

## **Tender Document (RFP)**

For Providing VSAT Satellite Bandwidth and Comprehensive Annual Maintenance of 17 VSAT terminals along with 2 leased line connectivity of 2 Mbps each

**National Center for Seismology (NCS)**

**Ministry of Earth Sciences**

**Lodi Road, New Delhi-110 003**

**April 2023**

**SECTION – I**  
**GENERAL INSTRUCTIONS AND CONDITIOS**

**1. Introduction:**

- 1.1** The Purchaser has issued this Tender Enquiry (TE) document for providing VSAT Services as detailed in “Request for Proposal (RFP)”, which also indicates, inter alia, the required Services for VSAT Satellite bandwidth and Comprehensive Annual Maintenance of 17 VSAT terminals installed under Real Time Seismic Monitoring Network (RTSMN) along-with 2 leased line connectivity of 2Mbps each.
- 1.2** Bidders shall have to agree/accept all the terms and conditions of Tender document including payment terms etc. Acceptance shall be unconditional and Bidders shall have no claim and right in future on their terms, if any.
- 1.3** Whenever there is any conflict between the provision in the “General Instructions to Bidders” with regard to specific item/para/clause under this section and that in the “RFP”, the provision contained in the RFP shall have an over-riding effect and treated as final. Any special instructions as per “RFP” section will also apply for this purchase. The conditions (like qualification criteria, maintenance services, penalty charges, etc.) mentioned in “RFP” will also apply for this purchase.

**2. Language of Tender& Tender Currency:**

- 2.1** The tender submitted by the bidder and all subsequent correspondence and documents relating to the tender exchanged between the bidder and the purchaser, shall be written in English language.
- 2.2** The tender currency is in Indian Rupees (₹) only. No payment will be made in foreign currency.

**3. Eligible Goods and Services:** All goods and related VSAT services are to be supplied by the Indian Equipment Manufacturing Firms or the System Integrator companies or VSAT Service Providers based in India only.

**4. Tender Validity:**

- 4.1** The tenders shall remain valid for acceptance for a period of 180 days (one hundred eighty days) after the date of tender opening prescribed in the Notice Inviting Tender (NIT) document.
- 4.2** The purchaser reserves the right to accept in part or in full any tender or reject any tender without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of contract, without incurring any liability, whatsoever to the affected Bidder or Bidders.

**5. Tendering Expenses:** The Bidder shall bear all the costs and expenditure incurred and/or to be incurred by them in preparation, and uploading their tender including attending the pre-bid conference and/ or arranging demonstration of Services or Presentations before the Committee that may be deemed necessary by the Purchaser.

**6. Price preference:** Price preference shall be given to Micro and Small Industries registered for stores and services specified in this tender document with National Small Industries Corporation or any other Government Agencies as per the latest guidelines/orders from Government of India. Purchase preference and quantity etc. shall be decided as per the Government of India orders. The Bidders shall have to attach valid Registration Certificate. Micro and Small Enterprises are exempted for submission of Earnest Money Deposit (EMD) also known as security deposit. However, Micro and Small Enterprises are **not exempted for Performance Security**. Micro and Small Enterprises shall have to furnish Performance Security; if purchase order is placed to them. There is no relaxation in this regard.

**7. Pre-Bid Conference:**

- 7.1** Pre-bid conference shall be held as per NIT schedule, **after pre-bid conference, tender conditions will be frozen. No change will be permissible after pre-bid meeting.** Request for clarification needed; if any, may be sent before commencement of pre-bid meeting. The date of Pre-Bid meeting is given in NIT. No reply in this regard shall be sent to individual Bidders. Pre-Bid minutes shall be uploaded on **GeM portal** and on [www.seismo.gov.in/tenders](http://www.seismo.gov.in/tenders).
- 7.2** Queries received in writing, from the Bidders, prior to the pre-bid meeting shall be addressed. The queries can be sent to NCS through email at [ravi5ravi@yahoo.com](mailto:ravi5ravi@yahoo.com) and [shanker.pal86@imd.gov.in](mailto:shanker.pal86@imd.gov.in).
- 7.3** Conditional tenders shall not be accepted on any ground and shall be rejected straightway. If any clarification is required, the same should be obtained on or before pre-bid meeting. No correspondence will be entertained after pre-bid meeting.
- 7.4** Regular visit of website: Prospective Bidders are advised to see GeM portal and NCS website ([www.seismo.gov.in/tenders](http://www.seismo.gov.in/tenders)) on regular basis for any change in NIT schedule, amendment / corrigendum in Tender Document including technical requirement and pre-bid minutes etc.

**8. Amendments to Tender enquiry (TE) documents:**

- 8.1** At any time, prior to the deadline for submission of tender, the purchaser may, for any reason deemed fit by it, modify the Tender Enquiry document by issuing suitable amendment(s) to it.
- 8.2** The amendment will be uploaded on [www.seismo.gov.in/tenders](http://www.seismo.gov.in/tenders) and on **GeM portal** only. In order to provide reasonable time to the prospective bidders to take necessary action in preparing their tenders as per the amendment, the purchaser may, at its discretion extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline. In all cases, the information presented in GeM portal should be considered as final and authentic.

**9. Documents Comprising the Tender:** Tender Enquiry Document seeks quotation in two parts by following TWO Bid System. The First Part will be known as '**Technical Bid**', and the Second Part will be known as '**Commercial Bid**'

**9.1 Technical Bid (Un-priced Bid) comprises of following:**

- 9.1.1** Registration certificate of bidding firm with any State and Central Government body of India like Department of Telecommunication. **Credential/document shall be attached.**

- 9.1.2 **Valid DoT license for VSAT Bandwidth Services.**
- 9.1.3 Checklist section (as per **Annexure-I**) properly filled and signed.
- 9.1.4 Technical Proposal with compliance statement/table to the clauses of tender.
- 9.1.5 A copy of the blank price bid as per **Annexure-VII**. The list of deliverables (un-priced) with type of service, bandwidth etc. should also be submitted along with the technical bid.
- 9.1.6 Scanned copy of Earnest Money Deposit (EMD) in the form of Fixed Deposit Receipt/ Bank Guarantee (FDR/BG). Original EMD in physical form shall be submitted to Sh. Ganesh Iyer, R.No.303, Sat-Met Building, Mausam Bhavan Complex, Lodi Road, New Delhi-110 003 on or before opening of tender.
- 9.1.7 Documentary evidence for fulfillment of Eligibility /Qualification criteria (s).
- 9.1.8 Certificate issued by competent authority from Ministry of MSME/ National Small Industries Corporation for any applicable exemption.
- 9.1.9 All the above documents must be enclosed with technical bids, otherwise bids may be either ignored or not considered for technical evaluation.
- 9.1.10 All the pages should be numbered, indexed, and duly signed and stamped by the authorized signatory (with Name and Designation in the firm)
- 9.1.11 All above documents must be signed & stamped on each page, and scanned & shall be attached in the beginning of technical bid. The scanned copy of technical bid (in PDF format) should be uploaded. All pages are to be numbered serially.
- 9.1.12 A hard copy of Technical BID of the tender document which is identical to the copy uploaded on GeM Portal, is required to be submitted in hand (or by speed post) to Sh. Ganesh Iyer, R.No.303, Sat-Met Building, Mausam Bhavan Complex, Lodi Road, New Delhi-110003. **Each page is to be duly signed and stamped.** If any discrepancy between the details in bid document submitted through GeMPortal and hardcopy, the details submitted on GeMPortal will be considered as final version for evaluating the proposal.

**9.2 Commercial Bid (Price Bid) comprises of following:**

- 9.2.1 All pages of the price bid should be page numbered, indexed and signed with company/firm seal by authorized signatory.
- 9.2.2 Prices should be quoted as per Price Schedule Format **Annexure-VII**. The Bidder shall indicate on the Price Schedule specifying all components of prices shown therein including the unit prices and total tender for providing services required for VSAT Satellite bandwidth and Comprehensive Annual Maintenance of 17 VSAT terminals installed under Real Time Seismic Monitoring Network (RTSMN) and two no. of 2 Mbps Lease line connectivity.
- 9.2.3 Costing of each and every item, sub items offered in bidder's technical bid, shall be done with all breakup prices. Cost of bandwidth services, CAMC, backhaul connectivity etc. are to be indicated separately.
- 9.2.4 In case any charges are not mentioned by the Bidder in the price bid, it will be treated as "all the charges are free of cost for that item".
- 9.2.5 Bidder shall quote prices on F.O.R destination (field sites of NCS) basis. Payment will be made in Indian Rupees only.

- 9.2.6 The bidder supplying indigenous goods or already imported goods shall quote only in Indian Rupees.
- 9.2.7 The Supplier shall bear all the taxes (GST/IGST/SGST/Income-tax /WCT/or any other taxes) levied by the state / central government in force in India, as per the rates prevailing at the time of undertaking the job in accordance with the Income-tax Act.
- 9.2.8 Comprehensive Annual Maintenance Contract (CAMC) includes backhaul connectivity, maintenance of VSAT terminals (including IFL cables and all its accessories), therefore prospective bidders are advised to quote CAMC charges accordingly. The charges are to be quoted on annual basis. It should not be quoted in terms of percentage of project cost. Price bids shall not be accepted if CAMC charges are quoted in percentage.
- 9.2.9 In case any charges not mentioned in the price bid, it will be treated as all the charges are free of cost for that item and included in the price bid.
- 9.2.10 Purchaser shall not be responsible for custom clearance, if any. Prices quoted by the bidder shall remain firm and fixed during the period of the contract.
- 9.2.11 Statutory levies, taxes and duties etc., if any, chargeable on the goods are payable on actual basis as applicable.
- 9.2.12 If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail.
- 9.2.13 Price bid shall prima-facia be rejected in case of any deviation from the un-priced bid given with the technical bid of the bidder.

**10. Signing and Submission of Tender:** Properly signed and stamped tender on the company letterhead must be uploaded ONLINE through GEM. Submission of only Hard copy of bids shall not be accepted for. The tender shall not contain any over-writing. Only the scanned copy in pdf format of the tender shall be uploaded on GEM. Each and every page is to be assigned page-number serially.

**11. Alternative Tenders:** Alternative Tenders are not permitted.

**12. Purchaser's Right to accept any tender and to reject any or all tenders:** The purchaser reserves the right to accept in part or in full any tender or reject any tender without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder(s).

**13. Validity of Tender and EMD:** As per details given in NIT.

**14. Alteration and Withdrawal of Tender:** The bidder, after submitting its tender, is permitted to alter / modify and upload its tender any number of times before the last date/time for submission of tender. The earlier tenders will get cancelled automatically and the latest uploaded tender will remain effective.

**15. Bidder's Eligibility Criteria:**

**15.1** The Bidder should have expertise and "hands-on" experience in India in the field of VSAT satellite communication, including Wide Area Network design involving VSATs, system integration, supply, installation and commissioning, comprehensive maintenance of VSAT terminals etc.

- 15.2** The Bidder should offer VSAT bandwidth services from Indian satellite only.
- 15.3** The bidder must be an Indian firm / company/ organization registered under applicable Act/Laws in India.
- 15.4** The Bidder MUST have maintained at least 100 numbers of VSATs and at least ONE VSAT Hub (with valid commercial share hub license from DoT on ext-C band technology) during the past FIVE years (from the date of publication of tender). **Requisite document to support this claim should be furnished.** The document should clearly indicate the number of VSAT terminals of different frequency-bands and VSAT-HUBs owned by the firm in different locations in India at the time of date of tender publishing.
- 15.5** The average annual turnover of the Bidder for the last THREE consecutive years should be a minimum of ₹ 50.0 Cr (₹ Fifty crore). The Balance sheet, Profit and Loss Statement copies of the last two years may be attached. The bidder should be profitable organization (on the basis of PAT) for at least 3 years
- 15.6** The Bidder should have end-to-end arrangement with the OEM to supply and maintain the VSAT equipment. The Bidder as consortium can also quote meeting the required qualification.
- 15.7** The Bidder (Service Provider) should have back-to-back support agreement with OEM for this contract. **A letter from OEM; issued post-publication of present tender, needs to be furnished as per Annexure-III** along with the tender document ensuring the availability of service support for the entire period of the contract.
- 15.8** Client references and contact details (email/ landline/ mobile) of customers for whom the Bidder has executed similar projects (during last 3 years) (At least TWO client references are required)
- 15.9** The Bidder must have countrywide support and provide the details on technical manpower. The Bidder should indicate their business model for providing the service support. NCS reserves the right to verify the coverage of tech-support base as indicated by Bidder. In case of false or un-true claims found for any Bidder, such Bidder could be accordingly disqualified from further evaluation & processing of their bids for this tender. In this regard, no further communication with the Bidder shall be entertained.
- 15.10** The registration number, GST and PAN numbers of the firm should be submitted, failing which Bidder's bid-offer would become invalid & same shall be rejected.
- 15.11** The Bidder should submit the details of agreements entered into with various Manufacturers/Partners/Sub-contractors for providing CAMC of VSAT terminals and their experience to meet the qualification & experience criteria.
- 15.12** A self-certificate stating that the Bidder is not presently blacklisted and hasn't been black listed by any institution of the Central/State Government in the past three years should be submitted.

**15.13** The Bidder is requested to furnish documents to establish their eligibility for each of the above clauses. Relevant portions, in the documents submitted in pursuance of eligibility criteria mentioned above, should be highlighted. If tender were not accompanied by all the above documents mentioned, the same would be rejected. Undertaking for subsequent submission of any of the above document will not be entertained. However, NCS reserves the right to seek fresh set of documents or seek clarifications on the already submitted documents. All documents should be submitted electronically in PDF format. Upon verification, evaluation / assessment, if in case any information furnished by the Bidder is found to be false / incorrect, their bid shall be summarily rejected and no correspondence on the same shall be entertained.

## **16. Bid Submission:**

**16.1** The Bidder has to quote for all items mentioned in Scope of the Services, as per Price-bid format given in **Annexure-VII** .

**16.2** No deviations in terms & conditions of the tender document will be accepted in any case.

**16.3** Uploading of bids on GeM portal is essential requirement. Bids not submitted through GeM portal will not be considered for tender evaluation.

**16.4** All the documents attached to the tender for considering offer are supposed to be complete in all respects. Therefore, it is important that all tender documents (scanned copies in PDF format) are duly filled in, duly signed-in and duly stamped, in all respects before uploading.

**16.5** All the bids documents should be signed by the authorized signatory with company seal. All pages of the bid being submitted must be sequentially numbered by the Bidder.

**16.6** NCS will not be responsible for any delay on the part of the Bidder in obtaining the terms and conditions of the tender notice or submission of the online bids.

**16.7** Without EMD unless exempted, bid will be treated as cancelled.

**16.8** Part-I (**Technical Bid**) and Part-II (**Commercial Bid**) should be uploaded in the prescribed format in the GeM portal. Original Fixed Deposit Receipt (FDR) or Bank Guarantee (BG) towards EMD in one cover sealed and super scribed "EMD – for Offering of VSAT Services for 17 nos. of VSAT terminals along with Leased line connectivity " should be submitted physically to Shri Ganesh Iyer, Meteorologist-A, Room No. 303, III Floor, Sat-Met Building, Mausam Bhavan Complex, Lodi road, New Delhi-03, Tel no. 011-43824593. However, the scanned copies of Bank drafts related to EMD, must be uploaded (PDF format) electronically (along with Technical Bid) on GeM Portal .

## **17. Opening of Tenders:**

**17.1 Opening of Tenders:** The purchaser shall open the tenders after the specified date/time and at the place as indicated in the NIT document. In case the specified date of tender opening falls on a holiday (or subsequently declared a closed day for the purchaser), then the tenders will be opened at the appointed time and place on the next working day. The bids downloaded by this office from GEM Portal will be available for the bidders automatically. The bidders need not come to this office as they can also download the opened bids directly from the GEM Portal. In case the bidders wish to come to this office

during tender opening, they must bring an Authorization Certificate from their respective firms. The process of opening of the tenders in Two Bid System is as follows.

**17.2 First Stage:** The Technical Bids are to be opened in the first stage on/after the prescribed date and time. These Bids are scrutinized and evaluated by Technical Evaluation Committee (**TEC**) constituted by the competent authority with reference to parameters prescribed in the Tender Enquiry Document. The bidders whose Technical Bids are found responsive and acceptable will pass on to the second stage. The details of the bidders, whose Technical bids have been accepted, will be uploaded on the GEM Portal along with the Report of TEC. The date of opening of Financial/Price Bids will also be published.

**17.3 Second Stage:** In the Second Stage, the Price Bids of technically qualified bids only will be opened. The Price Bids will be scrutinized by Financial Evaluation Committee (**FEC**) constituted by the competent authority. The report of the FEC will decide the lowest bidder. This report will also be uploaded on GEM Portal. Supply Order will then be issued to the lowest bidder.

## **18. Scrutiny and Evaluation of Tenders:**

**18.1 Unresponsive bids:** The tenders will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the Tender Enquiry Document. The tenders are liable to be treated as non-responsive and will be summarily ignored if following documents are not provided along with technical bids.

18.1.1 Checklist (**Annexure-I**).

18.1.2 Tender Acceptance Letter (**Annexure-II**) is not duly signed and stamped. (Bidder has to agree to accept all the terms & conditions of the Tender Enquiry Document)

18.1.3 Tender Validity Period is shorter than the required period.

18.1.4 Required EMD (Amount, Validity, etc.)/ Exemption document have not been provided.

18.1.5 Bidder has not agreed to deposit the required performance security (In case of allotment of the tender).

18.1.6 Copy of agreement of Bidder with its OEM with the precise relationship between them and nature of services which would be available for Bidder with OEM. Copy of this agreement must be attached with the tender.

18.1.7 By any means/reason, the incomplete bid uploaded on e-procurement.gov.in shall also be treated as Unresponsive.

### **18.2 Technical Evaluation**

18.2.1 A duly constituted Technical Evaluation Committee (TEC) will first select Bidders on the basis of eligibility criteria of this tender. The Bids conforming to the eligibility criterion will be considered for further evaluation

18.2.2 If during the preliminary examination, the purchaser finds any minor deviation/ and/or irregularity and/or non-conformity in a tender, the purchaser may waive the same provided it does not constitute any material deviation and financial impact and, also, does not prejudice or affect the ranking order of the Bidder. Wherever necessary, the purchaser will convey its observation on such 'minor' issues to the Bidder asking the Bidder to respond by a specified date. If the Bidder



does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that bid will be liable to be ignored.

18.2.3 Technical Evaluation Committee (TEC) will shortlist Technical Bids on the basis of technical parameters, offered technical solutions/products and their features. The TEC can make any enquiry/seek clarification from the Bidders on the offered Service Solution. In such a situation, the Bidder shall extend full co-operation. The Bidders can also be asked to give technical presentation/discussion on the offered solution, in a short period notice, as such the Bidders have to be ready for the same either on online or physical.

18.2.4 During the detailed Technical Presentations/Discussions, Bidder has to ensure availability of appropriate specialist, along with required documentation for interacting with Technical Evaluation Committee. If the required specialist along with proper documentation is not made available by Bidders, then such defaulting Bidders are likely to be debarred from further tender evaluation process.

18.2.5 Compliance statement in the form of '**Complied**' or '**Not Complied**' shall be given against each term and specification mentioned in the tender document. The compliance statement as per **Annexure-VI** should contain the signature of the authorized person and the seal of the company. Any deviation should be mentioned / explained by the Bidder in Compliance Statement. The compliance statements should be supported by authentic documentation. Deviations in lower side will not be accepted.

18.2.6 No enquiry shall be made by the Bidder(s) during the course of evaluation of the tender, after opening of bid, till final decision is conveyed to the successful Bidder(s).

18.2.7 The names of technically short-listed Bidders will be announced to only those Bidders whose bids will qualify for opening of the Price/Financial/Commercial Bids.

**18.3 Financial Evaluation:** In the second stage, the Price Bids of technically qualified bidders only shall be opened for further scrutiny and evaluation.

18.3.1 The Financial Bids of only those Bidders short-listed from the Technical Bids by TEC will be opened in the presence of their representatives on a specified date and time to be intimated to the respective Bidders, and the same will be evaluated by a duly constituted Finance Evaluation Committee (FEC).

18.3.2 No enquiry shall be made by the Bidder(s) during the course of evaluation of the tender, after opening of bid, till final decision is conveyed to the successful Bidder(s). However, the Committee/its authorized representative and office of NCS can make any enquiry/seek clarification from the Bidders, which the Bidders must furnish within the stipulated time else bid of such defaulting Bidders will be rejected.

18.3.3 If there is a discrepancy between the unit price and total price, The Unit Price shall prevail.

18.3.4 In case any charges not mentioned in the price bid, it will be treated as all the charges are free of cost for that item and included in the price bid.

## **19. Earnest Money Deposit (EMD):**

- 19.1** The Bidder shall furnish along with its tender, Earnest Money for an amount as detailed in the NIT
- 19.2** The bidders who are registered on Tender submission date with National Small Industries Corporation (NSIC), New Delhi, shall be eligible for exemption from EMD. Micro and Small Enterprises specified by Ministry of Micro, Small & Medium Enterprises (MSME) is exempted from the submission of Earnest Money Deposit (EMD).
- 19.3** EMD of an amount as shown in NIT has to be submitted through FDR/Bank Guarantee of any Scheduled Commercial Bank drawn in favour of “DDO, National Centre for Seismology, New Delhi”, physically **before 1500hrs before the date/time mentioned in NIT. Otherwise, bid will be rejected. However, the scanned copy of FDR/BG along with the Bid must be uploaded electronically on GeM site.**
- 19.4** The EMD shall be valid as per details given in NIT.

## **20. Refund of EMD:**

- 20.1** In the case of those Bidders who fail to qualify the eligibility criteria, the Earnest Money Deposit (EMD) will be refunded without any interest accrued immediately thereafter.
- 20.2** In the case of those Bidders whose technical bids do not qualify, the EMD will be refunded without any interest accrued within one month of the acceptance of TEC’s recommendations.
- 20.3** In the case of those Bidders whose technical bids have qualified but are not selected, the EMD will be refunded without any interest accrued within one month of the acceptance of Financial Evaluation Committee’s (FEC) recommendations.
- 20.4** Bidder whose bid is accepted and selected, the EMD will be refunded without any interest accrued after the submission of Performance Security/Guarantee.
- 20.5** The clause Encashment/release of FDR/BG requires clearance certificate from the main Purchaser i.e. **Director, National Centre for Seismology, New Delhi** must be mentioned in issued FDR/BG by Bank.
- 20.6** Application of request for refund of EMD is given at **Annexure-IV**

## **21. Forfeit of EMD:**

- 21.1** Earnest money of a Bidder will be forfeited, if the Bidder withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged without prejudice to other rights of the purchaser.
- 21.2** The successful Bidder’s EMD will be forfeited without prejudice to other rights of Purchaser if supplier fails to furnish the required performance security within the specified period detailed in Clause 22.1.
- 21.3** Firm shall have to extend the validity of EMD if extension of tender validity is agreed on the request of purchaser in exceptional cases.

## **22. Performance Security:**

- 22.1** Successful Bidder shall submit performance security within thirty (30) days from date of dispatch of supply order/award of contract by the purchaser or within twenty-one (21) days from the receipt of supply order by the supplier whichever is earlier.
- 22.2** The purchaser may consider annulment/cancellation of supply order/ award of contract if performance security not received in stipulated time.
- 22.3** There is no relaxation/exemption in submitting of Performance Security.
- 22.4** The supplier shall furnish performance security to the purchaser for an amount equal to three percent (3%) or equal to the % applicable at the time of issue of order, of the total value of the contract (excluding optional items), valid up to sixty (60) days beyond the CAMC period. The format of bank guarantee to be submitted as performance security is given in **Annexure-V**.
- 22.5** The successful Bidder will have to deposit Performance Security within specified time limit given above, equivalent to 3% (Three Percent) or equal to the % applicable at the time of issue of order, of the total value of the work order, in the form of FDR or Bank Guarantee from a Nationalized/ Scheduled Commercial Bank in favor of "DDO, National Centre for Seismology, New Delhi". If the Security Deposit is not paid within time specified, the Earnest Money Deposit of the Bidder shall be forfeited. No interest will be payable for "Performance Security".
- 22.6** Performance Security has to be submitted irrespective of its registration DGS&D/NSIC etc. Performance security is not relaxed to any supplier/service provider. Submission of Performance Security is must for all shortlisted suppliers/service providers.
- 22.7** It shall be in any one of the forms namely Fixed Deposit Receipt or Bank Guarantee drawn/issued by a commercial bank doing Government business in the prescribed form in favor of the purchaser. In the event of any amendment issued to the contract, the supplier shall, within twenty-one (21) days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended.
- 22.8** On completion of the CAMC period, the Performance Bank Guarantee without any interest accrued shall be released after ascertaining that satisfactory support that has been provided during CAMC period. In case, it is found that appropriate satisfactory support has not been provided by the Bidder, NCS will ensure that the prescribed penalty for the default in service has been realized or shall be recovered from the Bidder out of already due payments.
- 22.9** In the event of non-providing the services, the Performance Security shall be forfeited to the extent the services are not provided. Further, if the purchaser has to get the services from any other Bidder because of failure to provide in full or part by the successful Bidder, the difference in payment may be made from such amount. Also, the amount retained towards "Performance Security" is subject to forfeiture if it is found at any point of time during the period of contract that the services offered by the supplier are not in conformity to the accepted specifications mentioned in RFP by the purchaser.

**22.10** In case the Bidder backs out of the contract in mid-stream without explicit consent of the NCS, the PBG will stand forfeited.

**22.11** On completion of the tenure of contract, the Performance Security without any interest accrued shall be released after ascertaining that satisfactory support that has been provided during CAMC period. In case, it is found that appropriate satisfactory support has not been provided by the Bidder, NCS will ensure that the prescribed penalty as per clause nos. 22.9 and 22.10 for the default in service(s) (which explained in RFP Section) has been realized or shall be recovered from the Bidder out of already due payments from PBG.

**23. Payment Terms:**

**23.1** No advance payment will be made in any case.

**23.2** Payment for Services of AMC of VSAT terminals would be made on quarterly basis on completion of quarterly period. Final payment of completed quarterly period based on the performance report of the NCS (as the case may be) and deduction of penalty charges, if any; TDS etc.

**23.3** Payments shall be subject to deductions of any amount for which the Bidder is liable under the Service Contract. Further, all payments shall be made subject to deduction of TDS (Tax Deduction at Source) as per the Income-Tax Act, 1961 and any other applicable taxes; and also, penalty charges due to deficiency in service (if any).

**23.4** All payments will be made through RTGS only. In this connection, Bidder shall submit particulars of his Bank Account details – a) Account Number b) Branch Name and Address c) IFS code d) MICR number e) PAN etc.

**23.5** Bidder needs to submit monthly performance report duly certified by the NCS along with the bill and Project Manager / Technical Manager of this contract.

**23.6** During the AMC period the Bidder is expected to maintain the services as per RFP Service level requirements mentioned in RFP, failing which the penalties will be charged by NCS and payments are made after adjusting the penalties for not meeting the service levels. A Service Level Agreement is required to be signed within two months from the date of issue of Supply Order.

**23.7** VSAT bandwidth and VSAT CAMC can be issued to separate subsidiaries of the prime bidders if required.

**24. Duration of contract:**

**24.1** Initially the contract will be valid for FIVE years from the date of issue of Supply Order.

**24.2** The contract can be extended to another TWO years under the same payment and terms conditions

**25. Arbitration:**

- 25.1** If dispute or difference of any kind shall arise between the purchaser and the supplier in connection with or relating to the extension of contract, the parties shall make every effort to resolve the same amicably by mutual consultations. If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the "List of requirements/ technical specifications" section either the purchaser or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per Indian Arbitration and Conciliation Act, 1996.
- 25.2** In the case of a dispute or difference arising between the Purchaser/ Consignee and all suppliers relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitration of an officer, appointed to be the arbitrator by the Director NCS. The award of the arbitrator shall be final and binding on the parties to the contract. Each party shall bear its own cost.
- 25.3** The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi. The contract shall be interpreted in accordance with the laws of India. bid in respect of Ministry/Department of the Government of India or Public Sector Unit (PSU) and if it is found at any stage that similar products/systems or subsystems was supplied by the BIDDER to any Ministry/Department of the Government of India or Public Sector Unit (PSU) at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and difference in the cost will be adjusted from their bills, or it would be refunded by the BIDDER to the BUYER (National Center for Seismology) if the contract has already been concluded.

**26. Fall Clause:** The bidder undertakes that it has not supplied/is not supplying similar products/systems or subsystems at a price lower than that offered in the present

**27. Force Majeure Clause:**

**27.1** Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable. Such events may include, but are not restricted to, acts of the purchaser either in its sovereign or contractual capacity, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, and freight embargoes. If there is delay in performance or other failures by the supplier to perform its obligation under its contract due to event of a Force Majeure, the supplier shall not be held responsible for such delays/failures.

**27.2** If a Force Majeure situation arises, the supplier shall promptly notify the purchaser in writing of such conditions and the cause thereof within twenty-one days of occurrence of such event. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding

sixty days, either party may at its option terminate the contract without any financial repercussion on either side. There may be a Force Majeure situation affecting the purchase organization only. In such a situation the purchase organization shall take up with the supplier on similar lines as above for further necessary action.

**28. Termination of contract by the Purchaser:**

- 28.1** From the time of submission of tender to the time of awarding the contract, if a Bidder needs to contact the purchaser for any reason relating to this tender enquiry and / or its tender, it should do so only in writing.
- 28.2** In case a Bidder attempts to influence the purchaser in the purchaser's decision on scrutiny, comparison & evaluation of tenders and awarding the contract, the tender of the Bidder shall be liable for rejection in addition to appropriate administrative actions being taken against that Bidder, as deemed fit by the purchaser.
- 28.3** The purchaser, without prejudice to any other contractual rights and remedies available to it (the purchaser), may, by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails to deliver the VSAT services satisfactorily as per terms of the contract or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the purchaser. In the event of the purchaser terminates the contract in whole or in part, the purchaser may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the supplier shall be liable to the purchaser for the extra expenditure, if any, incurred by the purchaser for arranging such procurement.
- 28.4** If the supplier becomes bankrupt or otherwise insolvent, the purchaser reserves the right to terminate the contract at any time, by serving written notice to the supplier without any compensation, whatsoever, to the supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the purchaser.
- 28.5** NCS with regard to their respective work components, reserve the right to terminate the contract at any time by giving three months' notice, if the VSAT services mentioned in the RFP, rendered by the Bidder is not found satisfactory.

**SECTION – II**  
**SPECIAL CONDITIONS OF TENDER (SCT)**

- 29.** The Government of India lays down public procurement policies for Micro, Small and Medium Enterprises (MSMEs), from time to time, to help inclusive national economic growth by providing long-term support these enterprises and disadvantaged sections of society and to address environmental concerns.
- 30.** In this tender, the participating Micro, Small and Medium Enterprises (MSMEs) quoting price within price band of L1+25% (Twenty Five percent) shall also be allowed to supply up to 50% (Fifty percent) portion of total tendered value by bringing down their price to L1 price in a situation where L1 price is quoted by a firm other than an MSME. In case there are two or more MSME firms within such price band, then this 50% (Fifty percent) quantity is to be distributed proportionately among these bidders (As decided by the competent authority of this office).
- 31.** Within this 50% (Fifty Percent) quantity, a purchase preference of 4% (Four percent) i.e. 4% (Four percent) out of 50% (Fifty percent) is reserved for MSMEs owned by Scheduled Caste (SC)/Scheduled Tribe (ST) entrepreneurs (if they participate in the tender process and match the L1 price). Provided that, in event of failure of such SC/ST MSME to participate in tender process or meet tender requirements and L1 price, four per cent sub-target shall be met from other MSME. The MSMEs would be treated as owned by SC/ ST entrepreneurs. The final distribution of the supply order shall be decided by the competent authority of this office.
- 32.** Where any Aggregator has been appointed by the Ministry of MSME, themselves quote on behalf of some MSME units, such offers will be considered as offers from MSME units and all such facilities would be extended to these also.
- 33.** This Policy is meant for procurement of only goods produced and services rendered by MSMEs and not for any trading activities by them. An MSME Unit will not get any purchase preference over another MSME Unit The Purchaser has issued this Tender Enquiry(TE)document for purchase of goods/stores/articles and related services as mentioned in Section “List of requirements / Technical specifications”, which also indicates, inter alia, the required stores, delivery schedule, terms and place of delivery etc. This section “General Instructions to Bidders” (GIB) provides the relevant

information as well as instructions to assist the prospective Bidders in preparation and submission of tenders.

- 34.** Bid is open to all Indian VSAT Service Providers. The bids are only open for Class I local supplier and class II local suppliers. Purchase preference would be available for Class I local-supplier. Provisions of the Public Procurement (Preference to Make in India) order issued by the Department for Promotion of Industry and Internal Trade (DPIIT), Govt. of India, vide OM No.P-45021/2/2017-PP (BE-II) dated 4th June, 2020 and 16th September, 2020 and subsequent related orders issued time to time, shall be applicable in the tendering process. Accordingly, preference will be given to the Make in India products while evaluating the bids, however, it is the sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India product along with respective documentary evidence as stipulated in the aforesaid order in the technical bid itself.
- 35.** The Provision of restrictions under Rule 144(xi) of the GFR 2017 [Order No. 6/18/2019-PPD (Public Procurement No. 1&2) dated 23<sup>rd</sup> Jul 2020] for the bidder from a country sharing land border with India shall also be applicable.



## **SECTION-III**

### **REQUEST FOR PROPOSAL (RFP)**

**FOR**

**Providing VSAT Satellite Bandwidth and Comprehensive Annual Maintenance of 17 VSAT terminals along with 2 nos. of 2Mbps Leased line connectivity**

## Section – III

### 36. Introduction:

- 36.1 National Center for Seismology (NCS) is operating a Real Time Seismic Monitoring Network (RTSMN) for monitoring earthquakes of Tsunamigenic potential as part of Tsunami Warning System. The RTSMN system consists of 17 field stations and two Central Receiving Stations (CRSs) (**Annexure-VIII**). Each field station is equipped with state-of-the-art six channel digital seismograph, solar panels and VSAT terminal. The VSAT terminal is powered through a battery bank (4 nos. of batteries) of 12V 100 AH which is charged through Solar Panels (340W) and also by battery charger connected to AC mains (230V AC 50Hz).
- 36.2 All these equipment belongs to DVB-S technology. VSAT equipment (Model: SkyEdge IP, Make: M/s Gilat, Israel) were supplied and installed by M/s Bharti AirTel during 2007-08; the network is in operation since then.
- 36.3 The seismic data recorded at each field station is continuously transmitted simultaneously through the **shared hub** to two Central Receiving Station's (CRSs) located at National Center for Seismology, III Floor, SatMet Building, India Meteorological Department (IMD) office campus, Lodi Road, New Delhi-03 and Indian National Centre for Ocean Information Services (INCOIS), Hyderabad for real time monitoring of earthquake activity of tsunamigenic potential.
- 36.4 The user at CRSs has also got access to the field Data Acquisition Systems (DAS) for the purpose of monitoring the state-of-health of the field equipment, parameter setting etc and hence duplex communication is required between field stations and CRSs. Thus all 17 field stations and two CRSs are equipped with VSAT terminals
- 36.5 The details of VSAT equipment installed at each of 17 field stations and their contact address are given in **Annexure-IX and X** respectively.

### 37. Scope of Services

- 37.1 Closed User Group (1:1) VSAT bandwidth of **250 Kbps** for **17 VSAT** terminals.
- 37.2 **MPLS** line of **2Mbps** between VSAT service provider's Hub to **NCS** HQ New Delhi.
- 37.3 **MPLS** line of **2Mbps** between VSAT service provider's Hub to **INCOIS**, Hyderabad.
- 37.4 **CAMC** of all VSAT equipment's, VSAT connectivity, 2 Nos. of MPLS line connectivity, etc.
- 37.5 During the CAMC period and extended period, the VSAT service provider is responsible, without any additional cost to the Purchaser, for migrating and upgrading the VSAT terminals at all 17 field stations to the latest technology of the VSAT hub if the existing technology of the VSAT terminals (17 nos.) becomes obsolete or is declared obsolete by the Original Equipment Manufacturer (OEM). All related components for upgradation and transmission of data in realtime to the two CRSs i.e., NCS HQ, New Delhi and INCOIS, Hyderabad, should be executed on turnkey basis.

### 38. Bidder's Obligation

- 38.1 The Bidder should provide services required for VSAT Satellite bandwidth and Comprehensive Annual Maintenance of 17 VSAT terminals installed under Real Time Seismic Monitoring Network (RTSMN)
- 38.2 The Bidder on behalf of NCS shall collect information/data and prepare documents for the remote VSATs for obtaining DoT/ WPC / SACFA Clearances, submit at DoT/regulatory agencies for getting required licenses/regulatory clearances from DoT / WPC / SACFA/NOCC, due to the migration of VSAT services to the selected Bidder / Service Provider.
- 38.3 Bidder is responsible for all above licenses to be obtained from DoT and other regulatory authorities for the operation of VSAT network under this contract.
- 38.4 The complete VSAT network should operate in a shared-Hub, extended-C band with dedicated Closed User Group(CUG) dedicated VSAT bandwidth of 250kbps (1:1) for duplex communication from Indian satellite in ext-C band for online real time round the clock transmission of the recorded seismic data using shared hub of Service Provider from all the 17 field stations simultaneously to two Central Receiving Stations (CRSs) located at New Delhi and Hyderabad using multicast UDP/IP or TCP/IP.
- 38.5 NCS will have right to increase or decrease the bandwidth upto 50% at any time during the contract period. NCS reserves the right to modify the bandwidth as per the requirement in future. The above modifications need to be carried out at free of cost by the Bidder. However, the charges towards additional bandwidth utilization shall be paid by the Purchaser.
- 38.6 Bidder shall providing 2Mbps MPLS lease link between VSAT service providers hub to NCS HQ, New Delhi.
- 38.7 Bidder shall providing 2Mbps MPLS lease link between VSAT service providers hub to INCOIS, Hyderabad.
- 38.8 Comprehensive AMC of the MPLS connectivity mentioned in 37.2 and 37.3
- 38.9 Bidder is responsible for the transmission of the recorded data from all 17 field VSAT terminals to the shared hub of the Bidder and subsequently, the data is re-directed simultaneously to two Data Centers located at National Center for Seismology (NCS), Mausam Bhavan, Lodi Road, New Delhi-03 and Indian National Centre for Ocean Information Services (INCOIS), Hyderabad through MPLS link, for real-time monitoring of earthquake activity in the country and tsunamigenic earthquakes (**Annexure -XI**).
- 38.10 The Bidder is required to commission one backhaul links from the bidder's VSAT hub to each of Operational Centre of NCS and INCOIS using necessary equipment like routers, modems, switches, cables etc. So, there are total 2 links of 2Mbps from the VSAT Hub of Bidder, 1 each for NCS and INCOIS. All the required accessories should be provided by the Bidder for successful commissioning of the link on turn-key basis.
- 38.11 The initial bandwidth of each of the backhaul MPLS links shall be 2 Mbps for NCS, and 2 Mbps for INCOIS.
- 38.12 The backhaul link may be either point-to-point MPLS link.
- 38.13 Bidder should transmit the data received at shared-Hub, simultaneously to the data centers of NCS HQ, New Delhi and INCOIS, Hyderabad, pertaining to their VSATs through the terrestrial MPLS links.
- 38.14 Laying of cables up to the device of NCS and INCOIS shall be the responsibility of the Bidder.

- 38.15 The sharing of the backhaul links shall not be permitted.
- 38.16 Maintenance and upkeep of all network equipment of backhaul connectivity provided by bidder shall be the responsibility of the selected bidder. The Purchaser will provide necessary power (power supply will be provided through UPS) and proper earthing for equipment.
- 38.17 Backhaul links should be commissioned by the selected bidder within 3 weeks from the date of issue of Supply Order at NCS and INCOIS.
- 38.18 The charges relating to backhaul connectivity and VSAT services shall be paid to the Bidder. Comprehensive AMC of the above two links during the contract period.
- 38.19 Configuring the networking components to ingest the data into the user system at Purchaser sites (NCS and INCOIS).
- 38.20 For each VSAT terminal, committed information rate (CIR) will be around 14 kbps.
- 38.21 Configuring the network for receiving continuous data from all 17 field stations to each of the Data Centers by the above options, so that no data gaps in continuous waveform data is being received at each Data Centers (at NCS HQ and INCOIS).
- 38.22 Each and every field VSATs should be in operation without any down-time is the responsibility of the Bidder.
- 38.23 Bidder should preferably maintain the same IP network addresses which are currently in use at all the 17 field VSAT terminals. In case Bidder wants to change the IP details, then Bidder should make necessary changes in the configuration of Data Acquisition System installed at each field site. The necessary support and application software to change the parameters shall be provided by the Purchaser.
- 38.24 Bidder is responsible for the IP network configuration to make the smooth flow of data simultaneously at INCOIS and NCS HQ from all 17-field station VSAT terminals.
- 38.25 Bidder should provide at least three or four IPs to be configured in the recorder with a gateway IP of IDU. At most sites, two IPs are sufficient.
- 38.26 In case the Indian satellite is to be migrated from one to another in future, VSAT terminal orientation and configuration etc. at each and every site shall be the responsibility of the Bidder.
- 38.27 Bidder is responsible for maintenance of existing chemical electrical-earthing of VSAT terminal at all field stations.
- 38.28 Bidder must perform two maintenance visits to each site in one calendar year for checking the health of the VSAT, battery, solar systems etc. and their up-keep. The Service Report providing the details of works carried out is required to be submitted to the Purchaser.
- 38.29 The equipment/devices/links required to make the data reception at NCS and INCOIS, shall be supplied and commissioned at sites specified by the Purchaser on turn key basis. Maintenance and upkeep of all VSAT network equipment including battery, solar panel and its accessories, backhaul connectivity provided by bidder, shall be the responsibility of the selected bidder.
- 38.30 The ON Site comprehensive AMC covers keeping the VSAT with the optimum level for the CW signal, co polarization and cross-polarization value.
- 38.31 The overall UP TIME of the network committed must be 99.9% on 24 hrs, seven day of a week on quarterly basis.
- 38.32 The functioning of the network is essential to meet the operational requirement for real-time monitoring of earthquake activity of tsunamigenic potential; therefore, even brief downtime of the whole network is not acceptable. Hence, successful Bidder has to execute the whole job of migration; if required and make the seismic telemetry network MUST be operational within one

month from the date of issue of purchase order so that continuous data should be made available simultaneously at Data Centers of NCS and INCOIS:

- 38.33 Successful Bidder has to execute the complete job and make the 17 VSAT terminals and back-haul link operational as envisaged above in one month time from date of issue of supply order as detailed in the delivery schedule.
- 38.34 The VSAT bandwidth charges for a station should be from the date of commissioning i.e., from the date of establishment of connectivity and data reception at INCOIS and NCS.
- 38.35 The Bidder is required to undertake the Comprehensive AMC of the 17 field VSAT terminals with solar power accessories in existing power, environmental and earthing conditions, as is where is basis; and ensure that the configuration and fine-tuning of VSAT terminals, back-haul MPLS communication equipment, accessories etc. for the smooth functioning of the network
- 38.36 Bidder should ensure availability of sufficient number of equipments / critical spares etc. in their stock to replace the defective equipment on a priority basis
- 38.37 Any addition or discontinuation or closure of VSAT terminal at any station or site; is at the sole discretion of the Purchaser (NCS).
- 38.38 The Bidder should visit each and every site to carryout preventive maintenance (PM) of Remote VSAT systems at least once in six months and MUST carry out two visits to each site per year.
- 38.39 Mean Time to Repair (MTTR) for field/remote VSAT terminals from the time of reporting (through Email) of fault at field/remote VSATs is detailed below:

<b>Region of operation</b>	<b>No. of days from the date of Email issue by the Purchaser (excluding the date of Email)</b>
Mainland (M)	3
Himalayan & North-East region (HNE)	7
North & Middle Andaman stations	10
Nicobar Islands	20
Lakshadweep Islands* (LD)	44

38.40 The features of Comprehensive AMC of field VSAT are as follows:

- 38.40.1 24X7 Monitoring Operation.
- 38.40.2 VSAT network Performance report per site basis.
- 38.40.3 Network latency period not to exceed 5 seconds.
- 38.40.4 Review and setting of routing policies.
- 38.40.5 QoS implementation and review.

38.41 Maintenance and upkeep of all VSAT terminals, backhaul connectivity and its accessories shall be the responsibility of the selected bidder. He is responsible to manage the VSAT network using network management software/tools etc. However, VSAT terminal if any, or backhaul connectivity, is being faulty due to physical damage to the equipment due to mishandling or natural calamity and in case of theft etc. Bidder will not be liable to replace or repair the damaged equipment and Purchaser will have to bear the approved cost of replacement thereof. The extent of damage to the equipment will be evaluated by Bidder in their lab; and lab-report will be given in writing declaring the equipment faulty and beyond repair within 3 weeks of taking the damaged equipment from the location/user as the case may be. In case of physical damage visible to the naked eye, equipment being beyond repair will be admissible on approval of Purchaser and a pre-designated nodal officer. The Field-Engineer will provide the photographs of

damaged parts/items through WhatsApp or Email to the designated Official of NCS or INCOIS. In case the damaged equipment is declared to be repairable by the lab report, Bidder will have to provide the replacement of damaged equipment in working condition to the location / Purchaser as the case may be within one month of submission of the lab report.

38.42 In case of damage as detailed above, the Purchaser will not reimburse the visiting charges of Field-Engineer to the site to carry out the replacement of damaged equipment and to make the VSAT system operational. The said works required to be carried out as part of the maintenance contract to make the VSAT terminal fully operational.

38.43 Bidder should provide a detailed methodology of monitoring and calculating the up-time in the technical bid. The Purchaser reserves the right to evaluate the methodology suggested by the Bidder. In case the suggested methodology is not acceptable to the Purchaser (NCS and INCOIS), the Purchaser shall prescribe a suitable method at the time of implementation of the AMC of the project.

38.44 The Bidder shall treat all data and information about the network, obtained in the execution of the services as confidential and will not reveal any information to any other party without the prior written approval of NCS.

**39. Delivery Schedule:** Complete migration of 17 VSAT terminal to the new VSAT Service provider's Hub and setting up 2 Mbps lease line connectivity as per 38.1. shall be completed within 45 days from the issue of supply order

**40. Payment Terms:** Payment shall be made as per following schedule

SN	Item	Payment Schedule
1	100 % Payment on commissioning of 2 nos. of MPLS link each of 2Mbps	After 45 days from the issue of Supply Order or on commissioning of MPLS link whichever is later.
2	Payment of VSAT bandwidth and CAM of VSAT and Power system	Quarterly basis after completing the quarter

#### 41. Penalty

41.1 **Penalty Charges in respect of service disruption of VSAT terminals & communication at Data Centers:** If a remote VSAT is down beyond the stipulated period after the intimating to Bidder's Project Manager about the VSAT problem through Email, Penalty shall be imposed as detailed below.

Region	No Penalty window / Response time (days)	No. of days taken to resolve the fault (days)	Penalty charges for each faulty VSAT and non-delivery of data
Mainland (M)	3	4-15	5% of A
		16-20	7% of A
		>20	10% of A
Himalayan & North-East region (HNE)	7	8-15	5% of A
		16-20	7% of A
		>20	10% of A
Andaman Islands	10	11-20	5% of A

(North and Middle)		21-30	7% of A
		>30	10% of A
Nicobar Islands	20	21-30	5% of A
		30-45	7% of A
		>45	10% of A
*Lakshadweep Islands (LD)	44	45-60	5% of A
		61-75	7% of A
		>76	10% of A
<b>A = (Total contract value for a year / total No. of VSAT terminal)</b>			
<b>*At present, no VSAT terminal installed in Lakshadweep Islands. However, it may come up in future.</b>			

41.2 **Penalty charges in case of failure of MPLS link at each Data Centre:** In case of nonfunctioning of leased line (Non availability of field data at data center) ; penalty shall be imposed as detailed below.

<b>At Data Centre</b>	<b>^ Time taken to resolve the fault</b>	<b>Penalty of AMC charges corresponding to one unit of the respective component for the bill period of three months.</b>
Failure of MPLS link of NCS New Delhi	>15 Minutes < 6 Hours	5% of total contract value
	> 6 hours < 1 Day	8% of total contract value
	> 1 Day	No payment of the quarter
Failure of MPLS link of INCOIS Hyderabad	>15 Minutes < 6 Hours	5% of total contract value
	> 6 hours < 1 Day	8% of total contract value
	> 1 Day	No payment of the quarter

^Time is the period between the time of lodge of complaint to the Service Engineer through Email to the establishment of connectivity to the Operational Centre of NCS and INCOIS.

## 42. Other Terms and conditions

- 42.1 The selected bidders shall have to provide acceptance to the offer for honoring all tender conditions and adherence to all aspects of fair-trade practices in executing the purchase orders issued.
- 42.2 No deviations from these terms and conditions will be accepted; violation thereof will lead to rejection of the bid and forfeiture of EMD or PBG as the case may be.
- 42.3 In the event of a Selected Company/Bidder or the concerned division of the Company /Bidder is taken over/bought over by another company, all the obligations and execution responsibilities under the agreement with the Purchaser, should be passed on for compliance by the new company in the negotiation for their transfer.
- 42.4 In case of selected bidder is found in breach of any condition(s) of tender or supply order, at any stage during the course of contract service period, the legal action as per rules/laws, shall be initiated against the bidder and Bank Guarantee/Security Deposits shall be forfeited, besides debarring and blacklisting the bidder concerned for at least three years, for further dealings with NCS and offices under control of MoES.
- 42.5 The Bidder should not assign or sublet the VSAT services contract or any part of it to any other agency in any form. Any such eventuality shall result in termination of contract and forfeiture of Security Deposit/EMD/PBG concerning such Bidders/Parties.

- 42.6 NCS may, at any time, terminate the VSAT Services Contract by giving written notice to the Bidder without any compensation, if the recommended bidder becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.
- 42.7 The Director, NCS reserves their right to terminate the maintenance contract at any time without assigning any reason. The bidder will not be entitled to claim any compensation against such termination. However, while terminating the contract, if any payment is due to the contractor for maintenance services already performed in terms of the contract, the same would be paid to it as per contract terms.
- 42.8 The contract can be terminated by NCS with prior notice of THREE months, without assigning any reason. In this connection the decision of Purchaser shall be final and binding on the Bidder/Service Provider.
- 42.9 The field-site-engineer of the Bidder should support and carry out the configuration, integration of digitizers/sirens/sensors etc. with VSATs as desired by NCS during their visits. The necessary application-software and instructions to carry out the configuration shall be provided by the Purchaser.
- 42.10 The bidder should co-ordinate with data integrator, MPLS service provider and any other Bidder part of this project for smooth running of the network.
- 42.11 It is the responsibility of the Bidder to support any addition of hardware for integration to the network like routers, switches etc. as part of the network for continuous transmission of data from shared Hub to the Operational centers at NCS, New Delhi and INCOIS, Hyderabad.
- 42.12 Tender will be evaluated on the basis of total expenditure given at price bids by the technically qualified bidders.
- 42.13 Purchaser shall not be responsible for damages of any kind for any mishap/injury/accident caused to any service engineer of the Bidder/Service provider while performing duty at field sites and Purchaser premises. All liabilities, legal or monetary, shall be borne by the Bidder/Service provider.
- 42.14 Bidder shall be in a position to provide VSAT connectivity at any location in the country.
- 42.15 The Bidder should provide the details of offered technology of VSAT services and technology of the bidder's shared Hub, likely date of end-of-support and end-of-life of the offered technology etc.
- 42.16 Bidder should quote for one unit of supply, installation and commissioning of solar system and one unit of battery charger for one field VSAT terminal, if desired by the Purchaser for new installations.



## CHECK LIST

SN	Activity	Compliance Yes/No/N.A.	Page No. of your bid
1	Company Profile, Infrastructure, and Registration Certificate, ISO certification of Services (if applicable), copy of requisite license as VSAT service provider issued by DoT		
2	Availability VSAT bandwidth (Kbps) held by the Bidder for meeting requirements mentioned in this tender enquiry		
3	Have you enclosed EMD as per NIT		
4	Is the EMD submitted by other firm other than participating firm? If yes, then bid is likely to be ignored.		
5	Is Registration certificate from Ministry of Micro, Small & Medium Enterprises (MoMSME) /NSIC attached for relaxation of EMD?		
6	Details of Permanent Income Tax account number& GST number? (Attach a copy)		
7	Have you kept EMD validity as per NIT		
8	<p>a) Supporting documents for the terms mentioned under “Bidders Eligibility Criteria” (<b>Clause no. 15.4</b>)</p> <p>b) Back-to-back support agreement with OEM (details of OEM) for support during the CAMC contract as mentioned in Clause no. 15.7</p> <p>c) State whether the business dealings with you have been banned/blacklisted by the Ministry of Earth Sciences (MoES) or any other State/Central Government Department, in the past, as per <b>clause no. 15.12</b></p> <p>d) Have you enclosed all supporting documents as mentioned in Clause no. 15.13</p>		
9	Copy of Tender document with each page signed and stamped as <b>per Clause no. 9.1 and 10.</b>		
10	Have you enclosed Tender Acceptance Form ( <b>Annexure-II</b> ) duly filled and signed (i.e., terms and conditions are acceptable) with original set of tender. Tenders may be ignored if not signed.		
11	One hard-copy of the Technical Bid identical to the copy uploaded, should be submitted (by post or by hand) to Sh. Ganesh Iyer Meteorologist ‘B’, NCS, R.No.303, 3 <sup>rd</sup> floor, Sat-Met Building, Mausam Bhavan, Lodi Road, New Delhi-110 003, Tel no. 011-24344593.		
12	Have you enclosed clause-by-clause compliance statement for the general terms and RFP requirements mentioned under <b>Section-I, II and III?</b>		

13	Have you submitted copy of the last purchase order(s) and performance certificate from users?		
14	List of Service Centres/authorized Service Centres in India		
15	Is tender Submitted by an OEM?		
16	Is tender Submitted by an authorized Representative/ Agent/Dealer/Supplier/Distributor/ Stockist of OEM? If so is authorisation certificate attached?		
17	Have you submitted the Un-priced bid containing Bill of Materials for work components of NCS and INCOIS separately as per <b>Clause no. 9.2</b>		
18	Name of Bidder representative to be contacted in case any clarifications needed in the tender-bid submitted by the firm (Name, Office Phone number, Fax Number & Email ID)		
19	Please mention the Name, Designation and contact Email details of the Authorized signatory who signed on each page of the Bid document.		
20	Name of the Bidder with complete address to whom supply order to be placed.		

Signature of Bidder:

Full name, designation, and address of the person signing (in block letters):

Whether signing as proprietor/ partner/ Constituted attorney / duly Authorized by the company:

**TENDER ACCEPTANCE FORM**

(For all the terms & conditions of tender document are acceptable to Bidder/Tenderer)

Note: Firm/company shall use their own printed letter head for issuing this certificate

To

The Director, National Centre for Seismology,

Mausam Bhawan Complex, Lodi Road, New Delhi-110003

Ref: TE document No. NCS/\_\_\_\_\_ dated \_\_\_\_\_

I/We, the undersigned have examined the above mentioned TE document, including amendment/corrigendum No. \_\_\_\_\_, dated \_\_\_\_\_ (if any), the receipt of which is hereby confirmed. We now offer the services in conformity with your above referred document.

If our tender is accepted, we undertake to supply the goods and perform the Services of **“Providing VSAT Satellite Bandwidth and Comprehensive Annual Maintenance of 17 VSAT terminals along with 2 leased line connectivity of 2 Mbps each”** as mentioned in tender document with the requirements, terms and conditions specified in the Section I , Section II and Section III of tender document.

I/We further confirm that, if supply / purchase order is placed to firm, we shall provide performance security of required amount in an acceptable form for due performance of the contract.

I/We agree to keep our tender valid for acceptance as required in tender document or for subsequently extended period, if any, agreed to by us. I/We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. I/We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

I/We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.

**We confirm that we do not stand de-registered/banned/blacklisted by any Govt. Authorities.**

I/We confirm that we fully agree to the terms and conditions specified in above mentioned TE document, including amendment/ corrigendum etc. if any.

(Signature with date and seal of the company)  
(Name and designation)

**MANUFACTURER'S AUTHORISATION FORM**

(Bidders, quoting products other than his own manufactured products, shall submit this certificate in following format on the Letter Head of the firm)

To,

The Director, National Centre for Seismology

Mausam Bhawan, Lodi Road, New Delhi-110003

Sub: Manufacturer Authorization for Tender No \_\_\_\_\_.

Sir,

We, **<OEM/ Manufacturer name>**having our registered office at**<OEM/ Manufacturer address>**, are an established and reputed manufacturer of VSAT equipments.

We confirm that **<Bidder Name>** having its registered office at **<Bidder Address>** is our authorized partner for our VSAT equipments. We authorize them to quote for VSAT Services with technology \_\_\_\_\_(*specify technology of VSAT system offered in the tender*) in the above-mentioned tender.

We hereby confirm that we shall provide all service and maintenance support to our authorized partner during the entire contract period. We also ensure to provide required spares and service support to the above authorized partner while offering onsite maintenance services of Hardware and software of the VSAT terminals installed at 17 sites spread across the country during the contract period.

Yours faithfully,

---

[Signature with date, name and designation]

for and on behalf of M/s \_\_\_\_\_

[Name & address of the manufacturers along with Seal of the firm]

**Note:** This letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent and having legal binding to the manufacturer (original letter to be attached or to be shown at the time of opening of bids).

**APPLICATION-CUM-BILL FOR REFUND OF EMD**

Director, (Kind Attn. to: DDO) National Centre for Seismology  
 IMD Campus, Mausam Bhawan, Lodi Road, New Delhi-110003

MONTH.....BILL NO. ....

Original Challan or Receipt No. & date	Bank/Office in which deposited	Name of depositor	Amount Originally deposited
1	2	3	4

Received this ..... day of .....20..... the sum of ₹ .....(₹ .....) only being repayable on Account of release of deposited described above.

Claimant's Signature. ....

(with revenue stamp affixed)

For use in Departmental Office

1. Received payment of ₹..... (₹.....) for arranging disbursal to claimant.

2. Passed for Payment of ₹ .....(₹ .....) to claimant(s) Shri/Smt./Ms..... against personal deposit account administered by me.

DDO(NCS)

For Director National Centre for Seismology  
 In case of endorsement of above

For use in Pay & Account office incase of endorsement of 1 above

Passed for payment of Rs. ....Payment by Cheque

**MODEL BANK GUARANTEE FORMAT FOR FURNISHING EMD  
(tentative format only)**

Whereas ..... (hereinafter called the “tenderer”) has submitted their offer dated.....for offering the VSAT services of **“Providing VSAT Satellite Bandwidth and Comprehensive Annual Maintenance of 17 VSAT terminals along with 2 leased line connectivity of 2 Mbps each”** (hereinafter called the “tender”) against the purchaser’s tender enquiry No. .... KNOW ALL MEN by these presents that WE .....of ..... having our registered office at..... Are bound unto ..... (hereinafter called the “Purchaser”) in the sum of ..... for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this..... day of .....20.....

THE CONDITIONS OF THIS OBLIGATION ARE:

- (1) If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- (2) If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity: -
  - a) If the tenderer fails to furnish the Performance Security for the due performance of the contract.
  - b) Fails or refuses to accept/execute the contract.

WE undertake to pay the “Director, National Centre for Seismology”, up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force upto and including 60 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

Bank Guarantee issued with the tender enquiry reference No. NCS/..... Dated.....

(Signature of the authorized officer of the Bank) .....

Name and designation of the office .....

Seal, name & address of the Bank and address of the Branch

**COMPLIANCE STATEMENT**

<b>S.No.</b>	<b>Tender Clause No.</b>	<b>Compliance</b>
1	Undertaking for the compliance of each and every term and conditions mentioned under Section-I, section II and Section-III of Tender document.	Yes/No

**STATEMENT OF DEVIATIONS FROM TECHNICAL CONDITIONS**

<b>CLAUSE NUMBER OF TENDER DOCUMENT</b>	<b>DESCRIPTION OF ITEM SPECIFICATION WHERE DEVIATING</b>	<b>DEVIATION IN THE OFFER</b>	<b>BRIEF REASON FOR THE DEVIATION</b>

Note: Deviations on the lower side of technical specs/services will not be accepted

**Signature of the Bidder:**

**Name & Designation:**

**Date**

**Place**

**Company Seal**

**Email ID:**

## PRICE BID FORMAT

Table: A One Time Charges for setting up Backhaul connectivity

S N	Item Description	Quantity	Unit Cost (₹)	GST (₹) per unit cost	Total (₹)
A	B	C	D	E	F=Cx(D+E)
1	Installation and commissioning of <b>2 Mbps</b> MPLS link from <b>service provider</b> (Name of the firm to be mentioned); with all required accessories between VSAT HUB of Bidder to NCS, New Delhi	1			
2	Installation and commissioning of <b>2 Mbps</b> MPLS link from <b>service provider</b> (Name of the firm to be mentioned); with all required accessories between VSAT HUB of Bidder to INCOIS, Hyderabad	1			
<b>Total (₹)</b>					

(Amount in Words)

Table: B Charges for VSAT Bandwidth; CAMC of VSAT Equipment and MPLS Link

S N	Item Description	Quantity	Unit Cost (per annum) (₹)	GST (₹) per unit cost	Total (₹)
A	B	C	D	E	F=Cx(D+E)
1	VSAT Satellite total <b>bandwidth</b> (Ext-C band) (1:1) per annum for 17 sites*	250Kbps	Per Kbps per annum		
2	<b>Comprehensive AMC</b> (including traffic charges) of <b>MPLS link</b> of <b>2Mbps</b> from .....(Name of service Provider) with all network components and accessories between <b>VSAT HUB</b> of Service Provider to <b>NCS, New Delhi</b>	1			
3	<b>Comprehensive AMC</b> (including traffic charges) of <b>MPLS link</b> of <b>2Mbps</b> from .....(Name of service Provider) with all network components and accessories between <b>VSAT HUB</b> of Service Provider to <b>INCOIS, Hyderabad.</b>	1			
4	<b>Comprehensive AMC</b> of VSAT Field Terminals (including IFL cables, electrical earthing, etc) as per RFP	17			
5	<b>Total (₹)</b>				

(Amount in Words)

\*The requirement of 250 Kbps is from 17 field station to VSAT Hub. Data transfer from VSAT service provider's Hub to NCS, New Delhi and INCOIS, Hyderabad through 2 Mbps lease line.



**Table: C Rate Contract - Rates for different services as and when required**

S.No.	Item Description	Quantity	Unit Cost (₹)	GST (₹) per unit cost	Total (₹)
A	B	C	D	E	F=Cx(D+E)
1	Charges for making new chemical – electrical earthing	M	1		
		HNE	1		
		ANL	1		
2	Charges for replacement of IFL cable with Conduiting, Connectors and other accessories	M	1		
		HNE	1		
		ANL	1		
3	Charges for supply and installation of new 1.8 m VSAT antenna for complete VSAT including everything essential to establish the VSAT connectivity	M	1		
		HNE	1		
		ANL	1		
4.	Charges for supply and installation of new 1.2 m VSAT antenna for complete VSAT including everything essential to establish the VSAT connectivity	M	1		
		HNE	1		
		ANL	1		
<b>Total (₹)</b>					

(Amount in Words)

**Table: D Total Price of the NCS contract per annum**

S.No.	Details	Cost (₹)
1	Total from Table A (one-time charges)	
2	Total from Table B (Recurring charges)	
3	Total from Table C (rate contract)	
4	<b>Final Contract value (A + B+ C )</b>	

(Total quoted price in Rs. in words)

**Note:**

1. Total quoted price will be calculated for the entire duration of the contract to decide L1
2. Above rates shall remain fixed during the contract period.
3. Unpriced Bill of Materials (BoM) should be submitted with the technical bid.

Signature of the Bidder: \_\_\_\_\_

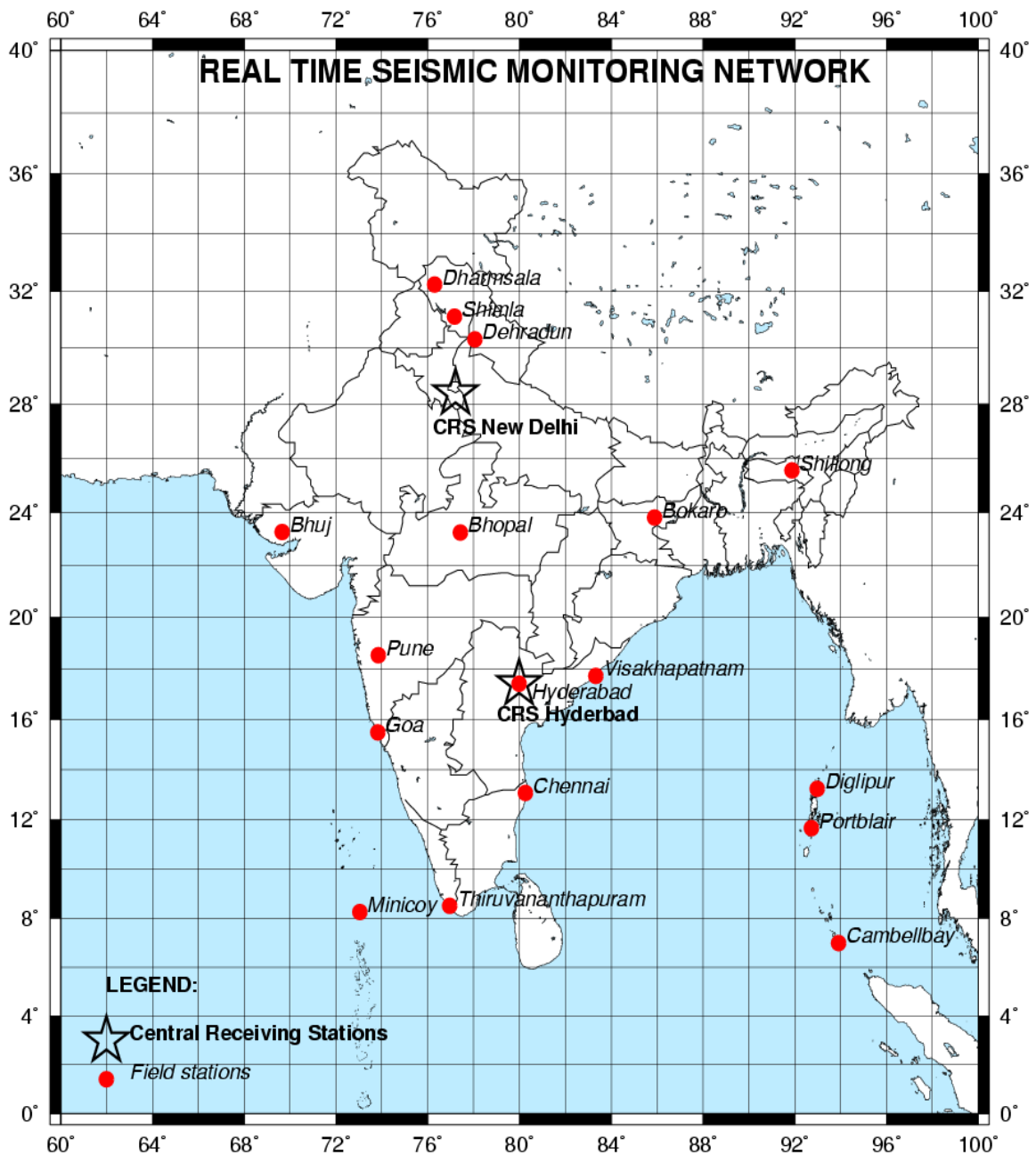
Name & Designation: \_\_\_\_\_

Date \_\_\_\_\_

Place \_\_\_\_\_

Company Seal: \_\_\_\_\_

Email ID: \_\_\_\_\_



**RTSMN Stations:**

- 1). Central Receiving Station (CRS) at IMD HQ, New Delhi
- 2). Central Receiving Station (CRS) at INCOIS, Hyderabad
- 3) Bhopal
- 4) Bhuj
- 5) Bokaro Thermal
- 6) CampBell Bay (A&N Islands)
- 7) Dehradun
- 8) Diglipur (A&N Islands)
- 9) Dharamsala
- 10) Goa
- 11) Chennai
- 12) Minicoy (Lakshadweep Islands)
- 13) NGRI, Hyderabad
- 14) PortBlair
- 15) Pune
- 16) Shillong
- 17) Shimla
- 18) Trivandrum and
- 19) Visakhapatnam

## Annexure-IX

S.No.	Station Code/Name	Lat (deg.N)	Long (deg.E)	Elevation (mts)	Date of Installation	Antenna Size	IDU Model No. and Make
1	Bhopal	23° 14.479'	77° 25.455'	520	31/12/2007	1.2	Make: M/s Gilat Model No. SkyEdge IP
2	Bhuj	23° 15.250'	69° 39.240'	80	12/10/2007	1.2	-do-
3	Bokaro Thermal	23° 47.577'	85° 53.807'	282	23/12/2007	1.2	-do-
4	CampBell Bay (A&N Islands)	07° 01.152'	93° 55.596'	10	13/02/2008	1.8	-do-
5	Dehradun	30° 19.335'	78° 3.248'	682	19/12/2007	1.2	-do-
6	Diglipur (A&N Islands)	13° 10.660'	92° 55.830'	30	27/01/2008	1.8	-do-
7	Dharamshala (Himachal Pradesh)	32°14.857'	76° 18.398'	1995	25/12/2007	1.2	-do-
8	GOA	15°29.495'	73° 49.492'	58	28/12/2007	1.2	-do-
9	Chennai	13° 4.090'	80° 14.798'	15	13/10/2007	1.2	-do-
10	Minicoy (Lakshadweep Islands)	08° 16.891'	73° 3.588'	2	30/01/2008	1.8	-do-
11	NGRI, Hyderabad	17° 25.117'	78° 33.109'	232	12/10/2007	1.2	-do-
12	PortBlair (A&N Islands)	11° 39.344'	92° 44.635'	79	31/01/2008	1.8	-do-
13	Pune	18° 31.782'	73° 50.925'	560	21/12/2007	1.2	-do-
14	Shillong	25° 34.009'	91° 51.357'	1600	13/10/2007	1.8	-do-
15	Shimla	31° 07.668'	77° 10.464'	2200	27/12/2007	1.2	-do-
16	Trivandrum	08° 30.490'	76° 57.503'	64	09/01/2008	1.2	-do-
17	Visakhapatnam	17° 43.310'	83° 19.780'	82	26/12/2007	1.2	-do-

VSAT Antenna Make: Prodelin, Offset feed

IFL cable length : 30m

ODU rating = 2W

Note: 1) VSAT IDU at S.No.1 to17 are powered through a dc-dc adaptor connected to 12V battery bank (consisting of 4 no.s of MF batteries, each of rating 12V 100AH). The battery bank is continuously charged through solar panels and battery charger.

S.No.	Station	Postal Address	Telephone No.s
1)	Bhopal 23°14.479' 77°25.455' 520m	Meteorological Centre India Meteorological Department Arrera Hills, Jail Road Bhopal-462 011 Madhya Pradesh	0755-2551496 / 2764272 (Fax) Mr. Waheed (O I/c) (09981854679)
2)	<b>Bhuj</b> 23°:15.24'N 69°:39.24'E Elevation 80 m	Seismological Observatory India Meteorological Department Patwarinaka Kodaki Road, Bhuj-370 001 Gujarat	02832-250575 (F) 02832-221352 Mr. Mode 09426253525 Dr.(Ms) Parul Chaturvedi 09427604860
3)	Bokaro Thermal 23°:47.69'N 85°:53.15'E Elevation 282 m	Seismological Observatory India Meteorological Department Bokaro Thermal (Post) Girdhi District -829 107 Jharkhand	06549-266781(Seismo Obsy.)
4)	Chennai 13°:04.08'N 80°:14.78'E , 15 m	Seismological Observatory PBO campus India Meteorological Department Airport Road Meenambakkam, Chennai Tamilnadu	Mr. Sachidanandam 044-22311097 09486905491
5)	Dehradun 30°:19.35' N 78°: 03.33'E 682m	Seismological Observatory Met Centre India Meteorological Department G & R.B Campus 17, East Canal Road Karanpur, Dehradun-248 001, Uttarakhand	0135-2654269 / 2714143  Sh. D.K. Verma 09690012752
6)	<b>Goa</b> 15°:29.50'N 73°:49.48'E 58 m	Seismological Observatory Met Centre India Meteorological Department Altino Hill Panjim, Goa-403 001	0832-2425547 0832-2420161  Sh. Halke 09420430181
7)	Minicoy 08°:16.00N 73°:02.00E 06 m	Seismological Observatory RS/RW Observatory India Meteorological Department Minicoy-602 558 Lakshadweep	04892- 222238(Telefax)

8)	Port Blair 11.63592°N, 92.71678°E	Meteorological Office Shadipur (P.O.) Port Blair-744 106 Andaman & Nicobar Islands	03192-229480 03192-227750 Mr. Santosh Kumar, SA
9)	Pune 18°:31.77'N 73°:50.95'E 560 m	Seismological Observatory Office of DDGM(SI) Ganesh Khind Road Shivaji Nagar(P.O) Pune-411005 Maharashtra	020-25535211/ 25533201 Ext.453,454 25521529(F)  Mr Jadhav 09423578722
10)	Shillong 25°:34.00'N 91°:53.00'E 1600m	Central Seismological Observatory India Meteorological Department Meath Home Shillong-793 005 Meghalaya	0364-2560075 Mr. A.C. Lyngdoh 09863022211 lyngdoh_ac@rediffma il.com
11)	Shimla 31°:07.70'N 77°:10.00'E 1000 m	Seismological Observatory Upper Bharari Shimla -171 001 Himachal Pradesh	0177-2806724 /2651490 (Seismo Obsy.) Sh. Ravinder Kumar Sharma, SA 09418120294
12)	Thiruvananthapuram 08°:30.48'N 76°:57.51'E 64 m	Seismological Observatory India Meteorological Department Observatory Hill Vikas Bhavan Thiruvananthapuram-695 033 Kerala	0471- 2322184/2322894/ 2321253/ 2322842(F)  Sh. Jatin 09446553886
13)	Visakhapatnam 17°:43.26'N 83°:19.72'E 82 m	Seismological Observatory Cyclone Warning Centre India Meteorological Department A.U. Out Gate Beach Road Visakhapatnam-530 017 Andhra Pradesh	0891- 2555163/2543035 0891- 2543031/32/34/36 Mr. Nageshwara Rao 09346022558
14)	Hyderabad (NGRI) 17° 25.04' N 79° 59.04' E 510 m	Seismological Observatory (Attn to: Dr Raghavan Scientist-E) National Geophysical Research Institute (NGRI) Uppal Road Hyderabad-500 007 Telangana	Dr Raghavan Scientist-E 09490461565 (040)23434664 (Direct) Fax. 040- 23434664/23434651

15)	Campbell Bay 7.0000°N 93.91667°E  (un-manned station)	Seismological Observatory India Meteorological Department Rajiv Nagar, Near Old Assistant Commissioner Office, Campbell Bay Great Nicobar A&N Islands	Mr. M.V. Jose Executive Engineer Construction Division Or Assistant Engineer Construction Division Ph/Fax 03193- 264217/264218 / 264070
16)	Diglipur 13.2465°N 92.9763°E  (un-manned station)	Seismological Observatory India Meteorological Department GRES Building, Kalara' Diglipur (Post) –744 202 North Andaman A&N Islands	Mr. K. Mathas Executive Engineer Fax:03192-272203 Tel: 03192-272473
17)	Dharamshala 32.25deg N, 76.30 deg. E, 1995 m	Seismological Observatory Wadia Institute of Himalayan Geology Dal Lake (P.O) Upper Dharamshala-176 216 Kangra (District) Himachal Pradesh	Mr. R.M. Sharma Senior Technical Assistant Tel No. 01892-221893 Mob: 09816426948

