified in the bid after reading the tender carefully. In this case, the bidder must mention the maximum achievable data rates with TEC (DoT) guidelines and must submit their link engineering sheets.<br><br>No modification in the existing clause. |   |   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
| 21.                       | Tender clause no. & Page   | Item at Serial number 1 of Clause 7 (of Table)  | Page 50   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
|                           | Clause statement   | a) General Specifications:  |   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
|                           |  | Alpha (Roll-off)  | 10% or better   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
|                           |  | Super Jumbo Frame   | Up to 10,240 Bytes support                                |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
|                           | b) Modulator (Dual IF)   |   |   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
|                           |  | Impedance / Connector   | IF : 75 Ω, BNC female<br><br>L-band: 50 Ω, Type N female. |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |
|                           | c) Demodulator (Dual IF)   |   |   |     |                |                            |    |                                    |         |    |                                    |         |    |                                   |         |    |                |         |



|     |                                  |   |  |
|-----|----------------------------------|---|--|
|     |                                  | Impedance / Connector   | IF: 75 $\Omega$ , BNC female. Return loss 15 dB min.<br>L-band: 50 $\Omega$ , Type N female. Return loss 10 dB min.  |
|     |                                  | d) Basic Unit Connectors  |  |
|     |                                  | Alarm Connector (DB-15 Male)  | Form C: TX, RX and unit faults<br>External TX carrier off  |
|     | Queries sought (in brief)        | <ul style="list-style-type: none"> <li>- Requested to amend Roll-off as 20% or better.</li> <li>- Requested to amend Super Jumbo Frame to 9,600 Bytes.</li> <li>- Requested to change Impedance/connector to any of N/SMA/F connector with proper suitable adaptor to connect IFL cable.</li> </ul> |  |
|     | ERNET India's response           | Modified parameters are given below:  |  |
|     | Modified Tender clause statement | a) General Specifications:  |  |
|     |                                  | Alpha (Roll-off)  | 20% or better  |
|     |                                  | Super Jumbo Frame   | Up to 9,600 Bytes support  |
|     |                                  | b) Modulator (Dual IF)  |  |
|     |                                  | Impedance / Connector   | Impedance : 75 $\Omega$ or 50 $\Omega$<br>Connector: Any of N/SMA/F connector with proper and suitable adaptor to connect IFL cable.   |
|     |                                  | c) Demodulator (Dual IF)  |  |
|     |                                  | Impedance / Connector   | Impedance : 75 $\Omega$ or 50 $\Omega$<br>Connector: Any of N/SMA/F connector with proper and suitable adaptor to connect IFL cable.   |
|     |                                  | d) Basic Unit Connectors and features   |  |
|     |                                  | Alarms  | The modem shall generate alarm for the faults in the Tx, Rx and unit faults.   |
| 22. | Tender clause no. & Page         | Item at Serial number 3 of Clause 7 (of Table)  | Page 52  |
|     | Clause statement                 | a) General  | The unit has built-in data logging up to 30 events or 30 days for alarms.<br><br>Parameters like Temp, Output power mute status, LNB current etc may be recorded in the computer through commands at regular interval of times for system maintainability or same may be maintained in the BUC itself. |
|     |                                  | c) Input: Noise Figure  | 8 dB typical   |
|     | Queries sought (in brief)        | Requested for change  |  |
|     | ERNET India's response           | These above two parameters have been removed.   |  |
| 23. | Tender clause no. & Page         | Item at Serial number 3 of Clause 7 (of Table)  | Page 52  |
|     | Clause statement                 | b) RF features  |  |
|     |                                  | Output Frequency  | 5850 – 6650 MHz  |
|     |                                  | Available power Output @ P1 dB  | 51 dBm ( 125 W)  |
|     |                                  | Output Connector  | CPR137G (or) Type N/Female (or) suitable   |
|     |                                  | Output Return Loss  | 19.1 dB/ VSWR : 1.3:1  |
|     |                                  | Gain Linear   | 70 dB min  |
|     |                                  | Adjust  | 20 dB in 0.5 dB step   |
|     |                                  | Gain flatness   | +/- 1.5 dB full Band or better   |
|     |                                  | Gain variation over temp -40 to +55 Deg C   | +/- 1.5 dB or better   |
|     |                                  | d) Phase noise performance  |  |
|     |                                  | Offset at 100 Hz  | -70 dBc/Hz   |
|     |                                  | @ 1 KHz   | -80 dBc/Hz   |
|     |                                  | @ 10 KHz  | -90 dBc/Hz   |
|     |                                  | @ 100 KHz   | -100 dBc/Hz  |
|     |                                  | @ 1 MHz   | -105 dBc/Hz  |

|     |                                  |  |   |
|-----|----------------------------------|--|---|
|     |                                  | e) Internal reference  |   |
|     |                                  | Freq   | 10 MHz over range of -5 to +5 dBm   |
|     |                                  | Frequency stability  | $\pm 2 \times 10^{-9}$ /day or better                                       |
|     |                                  | f) Environmental , Power and Physical  |   |
|     |                                  | Operating Temperature  | -10 Deg C to +55 Deg C  |
|     |                                  | Non- Operating Temperature   | -10 Deg C to +75 Deg C  |
|     |                                  | Operating Humidity   | 0 to 100 % Condensing   |
|     |                                  | g) Others  | All cables, connectors, etc for interconnection.                            |
|     | Queries sought (in brief)        | The bidder requested to relax Output Return Loss and Gain flatness                       |   |
|     | ERNET India's response           | Modified parameter is given below:   |   |
|     | Modified Tender clause statement | b) RF features   |   |
|     |                                  | Output Frequency   | 5850 – 6650 MHz   |
|     |                                  | Available power Output @ P1 dB   | 51 dBm ( 125 W)   |
|     |                                  | Output Connector   | CPR137G (or) Type N/Female (or) suitable                                    |
|     |                                  | Output VSWR  | 1.5:1   |
|     |                                  | Gain Linear  | 70 dB min   |
|     |                                  | Adjust   | 20 dB in 0.5 dB step  |
|     |                                  | Gain flatness  | +/- 2 dB full Band or better  |
|     |                                  | Gain variation over range of 50 Deg C  | +/- 1.5 dB or better  |
|     |                                  | d) Phase noise performance   |   |
|     |                                  | Offset at 100 Hz   | -70 dBc/Hz  |
|     |                                  | @ 1 KHz  | -80 dBc/Hz  |
|     |                                  | @ 10 KHz   | -90 dBc/Hz  |
|     |                                  | @ 100 KHz  | -100 dBc/Hz   |
|     |                                  | e) Internal reference  |   |
|     |                                  | Freq   | 10 MHz over range of -5 to +5 dBm   |
|     |                                  | Frequency stability  | $\pm 2 \times 10^{-8}$ /day or better                                       |
|     |                                  | f) Environmental , Power and Physical  |   |
|     |                                  | Operating Temperature  | -10 Deg C to +55 Deg C  |
|     |                                  | Non- Operating Temperature   | -10 Deg C to +70 Deg C  |
|     |                                  | Operating Humidity   | 0 to 100 % Condensing   |
|     |                                  | g) Others  | All cables, connectors, good quality mounting kit, etc for interconnection. |
| 24. | Tender clause no. & Page         | Item at Serial number 6 of Clause 7 (of Table)   | Page 53   |
|     | Clause statement                 | Available power Output @ P1 dB   | 47 dBm ( 50 W)  |
|     | Queries sought (in brief)        | Requested to amend it to 43 dBm (20 W)   |   |
|     | ERNET India's response           | Modified parameter is given below:   |   |
|     | Modified parameter               | Available power Output @ P1 dB   | 43 dBm ( 20 W)  |
|     |                                  |  |   |
| 25. | Tender clause no. & Page         | Item at Serial number 7 of Clause 7 (of Table)   | Page 53   |
|     | Clause statement                 | Local Stability  | Depends on External reference or $\pm 10$ ppm for Internal reference.       |
|     | Queries sought (in brief)        | The bidder requested to specify whether external or internal referenced LNB is required. |   |
|     | ERNET India's response           | Modified parameter is given below:   |   |

|     |                           |  |  |
|-----|---------------------------|--|--|
|     | Modified parameter        | Local Stability  | Depends on External reference or $\pm 10$ ppm for Internal reference (any one type may be offered suitable to the bidder). |
| 26. | Queries sought (in brief) | The bidder requested to also allow GaN based SSPA.   |  |
|     | ERNET India's response    | <p>1. SSPA of 100 watts have been added in the tender.</p> <p>2. The specifications of SSPA of 50 watts in the tender have been modified.</p> <p>Accordingly, the Annexure-II-A (High Capacity SCPC VSAT System) and Annexure-IV (Bill of Material &amp; Pricing Schedule) have been modified in the tender. Thus, the bidders are requested to submit their bid as per the modified tender.</p> |  |

## Annexure-II-B

|     |                           |   |         |
|-----|---------------------------|---|---------|
| 27. | Tender clause no. & Page  | Item at Serial number 1   | Page 59 |
|     | Tender clause statement   | <p><b>Travelling Wave Tube (TWT)</b></p> <p><b>General</b></p> <p>Travelling Wave Tube compatible with the existing TWTA.</p> <p>The details of existing three numbers of TWTA are given in Annexure-I.</p> <p>The bidder is required to quote the price new TWTs, inclusive of replacement of existing TWT with new supplied TWT, its installation, commissioning and integration in the existing TWTA of ERNET VSAT Hub Bangalore.</p> <p>All cables, connectors, miscellaneous items, etc required to install it shall be inclusive in its cost.</p> <p>Its installation shall be done by authorized engineer of its OEM.</p>  |         |
|     | Queries sought (in brief) | The bidder requested to provide the serial number of the TWTA whose tube has to be replaced to check the compatibility to offer TWT.  |         |
|     | ERNET India's response    | Modified clause is given below:   |         |
|     | Modified statement        | <p><b>Travelling Wave Tube (TWT)</b></p> <p><b>General</b></p> <p>Travelling Wave Tube compatible with the existing TWTA.</p> <p>The details of existing three numbers of TWTA are given in Annexure-I.</p> <p>The bidder is required to quote the price new TWTs, inclusive of replacement of existing TWT with new supplied TWT, its installation, commissioning and integration in the existing TWTA of ERNET VSAT Hub Bangalore.</p> <p>All cables, connectors, miscellaneous items, etc required to install it shall be inclusive in its cost.</p> <p>Its installation shall be done by authorized engineer of its OEM.</p> <p>Note: The serial number of three TWTA's whose TWT shall be replaced is as below:</p> <ul style="list-style-type: none"> <li>- TWTA-1 (Model VZC6967AB)- Serial number- 2680</li> <li>- TWTA-2 (Model VZC6967AB)- Serial number – 2679</li> <li>- TWTA-3 (Model VZC6967AM)- Serial number- SC7330D7</li> </ul> |         |

## Annexure-III

|     |                          |               |             |
|-----|--------------------------|---------------|-------------|
| 28. | Tender clause no. & Page | Time Schedule | Page 61 -63 |
|-----|--------------------------|---------------|-------------|

|  |                           |  |
|--|---------------------------|--|
|  | Queries sought (in brief) | <ul style="list-style-type: none"> <li>- Few items are high lead time items like 3.8M Antenna, BUCs etc. Thus, need at least 10-12 weeks for the delivery and around 4-5 weeks for I&amp;C considering the Island locations. Hence overall time schedule should be 17 Weeks which include delivery and I&amp;C both.</li> <li>- The bidder requested for more time.</li> </ul> |
|  | ERNET India's response    | The Time Schedule has been modified in the tender. The bidders are requested to kindly refer the modified tender document and accordingly submit the bids.   |

### Annexure-VIII

|     |                           |  |         |
|-----|---------------------------|--|---------|
| 29. | Tender clause no. & Page  | Para after Serial number 1.0 (iv)  | Page 77 |
|     | Tender clause statement   | In case, the bidder is unable to meet any of the above conditions, the bidder shall pay penalty of Rs. 50,000/- per day. Penalties whichever shall be at the higher side shall be imposed. |         |
|     | Queries sought (in brief) | The bidder has requested to minimize its value and should be capped at 10% of Annual Value.  |         |
|     | ERNET India's response    | Modified statement is given below:   |         |
|     | Modified statement        | In case, the bidder is unable to meet any of the above conditions, the bidder shall pay penalty of Rs. 20,000/- per day. Penalties whichever shall be at the higher side shall be imposed. |         |

### Miscellaneous queries, clarifications, etc

|     |                               |   |
|-----|-------------------------------|---|
| 30. | Queries sought (in brief)     | <p>1. Regarding site readiness/ site availability, the bidder has submitted that site readiness / site availability will be the sole responsibility of ERNET India and the bidder shall not be held liable and penalised if the awarded work is affected due to it.</p> <p>2. Any access, permission, rights required to deliver and install hardware at locations shall be provided by customer and no penalty shall be applicable on such delays.</p> |
|     | ERNET India's response        | <p>Regarding site readiness/ site availability, ERNET India submits that the bidder will not be held liable and penalised if the awarded work is affected due to it.</p> <p>The above as well as clarifications to access, permission, etc are already covered in the tender under various clauses, such as clause no. 23 and 27 of Section-B, clause no. 8 of Section-C, Annexure-III, Annexure- VIII, etc.</p>  |
| 31. | Modification from ERNET India | <p>The header of Tender document has been modified as below:</p> <p style="text-align: center;"><b><u>“ Tender no. EI-D/TECH/51-27/18 dated 09.07.2018”</u></b></p>   |