

NOTICE INVITING TENDER (NIT)

Tender Enquiry No. NCS-02176/NSN/MEQ/Procurement

Dated: 23th August 2019

1. Director, National Centre for Seismology, Ministry of Earth Sciences (MoES), Government of India, on behalf of President of India invites ONLINE Global Tenders in two bid system i.e. (i) Technical bid, and (ii) Price bid from eligible and qualified Bidders for “Supply of Portable Seismic Equipment for Conducting Micro-Earthquake and Aftershock Survey”
2. **Name of Services:** Supply of Portable Seismic Equipment for Conducting Micro Earthquake and Aftershock Survey
3. **Specification and quantity:** As per RFP
4. **Tender schedule** is as follows:

Date of publication & availability of Tender	23 rd August 2019 e-Procurement site: https://eprocure.gov.in/eprocure/app NCS website: https://seismo.gov.in/content/tenders IMD Website: https://imd.gov.in/pages/tenders.php MoES website: http://moes.gov.in/manage-tender-module-admin
Seek clarification start date:	23 rd August 2019
Seek Clarification end date:	09 th September 2019, 1800 Hrs. (IST)
Pre-bid Meeting (Date & Venue):	11 th September 2019 at 1100 Hrs (IST) at NCS, HQ, Mausam Bhavan Complex, Lodi Road, New Delhi-110 003, India
Issue of Addendum /Corrigendum, if any:	Shall be informed in the pre-bid meeting
Bid submission start date:	11 th September 2019 at 1100 (IST) Hrs onwards
Bid submission end date:	14 th October 2019 upto 1800 Hrs (IST)
Opening of Tender Bids (EMD, Eligibility & Technical):	15 th October 2019 at 1500 Hrs (IST)
Bid Validity period:	180 days from the date of opening of tender

5. **Earnest Money Deposit (EMD):** EMD of an amount equivalent to ₹ 1500000.00 (Fifteen Lakhs only) will be accepted in the form of FDR/ Bank Guarantee, and its validity period is 240 days from the date of opening of tender. The EMD should be in favour of “DDO, National Center of Seismology, New Delhi”.
6. (a). Micro and Small Enterprises registered with any Government bodies are exempted from submitting the Earnest Money Deposit (EMD).

(b). Exemption for submitting the Earnest Money Deposit (EMD) will be valid only for validity of registration as on date of opening of tender.

(c) The duly filled and completed bid should be uploaded online on website <https://eprocure.gov.in/eprocure/app> along with scanned copies of EMD. More details regarding submission of bids are given in tender Document.

7. All prospective Bidders are requested to attend the Pre-Bid meeting. The venue, date and time of the Pre-Bid meeting are indicated in the Para 4 above.

8. In the event of the tender opening date being declared as holiday for the purchase organization, the tender will be opened on the next working day; the venue and time of tender opening remains the same.

9. Purchaser: The President of India
Through Director, National Centre for Seismology,
Ministry of Earth Sciences,
Lodi Road, New Delhi-110003

10. Consignee: Director, National Centre for Seismology
Ministry of Earth Sciences,
Mausam Bhavan complex,
Lodi Road, New Delhi-110003

11. Inspecting Authority: Director, National Centre for Seismology
Mausam Bhavan complex,
Lodi Road, New Delhi-110003.

12. Inspection officer: Authorized Representative of Inspecting Authority

Director, National Centre for Seismology
Ministry of Earth Sciences,
Mausam Bhavan Complex, Lodi Road,
New Delhi-110003.
Tele No: 011-24611305, Fax No: 011-24619943



National Centre for Seismology
Ministry of Earth Sciences

**TENDER DOCUMENT FOR
PROCUREMENT OF SEISMIC
EQUIPMENTS REQUIRED
FOR CONDUCTING
MICRO-EARTHQUAKE AND
AFTERSHOCK SURVEYS**

August 23

2019

TENDER DOCUMENT FOR PROCUREMENT OF SEISMIC EQUIPMENTS REQUIRED FOR CONDUCTING MICRO-EARTHQUAKE AND AFTERSHOCK SURVEYS

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SECTION – I

GENERAL INSTRUCTIONS TO BIDDERS

1. Introduction:

1.1 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” (Section-IV), 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.

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” (in Section IV), the provision contained in the RFP (in Section IV) shall have an over-riding effect and treated as final. Any special instructions as per “RFP” (Section-IV) 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. Tender Language: 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.

3. Eligible Goods and services: All goods and related services to be supplied shall have their origin either in India or in any other country with which India has not banned the trade relations. The term “origin” used in this clause means the place where the goods are mined, grown, produced or manufactured or from where the related services are arranged and supplied.

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 TE document.

4.2 Purchaser’s Right to accept any tender and to reject any or all tenders.

4.3 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. Pre-bid Meeting:

6.1 Pre-bid conference shall be held as per NIT schedule so as to provide an opportunity to the participating bidders to interact with NCS with regard to various tender provisions/clauses, before the bids are submitted. Bidders should depute their authorized representative for pre-bid meeting. In case, due to the points/doubts raised by the prospective Bidders, needs to be modified, and then the same will be considered for modification. After pre-bid conference, tender conditions will be frozen. No change will be permissible after pre-bid meeting. Clarification needed, if any, may be sent before commencement of pre-bid meeting. No reply in this regard shall be sent to individual Bidders. Pre-Bid minutes shall be uploaded on e-Procurement portal <https://eprocure.gov.in/cppp/> and NCS website <http://seismo.gov.in/content/tenders>

6.2 NCS shall hold a pre-bid meeting with the prospective Bidders as per Notice Inviting Tender (NIT) details in the EREC Conference Hall, Annexe Building, Near SatMet Building, Mausam Bhawan Complex, Lodi Road, New Delhi-110 003. 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 g.suresh@imd.gov.in, rk64.singh@imd.gov.in and/ or faxed on 91-11-24619943.

6.3 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.

6.4 **Regular visit of website:** Prospective Bidders are advised to see e-Procurement portal <https://eprocure.gov.in/cppp/> or NCS website <http://seismo.gov.in/content/tenders> on regular basis for any change in NIT schedule, amendment / corrigendum in Tender Document including technical requirement and pre-bid minutes etc.

7. Document comprising the tender:

7.1 Tender Enquiry Document seeks quotation in two parts by following **TWO Bid System**. The First Part will be known as **'Techno-Commercial Bid'**, and the Second Part will be known as **'Price Bid'** (Details given below)

7.2 **Techno-Commercial Bid(Un-priced Bid)**: comprising of following

- a) Checklist section (Annexure-1) properly filled and signed.
- b) Earnest Money Deposit (**EMD**) (BG or FDR or MSME certificate for EMD exemption)
- c) Technical proposal.
- d) Compliance statement/table.
- e) List of deliverables (un-priced) with make & model etc. This should be exactly same as attached in the price bid.
- f) Documentary evidence for eligibility.
- g) The bidder **must** also submit a copy of UNPRICED financial bid in the given format .
- h) Tender Acceptance Letter (Annexure-2) Duly Stamped & Signed. (Bidder has to agree to accept all the terms & conditions of the Tender Enquiry Document).
- i) The bidder, who quotes seismic equipments like sensors, digitizer etc manufactured by some other manufacturer, shall furnish Manufacturer's Authorisation Form as given in Annexure-3.
- j) Authorization Letter from the Foreign Principal for authorizing Indian Representative (To submit the tender document on behalf of foreign principal)All the above documents must be enclosed with technical bids, otherwise bids may be either ignored or not considered for technical evaluation.

7.3 **PRICE BID:**

- a) All the pages of the price bid should be numbered, indexed and duly signed by the authorized signatory.
- b) Prices should be quoted as per Price Schedule Format (Annexure-6). The domestic Bidder shall indicate on the Price Schedule specifying all components of prices shown therein including the unit prices and total tender prices of the goods, services, packing, inland transportation/freight/insurance to the sites and GST etc. against the requirement.
- c) In case any charges are not mentioned in the price bid, it will be treated as "all the charges are free of cost for that item".
- d) Indian vendor shall quote prices on F.O.R destination (site of consignee i.e, NCS Headquarters, IMD, Mausam Bhavan Complex, Lodi Road, New Delhi-03) basis. Payment will be made in Indian Rupees only. No payment will be made in foreign currency.

- e) The bidder supplying indigenous goods or already imported goods shall quote only in Indian Rupees.
- f) Unless otherwise specified, prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account except statutory levies, taxes and duties etc., if any, chargeable on the goods are payable.
- g) If there is a discrepancy between the amount expressed in words and figures, the amount expressed in words shall prevail and will be treated as final.
- h) The Supplier shall bear all the Income-tax liability as per rates prevailing at the time of undertaking the job in accordance with the Income-Tax Act in force in India.
- i) Price bid shall prima-facia be rejected in case of any deviation from the technical bid of the bidder and if there is any fact concealed or hidden in price bid/technical bid.

7.4 **The Bidder** shall have to agree/accept all the terms and conditions of the tender including payment etc. Acceptance shall be unconditional and bidders shall have no claim and right in future on their terms

8. Preparation of Tender: 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, each page is to be numbered sequentially, duly signed-in and duly stamped, in all respects before uploading. 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.

9. Submission of Tender:The bidders shall upload the soft copy of the tenders (In PDF Format) on CPP Portal (www.eprocure.gov.in) within the specified date/time of submission of the tender as mentioned in the NIT document. Each page of the tender document is to be numbered.

The Bidder should comply to the requirements specified in “Checklist (Annexure-1)”

10. Alteration 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.

11. Opening of Tenders: The purchaser I.e., National Center for Seismology (NCS) 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 CPP 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 CPP 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.

11.1 First Stage : The **Technical Bids** are to be opened in the first stage on/after the prescribed date and time. These Bids are then scrutinized and evaluated first by Technical Acceptance Committee (TAC) and then by Technical Evaluation Committee (TEC) constituted by the competent authority with reference to the 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 CPP Portal along with the Report of TEC. The date of opening of Financial/Price Bids will also be published.

11.2 Second Stage : In the Second Stage, the Price Bids of technically qualified bids only will be opened. The Price Bids will be scrutinized by CST Committee constituted by the competent authority. The report of the CST committee will decide the lowest quoted bidder. This report will also be uploaded on CPP Portal. Supply Order will then be issued to the lowest quoted bidder.

12. Scrutiny and Evaluation of Tenders

12.1 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.

- a) Checklist (Annexure-1).
- b) Tender Acceptance Letter (Annexure-2) is not duly signed and stamped. (Bidder has to agree to accept all the terms & conditions of the Tender Enquiry Document)
- c) Tender Validity Period is shorter than the required period.
- d) Required EMD (Amount, Validity, etc.)/ Exemption document have not been provided.
- e) Bidder has not agreed to deposit the required performance security (In case of allotment of the tender).

- f) Copy of agreement of Indian agent with its foreign principal with the precise relationship between them and nature of services which would be available from Indian agent. Copy of this agreement must be attached with the tender.
- g) By any means/reason, the incomplete bid uploaded on e-procurement.gov.in shall also be treated as Unresponsive.

12.2 Technical Evaluation:

- a) 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
- b) **Bidder should present their offered solutions before the TEC for further evaluation of their technical proposal.**
- c) If during the preliminary examination, the purchaser find any minor informality 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 tender will be liable to be ignored.
- d) Technical Evaluation Committee (TEC) will shortlist Technical Bids on the basis of technical parameters, presentation on offered technical solutions and features offered. 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 **Bidder** have to be ready for the same. The presentation can also be delivered through Video Conference.
- e) For 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 shall be debarred from the tender evaluation process and shall forfeit the EMD.
- f) 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 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.

- g) 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).
- h) 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.

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

- a. 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).
- b. There will be **NO NEGOTIATIONS** regarding the financial bid.
- c. 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.
- d. If there is a discrepancy between the unit price and total price, The Unit Price shall prevail.
- e. The ultimate/landing cost in respect of store is arrived at by considering following elements:
 - i. **Indigenous stores**
 - a. Basic price
 - b. Goods and Service Tax (GST), as applicable in India
 - c. Insurance, freight and transportation of goods up to user site at NCS Head Quarters, IMD Office Complex, Lodi Road, New Delhi-03
 - ii. **Imported stores**
 - a. If any vendor is bidding on behalf of its foreign principal, then Custom Duty Exemption Certificate for imported stores will be provided by NCS on request of the firm. If the Custom Duty applicable on hardware, software,

equipments, instruments, consumables and other items coming through customs clearance is actually paid by the firm, then the same will be reimbursed by NCS on submission of the original documents to NCS.

- b. All other charges like Landing/Clearing/Bank charges, Freight charges, Insurance charges, etc. on imported stores will have to be paid by the vendor.
- c. Goods and Service Tax (GST), as applicable in India

13. Packing and Marking: The packing for the goods to be provided by the supplier should be strong and durable enough to withstand (Without limitation) the entire journey during transit including shipment (if any), rough handling, open storage etc. without any damage or deterioration of the packed goods.

14. Inspection, Testing and Site Acceptance Test (SAT): The purchaser/consignee reserves the right to inspect goods before their dispatch if required in technical requirement. Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract. Purchaser will not undertake any Pre dispatch inspection, unless mentioned, for imported stores in the suppliers country of origin and equipment will be sent to the supplier on the basis of supplier own inspection at the premises and guarantee and warranty. The equipment will be accepted subject to final inspection and test before handing over the equipment to consignee.

SECTION – II

GENERAL CONDITIONS OF TENDER (GCT)

15. Whenever there is any conflict between the provision in the GCT under this section and that in the section “RFP” (Section-4), the provision contained in the section “RFP” (Section IV) shall prevail and have an over-riding effect, i.e. The details given in the RFP will be treated as final.
16. Any Special instructions or conditions like delivery schedule, mode of delivery & sites of delivery etc., mentioned in “RFP” section will also be applicable
17. **Eligible Bidders** : The Firms in followings categories are eligible to participate in tender subject to fulfill other criteria in technical requirement section.
 - 17.1 Indian/Foreign Manufacturers of the required stores.
 - 17.2 Authorized Dealer/Supplier/Distributor of Indian manufacturer/Foreign principal. The bidder shall have to submit authorization certificate from manufacturer that they will provide service support after sale.
 - 17.3 Indian agent on behalf of foreign principal. A copy of the agreement between Indian agent and the foreign principal with the precise relationship between them, their mutual interest and nature of services should be available with the Indian agent. The Purchase order shall be placed to India agent (in Indian Rupees) only.
18. **Alternative Tenders:** Alternative Tenders are not permitted. However the bidders can quote alternate models meeting the tender specifications of the same manufacturer with single EMD.
19. **Validity of Tender:**The tenders shall remain valid for acceptance for a period of 180 days (One Hundred Eighty Days) for Technical Bid and 240 days (Two Hundred Forty Days) for EMD after the date of opening of tender as prescribed in the TE document.
20. **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).
21. **Earnest Money Deposit (EMD):**
 - 21.1 The Bidder shall furnish along with its tender, Earnest Money for an amount as shown in the tender notice. The Earnest Money is required to protect the purchaser rights

against the risk of the Bidders unwarranted conduct. EMD also known as security deposit.

21.2 The bidders who are registered on Tender submission date with National Small Industries Corporation, New Delhi, shall be eligible for exemption from Earnest Money Deposit (EMD). Micro and Small Enterprises specified by Ministry of Micro, Small & Medium Enterprises (MSME) are also exempted from the submission of EMD.

21.3 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". The original copies of Demand Draft/FDR/Bank Guarantee should be submitted to Mr KamaleshChowdhary, Meteorologist-A, Room No. 303, III Floor, SatMet Building, Mausam Bhavan Complex, Lodi road, New Delhi-03, within due date and time of tender opening physically **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 e-Procurement site.**

21.4 The earnest money shall be valid for a period of sixty (60) days beyond the validity period of the tender.

22. Refund of EMD:

22.1 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.

22.2 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.

22.3 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.

22.4 Bidder whose bid was accepted and selected, the EMD will be refunded without any interest accrued after the submission of Performance Bank Guarantee (PBG).

22.5 Application of request for refund of EMD is given at **Annexure-4**

22.6 The Bidders have to submit pre receipt for obtaining their EMD in the **FORM GAR 43D** (Annexure-5) in duplicate with original signatures. One form should be affixed with Indian revenue stamp.

22.7 The clause “Encashment/release of FDR/BG requires clearance certificate from Purchaser i:e Director, National Centre for Seismology, New Delhi” must be mentioned in issued FDR/BG by Bank.

23. Forfeit of EMD:

- 23.1 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.
- 23.2 The successful Bidder’s Earnest Money (EMD) will be forfeited without prejudice to other rights of Purchaser, if supplier fails to furnish the required performance security within the specified period mentioned in clause 24.5 / relevant clause in Supply Order.
- 23.3 Firm shall have to extend the validity of EMD if extension of tender validity is agreed on the request of purchaser in exceptional cases.

24. Performance Security:

- 24.1 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.
- 24.2 Performance security has to be submitted by the successful bidder, irrespective of its registration with NSIC/MSME. Performance security is not relaxed to any supplier.
- 24.3 The purchaser may consider annulment/cancellation of supply order/ award of contract, if performance security not received in stipulated time.
- 24.4 There is no relaxation/exemption in submitting of Performance Security.
- 24.5 The supplier shall furnish performance security to the purchaser for an amount equal to ten percent (10%) of the total value of the order, valid up to sixty (60) days beyond the warranty period. The format of Bank Guarantee to be submitted as performance security is given in **Annexure-5**.
- 24.6 Performance Security shall be furnished by foreign supplier (participated directly in the tender) including indigenous components to be taken by their representative.
- 24.7 Bank Guarantee issued from the foreign banks must be authenticated by State Bank of India (SBI) or any other Nationalized Bank of India.

- 24.8 Firms, registered with NSIC/ MSME, quoting on behalf of their foreign principal shall be responsible for furnishing performance security for the entire project tenure.
- 24.9 The successful Bidder will have to deposit Performance Security within specified time limit given above, equivalent to 10% (Ten Percent) of the total value of the work order, in the form of FDR or Bank Guarantee from a Nationalized/ Scheduled Commercial Bank in favour 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”.
- 24.10 Performance Security has to be submitted irrespective of its registration NSIC etc. Performance security is not relaxed to any supplier/service provider. Submission of Performance Security is must for all suppliers/service providers.
- 24.11 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 favour 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. Foreign Bidder should submit the Performance Security in the form of Bank Guarantee. Bank Guarantee issued from the foreign banks must be authenticated by STATE BANK OF INDIA or any other Nationalized Bank of India.
- 24.12 The purchaser will release the Performance Security without any interest to the supplier/ service provider on completion of the supplier’s all contractual obligations including the warranty obligations & after receipt of performance security for CAMC (if applicable).
- 24.13 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.
- 24.14 In case the Bidder backs out of the contract in mid stream without explicit consent of the NCS, the PBG will stand forfeited.

24.15 On completion of the Project (including Warranty Period of 24 months), the Performance Bank Guarantee without any interest accrued shall be released after ascertaining that satisfactory support that has been provided during Warranty 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 28 for the default in service has been realized or shall be recovered from the Bidder out of already due payments.

25. Terms of Delivery: Goods shall be delivered by the supplier in accordance with the terms of delivery specified in the Supply Order. Generally it is **F.O.R destination** (in case of domestic supply). Suppliers should not deliver the goods without any valid delivery period. Purchaser shall not be held responsible for any thing (payment and loss of stores etc) if stores supplied without any valid delivery period as purchaser reserve the right to reject the delivery and terminate the supply order.

26. Delivery Schedule: As per RFP

27. Warranty: Warranty for a period of 24 months from the date of site acceptance of the systems at respective sites

27.1 Other condition under warranty clause of "RFP" section shall also be applicable.

28. Penalty/Liquidity Damage:

28.1 The supplier shall deliver the goods as per the Supply Order within the time schedule specified by the purchaser in the "RFP" section. The delivery date, unless delivery is divided, on which all the items/stores/materials/services etc as per Supply Order are delivered shall be taken into account for penalty/LD purpose.

28.2 The purchaser shall, without prejudice to other rights and remedies available to the purchaser under the contract, deduct from the contract price a sum equivalent to 0.5% (half percent) per week of delay or part thereof on delayed supply of goods and/or delayed services during warranty period subject to a maximum of 10% of the contract price of delayed items. Once the maximum is reached purchaser may also consider followings:

a. Forfeiture of its performance security and

b. Termination of the contract for default.

28.3 The supplier shall not be held responsible for any delay in custom clearance by the Purchaser/Consignee, handing over proper site by consignee and any other delay in part of consignee/purchaser if responsible. These periods shall not be counted in LD. The supplier shall not dispatch the goods after expiry of the delivery period. The supplier is required to apply to the Purchaser for extension of delivery period and obtain the same before despatch. In case the supplier dispatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and / or any other expense related to such supply shall lie against the Purchaser. The supplier shall inform to the purchaser directly in writing about these delays on part of NCS.

29. Award Criteria and Tolerance Clause: The Supply Order shall be issued to the eligible responsive tender evaluated as the most economical, technically qualified and suitable to the requirements subject to the availability of funds. The purchaser reserves the right to increase or decrease the quantity of required goods up to plus minus fifteen percent ($\pm 15\%$) till the placement of supply order without any change in the terms & conditions and prices quoted by the bidders.

30. Modification of Contract: If necessary, the purchaser may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract. If the supplier doesn't agree to the adjustment made by the purchaser, the supplier shall convey its views to the purchaser within fifteen (15) days from the date of the supplier's receipt of the purchaser's amendment / modification of the contract.

31. Customs Duty: In case of Indian agent quoting on behalf of its foreign principal, the Custom Duty Exemption Certificate shall be provided by NCS on request by the firm only for the imported items. If additional Custom Duty is paid by the Indian agent, the same shall be reimbursed by NCS on submission of original documents. All other charges like Landing/Clearing/Bank charges, Freight/Insurance charges on imported stores will have to be paid by the vendor.

32. Taxes and Duties in India:

32.1 Duty and Local Taxes: As per Govt. of India Rules, the applicable GST shall be paid to the successful bidder/supplier. Normally, the materials to be supplied to Govt. Departments against Govt. contracts are exempted from levy of town duty, Octroi duty,

terminal tax and other levies of local bodies. However, the local Town/Municipal Body regulations, at times, provide for such exemption only on production of exemption certificate from any authorized officer. The suppliers should ensure that the stores ordered against contracts placed by this office are exempted from levy of town duty/Octroi duty, Terminal tax or other local taxes and duties. Wherever required, they should obtain the exemption certificate from the indenter /consignee concerned, to avoid payment of such local taxes or duties. The supplier shall pay the Octroi, entry tax etc. if exemption certificate not agreed by local authorities and same may be got reimbursed from purchaser on proof of payments.

32.2 Supply of Road Permits by the consignees: In all such cases where the requirement of Road Permit for entry of goods into a particular State is mandatory, the following provisions shall be strictly followed: -

- a. The supplier shall request the consignee for providing Road permit/ Way bill within 10 days of the receipt of the Supply order. The supplier shall furnish all the necessary information and documents in this regard to consignee within a maximum period of two weeks so that the same reaches the supplier before the dispatch of the stores. However, in cases where the Road permit/Way Bill is issued on proof of actual invoice of the material, the consignee shall arrange to provide the Road permit/Way Bill from appropriate authorities within a maximum period of 5 days from the receipt of invoice.
- b. The supplier shall pay the local charges/taxes if exemption certificate not agreed by local authority and same will be reimbursed by purchaser on submission of receipt.
- c. The supplier shall not be held responsible for any delay in supply due to non-supply/delayed supply of Road permit.

32.3 Income Tax : Deduction of Income Tax at Source from the payment to the suppliers shall be done as per existing law in force. The bidders (Foreign as well as Indian) may visit the website of Income Tax Department of India for details of Tax Liabilities, Rules, and Procedures etc. The bidders shall have to provide their Permanent Income Tax Number (PAN) and TAN. Firm may also mention the applicable rates of TDS as per DTAA

with India. Copy of same may also be enclosed. Foreign vendor shall have to mention the details of establishment in India if any.

33. Terms and Mode of Payments:

- 33.1 Payment Terms: Payment shall be made subject to recoveries, if any, by way of liquidated damages /penalty clause /TDS or any other charges as per the payment terms of the Supply Order if not specified elsewhere in the document.
- 33.2 70% payment shall be made on recipe store and remaining 30% after successful installation and acceptance of the stores. As the stores are to be delivered and demonstrated about its functioning at NCS Headquarter, Mausam Bhavan, Lodi Road, New Delhi-110 003. The Bidder shall submit detailed particulars of his bank account in this office, like:

Account Number Bank Name

- a. Branch Name
- b. Address
- c. IFSC code
- d. MICR No.
- e. Telephone No.

34. Termination of tender:

- 34.1 From the time of submission of tender up to the time of issuing of the Supply Order, 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.
- 34.2 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.
- 34.3 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 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.

34.4 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

35. Arbitration

35.1 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.

35.2 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 "RFP" 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, 1995. 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, National Center for Seismology. The award of the arbitrator shall be final and binding on the parties to the contract. Each party shall bear its own cost.

35.3 **Venue of Arbitration:** 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.

36. 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 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 would be refunded by the BIDDER to the BUYER (National Center for Seismology) or it will adjusted from their bills, if the contract has already been concluded

SECTION – III

SPECIAL CONDITIONS OF TENDER (SCT)

- 37.** 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.
- 38.** 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).
- 39.** 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.
- 40.** 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.
- 41.** 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.

Section IV

Request for Proposal (RFP)

For supply of portable seismic equipments and its accessories required for conducting micro earthquake and aftershock surveys

Request for Proposal (RFP) for supply of portable seismic equipments and its accessories required for conducting micro-earthquake and aftershock surveys

42. Introduction: National Centre for Seismology (NCS) has been involved in conducting microearthquake and aftershock surveys in different parts of the country. Whenever there is sudden spurt in local earthquake activity in any part of the country, a field team with necessary portable digital seismographs will be deputed from NCS Headquarters (NCS HQ) at New Delhi to the affected area for close monitoring of the seismic activity. On such occasions, NCS team visits the affected area to setup temporary field stations within 100sq km of the affected area to record the micro-earthquake activity. The Seismic Digitizer installed at temporary field stations should remotely be accessed through GPRS Modem (compatible to 3G/4GLTE/4G Mobile communication technology) from the central site for downloading of data and for continuous data acquisition. The software at central site should have capabilities such as continuous waveform display, State of Health (SOH) display of remote field sites, downloading of recorded data from each site as per user defined criteria, conversion of event data to standard formats like mSEED, ASCII and binary_SEISAN, offline data processing etc. The field observations (or survey) shall continue for a period of few months till the swarm/aftershock activity subsides. On completion of the survey, all the equipments at temporary field and central sites shall be brought back to NCS HQ.

43. Purpose of RFP: This RFP is an invitation for potential bidders to supply the required equipments with associated communication and application software for meeting the necessities for carrying out **microearthquake surveys** for monitoring earthquake swarm and **aftershock activity** with near-real time waveform display, hypocenter location capabilities (off-line), etc.as per following

- (i) Portable broadband seismometer (10 no.s)
- (ii) Portable 6 channel Data Acquisition System (DAS) with GPS, associated cables etc. (10 no.s)
- (iii) Data acquisition, health monitoring and offline processing software and other utility software with license and media (2no.s)
- (iv) Portable field computers required at field sites for parameter setting, downloading of recorded data, offline data processing application software ., (2 no.s)
- (v) GPRS Modem compatible to DAS (10 nos.)
- (vi) Accessories (as required)

44. Portable Broadband Seismometer (10 No.)

44.1	Type	<p>a) Tri-axial Broadband (Z, N-S, E-W), electronic force balance velocity transducer in a single sealed module.</p> <p>b) The sensor should be rugged, compact and light weight to meet the requirements of frequent transportation, simple and easy for quick deployment in the field.</p>
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44.2	Frequency Response	Flat (within ± 3 dB) to ground velocity in the frequency range 40 sec - 50 Hz._
44.3	Sensitivity	700 volts/m/s or better
44.4	Dynamic range	120 dB or higher
44.5	Output voltage	± 20 V
44.6	Damping	0.7 critical
44.7	Linearity	$\pm 1\%$ of full scale.
44.8	Mass centering	Automatic, on external command locally and from remote
44.9	Leveling	a). Should have an indicator for leveling the sensor b). Should have an indicator mark on its body to indicate the direction of relative orientation of the sensor.
44.10	Calibration Facility	Calibration facility from DAS
44.11	Power Requirement	Less than 2.0 watts derived from the DAS
44.12	Operating Temperature	0 to 55 degrees C
44.13	Humidity tolerance	Up to 100 % RH
44.14	Housing	All the components should be permanently mounted in single stainless steel or cast aluminum casing, water tight, vacuum tight enclosure.
44.15	Mass Locking	Must contain a robust sensor mass locking and safety mechanism required during transportation.
44.16	Connectors	Water proof and rust proof
44.17	Cable	Low-loss shielded cable of atleast 3 meters with end connectors.
44.18	Spare parts	Spare connector – one set.
44.19	Self noise	Must be below the USGS New Low Noise Model(NLNM) for the frequency range 10sec to 5 Hz.
44.20	Insulating cover	Air-tight thermal insulating cover and other accessories required at the time of installation
44.21	Transporting case	As the sensor is being subjected for frequent transportation, hence it should be provided with carrying case exclusively for sensor to protect from accidental drops, transport vibration and jerk as detailed in Clause 5.1.
44.22	Supporting Document	The bidder should provide detailed technical documentation in support of specifications offered.

45. Strong Motion Accelerometer (10 Nos.)

45.1	Type	Tri-axial, Force balance transducer
45.2	Frequency response	Flat response (within +/- 3dB) to ground acceleration, at least in the range of DC to 200 Hz.
45.3	Dynamic range	≥120 dB
45.4	Full Scale output voltage	±20V
45.5	Full Scale Range	±2g
45.6	Damping	0.7 critical.
45.7	Clip level	Greater than full scale range.
45.8	Linearity	Less than 1% of full scale.
45.9	Cross-axis sensitivity	Less than 1% of full scale
45.10	Mass centering	Automatic
45.11	Calibration facility	Calibration procedure from the Data Acquisition System to check the working performance of the sensor, free period, damping etc.
45.12	Frequency response curve and system information	Frequency response curve of the unit along with information regarding transfer function including poles and zeros should be provided.
45.13	Noise Response	Noise response should be less than 0.001% of full scale for entire frequency band.
45.14	Indicators	Should have an indicator for leveling the transducer. Should have an indicator mark on its body to indicate the direction of relative orientation of the sensor.
45.15	Humidity and operating temperature range	Upto 100% RH and 0° to 50°C.
45.16	Power requirement	< 1.2 watt at 12V DC.
45.17	Housing	The tri-axial sensors should be mounted in a single water-proof and vacuum-tight enclosure.
45.18	Mass locking and safety mechanism	Must contain a robust locking and safety mechanism during transportation.
45.19	Connectors	All connectors should be water-proof and rust-proof. All mounting plate, nuts and bolts should be provided for installation/anchoring the sensor on the seismic pier/ground.

45.20	Spare Connector	One set of spare connectors of Sensor side and Digitizer side
45.21	Cable	Low-loss shielded cable of at least 10 meters with end connectors.
45.22	Supporting Document	The Bidder should provide detailed technical documentation in support of specifications offered.
45.23		

46. Portable Seismic Data Acquisition system (DAS) and other accessories (10 Nos.)

46.1	Number of Channels	Six channel (3 for weak motion sensors and 3 for strong motion sensor)
46.2	Dynamic range	135dB or more, measured at 100 sps
46.3	ADC resolution	24 bit independent digitizer for each channel
46.4	Input Range	Should match the sensor outputs
46.5	Common Mode Rejection	Greater than 60 dB
46.6	Channel to channel skew	Zero- Simultaneous sampling of all channels. Immune to electro magnetic interference.
46.7	System noise	Not more than 2-3 counts of 24 bit system
46.8	Sampling rate	User- selectable 1,10,20,50,100 and 200 sps per channel in different streams both in continuous and trigger modes simultaneously as per user requirements. Provision to select different sampling rates for weak motion and strong motion channels.
46.9	Filter	Linear phase digital FIR filter.
46.10	RAM	At least 16 MB RAM
46.11	Storage Type	Hard disk or compact flash memory card of 16 GB or more
46.12	Recording Format	Standard seismological format compatible to Windows/UNIX with proven compression technique. It should be easily convertible to SEED format.
46.13	GPS Timing System	UTC timed with digitally controlled precision VCXO clock phase locked to GPS Timing accuracy less than 0.1mSec when GPS is locked Free running TCXO accuracy of 1 ppm over wide temperature

		<p>range.</p> <p>GPS receiver electronic circuit should be inside the DAS with Antenna exposed to outer side</p> <p>Antenna cable length should be 15 m or more.</p> <p>Antenna should be enclosed in water tight and can work effectively in extreme climatic condition.</p> <p>Antenna mounting rod and its accessories</p>
46.14	Sensor control	<p>Sensor calibration facility for both BB seismometer and SMA</p> <p>Sensor mass position monitoring for BB seismometer.</p> <p>Sensor mass centering on command for BB seismometer.</p>
46.15	State of Health Channel	<p>Provision for checking state of health information like sensor mass position, temperature voltage, condition of GPS time lock etc. locally and remotely.</p>
46.16	Status display	<p>Status display indicators for power, data acquisition, SOH, GPS etc. should be provided.</p>
46.17	Gain	<p>Hardware gain selection through software for 0.5, 1, 2 and 4</p>
46.18	Data acquisition Mode	<p>Both continuous and trigger mode</p>
46.19	Trigger	<p>User selectable, independently for each channel at different sampling rate based on triggering criteria as STA/LTA level etc.</p>
46.20	Communication	<p>In built communication interface circuitry for provision of remote data acquisition and State-of-Health in near real time mode through V-SAT and GPRS modem</p> <p>Suitable interface for computer/ laptop for parameter setting and data downloading.</p>
46.21	Transmission setting	<p>Should have facility to select transmission to remote location in following options:</p> <p>continuous mode transmission for BB data</p> <p>continuous or trigger mode transmission of SMA data as per user configuration</p>
46.22	GPRS modem and VSAT connectivity	<p>Ethernet port (10/100 Base-T) supporting TCP/IP and UDP/IP</p> <p>Compression of data before transferring to GPRS modem or VSAT.</p> <p>Continuous and trigger both. (6 channels)</p>

		<p>Duplex communication between field and Central Station</p> <p>Extensive error correction</p> <p>Support for off-the-shelf communication equipment</p>
46.23	Power Supply	<p>Supply voltage 10-15Volts through solar panel activated maintenance free batteries.</p> <p>Power consumption of DAS less than 6W at 12V DC recording 6 channels at 100 SPS.</p> <p>Low battery voltage protection and</p> <p>DAS shall resume data acquisition and transmission automatically when the power is restored.</p> <p>with each DAS is required to be supplies</p>
46.24	Operating temperature and humidity range	<p>Operating Temperature -10°C to 50°C</p> <p>Humidity Upto 100% RH</p>
46.25	Environment	All the indoor units should work in typical tropical environment conditions and should work without air conditioning.
46.26	Housing	GPS and DAS modules should be enclosed in a weather- and shock-proof sealed enclosures with lightening protection.
46.27	GPRS Modem (external to DAS)	<p>Each DAS is to be supplied with a GPRS modem with following requirements:</p> <ul style="list-style-type: none"> a) GPRS modem should be compatible to 3G and 4G mobile communication technology b) Operator independent c) GPRS should operate through dynamic IP at field site i.e., no requirement of static IP at field site. However, static IP will be provided at central Receiving Station i.e., NCS Head Quarters, New Delhi. d) GPRS modem should operate from 12V DC supply adapter or Battery (12V 80AH) e) Mobile SIM and other recurring charges shall be borne by the purchaser.
46.28	Solar Panel (external to DAS)	<p>Each DAS is to be supplied with a Solar Panel with following requirements:</p> <ul style="list-style-type: none"> a) Solar Panel (not less than 12W) with compatible solar charge controller with each DAS
46.29	Battery Charger (external to DAS)	<p>Each DAS is to be supplied with a Solar Panel with following requirements:</p> <ul style="list-style-type: none"> a) Make: Mean Well ESC/ESP-120/240 Series or Victron

		<p>Energy Blue: Smart IP65 charger 12V, 15A with all accessories like power cable, and battery links.</p> <p>b) AC supply input should be compatible to Indian type connecting socket</p>
46.30	Firmware updation	Firm should provide all the update of firmware at free of cost at least for ten years from the date of acceptance of the system

47. Spares and Accessories

47.1	Spares	<p>a) 6 channel DAS (specified in Clause 2.3)(3 nos.)</p> <p>b) Broadband Sensor and Accelerometer sensor (specified in Clause 2.1 and 2.2) (3 nos. each)</p> <p>c) GPS antenna with cable of length 15m for DAS (3no.s)</p> <p>d) Solar Panels specified at Clause no. 2.3.28 – 3sets</p> <p>e) Battery charger specified at 2.3.29 – 3sets</p>
47.2	Accessories	<p>a. Sensor cables for Seismometer and Accelerometer (sensor to DAS) (5m length each) – 5nos.</p> <p>b. Power cables from DAS to Battery (10 nos.)</p> <p>c. Data cables (LAN port of DAS to GPRS Modem) (10 nos.)</p> <p>d. Memory card (same capacity as supplied in DAS)– 50 nos.</p> <p>e. Internal battery installed with DAS (if any) – 20 nos.</p> <p>f. A suitable on-line battery charger operating from AC mains 230V 50Hz for charging a single battery of 12V 100AH to power-up the DAS for long time recording. (5 no.s)</p> <p>g. 12W Solar Panel (small size) with compatible solar charge controller (2No.)</p> <p>h. Memory card reader- 2 nos.</p>

48. Data Processing and other Utility Software- 2 No.

48.1	<p>a) Application software utilities for parameter setting, On-site control panel, sensor calibration, data retrieval into the field computer, processing and analysis of the data. Media and license to be provided.</p> <p>b) Data acquisition software from field to central site for at least 120 channels (20 station 6 channel each)</p> <p>c) Display of incoming continuous data from 120 channels</p>
48.2	<p>a) Appropriate utility software for faster downloading of large amounts of data from the DAS to Note Book Computer during the visit to field site.</p> <p>b) Downloading of data as per user criteria from field to central site through GPRS modem</p>
48.3	Provision to convert the data into SEISAN, ASCII. mSEED, and other standard formats.
48.4	Provision to get the details on the State of Health of the Sensor and DAS, GPS time and co-ordinates etc.
48.5	Continuous waveform display of the recorded data

48.6	Old recorded data plotting and display software
48.7	Offline data processing software for Broadband seismic sensor and Strong motion Accelerometer
48.8	Bidder should provide all the updates without any financial implication to purchaser for a period of at least 10 years from the date of acceptance of the system.

49. Field-ready and sturdy transportable casing for seismometer, digitizer, solar panels and cable accessories - (5 no.s)

48.1	The case must be made of high impact ABS plastic inbuilt robust wheels and having extendable handle
48.2	The case should be suitable for rough handling including transport as check-in baggage on airlines.
48.3	The height of the case should preferably be less than 50 cm.

50. Portable Notebook - (2 no.s)

50.1	Touch Bar with integrated Touch ID sensor
50.2	Not less than 13 inches, Super amoled High resolution monitor (1900 X 1200)
50.3	OS : windows latest version a) Appropriate latest OS compatible to run all application software's. b) OS license with media. c) Anti-virus package
50.4	Processor: <i>2.9GHz 6-core Intel Core i7, Turbo Boost up to 4.8GHz, with 12MB shared L3 cache or equivalent</i>
50.5	RAM: 16 GB or more
50.6	<i>HARD: 2TB SSD or more</i>
50.7	Maxi Weight: Not more than 2.0kg
50.8	1 nos of 10/100/1000Mbps Ethernet port
50.9	Suitable slot or external reader for read and write of storage disk of DAS
50.10	Suitable interface for connecting to the field sites through GPRS communication. All necessary cables, connectors and devices should be provided to meet the requirements for reception of the continuous waveform data from field sites.
50.11	At least 5-8hrs internal battery backup in case of power failure
50.12	Charger unit for the Notebook Computer – compatible with Indian AC socket Line voltage 220V AC, 50 Hz
50.13	Good quality carrying case/Bag

51. Delivery of Equipment:

- The safe delivery of the equipment to NCS HQ, New Delhi is the responsibility of the Bidder.
- Delivery Schedule:** Delivery of all Goods/ Equipment at NCS HQ, New Delhi should be within TWO (2) months after opening of confirmed L/C.
- For any delay in delivery, Liquidated Damages @1% of contract value per week will be levied for a maximum of ten weeks, subject to a maximum amount equivalent to bid

security. Once the said limit of ten weeks is over, termination/cancellation of order will be considered.

d. The bidder should submit delivery and testing schedule.

52. Payment terms

a) No advance payment will be made in any case.

b) 70% payment shall be made on receipt of stores. Remaining 30% payment shall be made after the training and site acceptance.

c) Payment shall be made through Opening of Bank L/C in case of foreign supplier(OEM).

53. Qualification Criteria for Bidder

a) The bidder should be a manufacturer or an authorized agent of a manufacturer who must have designed, manufactured, tested, supplied, erected and operated seismic equipments of the most recent models incorporating state-of-the-art technology and must be in successful operation at least for three year on the date of bid opening.

b) The Bidder should provide an authorization letter from their Principals that they are the authorized representatives of the firm for the supply, installation and maintenance of the products being supplied under this project. The date of issue of this letter should be within 6 months from the date of bid opening.

c) The bidder should furnish information on all past supplies and documentary evidence (Client's certificates) in support of satisfactory operation and performance of the equipment.

d) It is essential that the Indian representative should have at least THREE years of experience in the installation of Seismic equipments as a proof of the bidder's ability to undertake such specified work. This claim must be accompanied by supporting proof documents.

e) Notwithstanding anything stated above, the Purchaser reserves the right to assess Bidder's capability and capacity to perform the contract, should circumstances warrant such an assessment in the overall interest of the purchaser.

54. Training

a) For each equipment (hardware and software) supplied, the Bidder is required to train the designated Purchaser's technical and end-user personnel, covering all aspects including operations, maintenance, the design philosophy, integration, fault diagnosis and rectification, operational use of real-time communication (GSM based) and offline data processing, and other application softwares of SMA etc.

b) Operational/ Maintenance training at New Delhi for a period of FIVE working days for 20 NCS officials. During the training period all application and operating software should be reinstalled from the fresh and restart all the computer systems.

c) Sufficient lecture notes and material are to be provided to the trainees. A detailed training plan should be submitted by the Bidder, sufficiently in advance before commencement of the training programme, for NCS's approval.

55. Installation and Acceptance

- a) The objective of the tests shall be the verifications of performance of the system as per the specifications and functional requirements. This will include both the H/w and S/w tests. The acceptance tests will comprise of overseeing and evaluating the satisfactory and fail proof performance to ensure trouble-free operations for **FIVE consecutive days** of all the equipment simultaneously and collectively, namely the Broadband Seismometers, Strong Motion Accelerometer Digital Seismic Data Acquisition Systems, mobile Network operations (both H/w and S/w), Seismic Data Analysis, Field Computer hardware and software, Solar Panels, battery charger, etc., in conformity with the Technical Specifications and RFP.
- b) As per the mutually agreed test procedures, acceptance test should be carried out at NCS HQ or at any designated site, after temporary installation. The supplier shall arrange for necessary test equipment.
- c) In the event of equipment failing to pass the acceptance test, a period not exceeding four weeks will be given to rectify the defects and clear the acceptance test, failing which the Purchaser reserves the right to get the equipment replaced by the Bidder at no extra cost to the Purchaser or to cancel the order and recall all the payments with applicable interest rate from the date of the respective payments.

56. Test and Acceptance of the system

- a) Test & Acceptance of the System: The successful bidder shall submit 3 copies of a detailed Test and Acceptance plan document within one month of award of contract for approval of NCS. This document will contain full details of acceptance to be conducted with regard to functioning of sensors, digitizers, GPRS Modem connectivity, off-line data processing of seismic and SMA data so as to meet the requirements laid down in the bid document.
- b) The Bidder is responsible for all unpacking, assembling, wiring, installations, cabling between equipment hardware units and connecting to power supplies, etc. during the testing.
- c) The Bidder will provide all cables and connectors required for the installation and integration of Sensors, DASs, GPS Receivers, mobile communication (GSM) equipments etc.,. All the power connectors should plug into the Indian-type electric sockets.
- d) The Bidder is responsible for installation of all the supplied software. The Bidder should customize the communication management and monitoring software, real-time seismic data reception through GPRS Modem at CRSs, etc., in order to meet the requirements specified in RFP.
- e) The Bidder will test all hardware & software operations and carry-out all adjustments necessary for successful and continuous operation of the equipment to fulfill the actual field / site operations.
- f) The Bidder should be ready to accommodate changes in application software and its customization, hardware, etc., in order to fulfill such requirements that may arise during the intervening period between preparation of this document and commissioning of the system within the scope of the project.
- j) The system design should be modular and upgradeable to meet the future requirements.

- k) The supplier should also provide at no extra cost, all the latest version of upgraded firm ware of DAS, application software, data retrieval software, communication software etc., which are being upgraded from time to time and also the relevant installation steps for a period of years.

57. Warranty

- a) The Bidder warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract.
- b) The Bidder further warrants that all Goods supplied under this Contract should have no defects, arising from design, materials, or workmanship (except when the design and/or material is required by the Purchaser's specifications) or from any act or omission of the Bidder, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.
- c) The bidder should offer comprehensive free warranty for a period of **TWENTY FOUR** months from date of acceptance of the Goods.
- d) During warranty period and in the event of the equipment developing snags or malfunctioning or if it stops functioning altogether, the Purchaser will promptly inform the Bidder, and the Bidder's maintenance engineers should attend to the complaint immediately and operationalize the equipment in the least possible time (within 24hrs at NCS HQ). The time period for which the equipment was down and not operational, beyond least possible time mentioned above will be deemed to be the downtime and would be taken into consideration for extending the Warranty period by twice the downtime.
- e) The Bidder should supply, free of cost, during the period of Warranty, updates of all software supplied at the time of initial installation and commissioning.

58. Documentation : Supplier will deliver all documentation in English language in three sets both in hard (bound volume) and soft copies. It should include specification, operation, maintenance, and trouble-shooting procedures; application software, software logic diagrams for offline data processing, for each field station and at central site.

59. Bidder's Obligations:

- a) To submit one hard copy of the Technical Bid to Sh. Kamallesh Chowdhury, NCS HQ, New Delhi-03, which is same to that of uploaded on CPP portal.
- b) The Bidder is responsible for customization of software requirements and obliged to conduct all contracted activities in accordance with the Contract using state-of-the-art methods and economic principles and exercising all means available to achieve the Performance specified in the Contract.
- c) The Bidder is obliged to work closely with the Purchaser's staff, act within its own authority and abide by directives issued by the Purchaser and implementation activities.

- d) The Bidder will abide by the job safety measures prevalent in India and will free the Purchaser from all demands or responsibilities arising from accidents or loss of life the cause of which is the Bidder's negligence. The Bidder will pay all indemnities arising from such incidents and will not hold the Purchaser responsible or obligated.
- e) The Bidder is responsible for managing the activities of its personnel or sub-contracted personnel and will hold himself responsible for any misdemeanours.
- f) The Bidder will treat as confidential all data and information about the Purchaser, obtained in the execution of his responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of the Purchaser.

CHECKLIST

S. N	Activity	Compliance Yes/ No/ Not Applicable (NA)	Page No. of bid
1.	(i) Is the EMD of required amount enclosed ?		
	(ii) Is the Validity of EMD (FDR/BG) 240 days starting from the date of opening of tender ?		
	(iii) Is Registration certificate from MSME/NSIC attached for relaxation of EMD ?		
	(iv) Is the "EMD Submitting Firm" other than the participating firm? If yes, then bid is likely to be ignored.		
2.	Have you kept validity of your bid as mentioned in Section II-GCT of the TE Document ?		
3.	Have you enclosed duly filled and signed Tender Acceptance Letter on firm's letterhead (Accepting all the terms and conditions of the tender). (Bid may be ignored if not signed)		
4.	Have you enclosed clause-by-clause Compliance Statement for the " RFP" (Section-4) ?		
5.	Have you submitted copy of the last purchase order(s) and end user certificate?		
5.	(i) Is tender Submitted as Manufacturer/OEM?		
	(ii) Is tender Submitted as Authorized Agent/ Dealer/ Supplier/ Distributor of OEM? Is Authorization Certificate attached?		
	(iii) Is tender submitted as an Integrator? Whether Back-to-back support agreement with equipment manufacturer and software developer company attached?		
	(iv) Is tender submitted by Indian agent quoting on behalf of foreign principal: If yes, whether the necessary documents are attached as mentioned in Tender Document ?		
5.	(i) Permanent Account No. of bidding firm with proof.		
	(ii) Is GST Number with Registration Certificate attached?		
8.	Name of the supplier with complete address to whom supply order is to be placed.		

(Signature with date)

(Full name, designation on behalf of the Bidder)

TENDER ACCEPTANCE FORM

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

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 to CAMC services in conformity with your above referred document.

If our tender is accepted, we undertake to supply the goods and perform the services of (Installation & commissioning etc.), as mentioned in tender document with the requirements, terms and conditions specified in the Section 1 and Section II 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 deregistered/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)

Duly authorised to sign tender for and on behalf of Bidder / Tenderer

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

Acceptance shall be unconditional.

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
IMD Campus, 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

We confirm that **<Bidder Name>** having its registered office at **<Bidder Address>** is our authorized partner for We authorize them to quote for 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.

Yours faithfully,

[Signature with date, name and designation]
for and on behalf of Messrs _____

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

Note: This letter of authorisation 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).

MODEL BANK GUARANTEE FORMAT FOR FURNISHING EMD

(format only)

Whereas (hereinafter called the “tenderer”)has submitted their offer dated.....for offering the VSAT services of(hereinafter called the “tender”) against the purchaser’s tender enquiry No.KNOW ALL MEN by these presents that WEof 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 of20.....

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

APPLICATION-CUM-BILL FOR REFUND OF EMD

FORMGAR 43D [See Rule 186(1)]

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 of20..... 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 No.

Pay & Account Office

PRICE SCHEDULE (Financial Bid format)

Sr. No.	Particulars	No. of Unit	Ma ke	Mo del	Qua ntity	UNIT PRICE			Total price (6x9)
						Base price	Applicable taxes & duties	Total unit price	
(1)	(2)	(3)	(4)	(5)	(6)	(6)	(8)	(9)	(10)
1.	Broad Band Seismometer (BBS) as per clause no. 44	10							
2.	Strong Motion Accelerometer (SMA) as per clause no. 45	10							
3.	Six Channel Data Acquisition System (DAS) as per clause no. 46	10							
4.	Spare and Accessories; as per clause no. 47	As per 47.1 and 47.2							
5.	Data processing and utility Software as per clause no. 48	2							
6.	Field sturdy transportable case as per clause no. 49	5							
7.	Notebook Computer as per clause no. 50	2							
8.	Warranty as per clause no. 57								
9.	Inland transportation, etc.								
10	Training and Acceptance (as per Clause no. 54 to 56)								

Total Tender price: (In words)

Note:

1. The names of each stores/items must be mentioned including services if any. The deliverables list attached with financial bid must be exactly same as per technical bids without mentioning prices.
2. Charges ,if any, for inland (within the India) Transportation /freight/insurance of stores shall be mentioned separately. In case not mentioned, it is treated as free of cost.
3. If there is a discrepancy between the unit price and the total price, then THE UNIT PRICE shall prevail.
4. All applicable taxes must be mentioned against each item. Rate of each applicable tax must be mentioned in price bid.
5. Price schedule for optional items should be attached separately and not to be mentioned in main price bid.

Place : _____ Date : _____ Signature of Bidder _____ Seal of the Bidder _____

ANNUAL TURN OVER STATEMENT**(On contractor's Letter head)****[Ref. Clause No. 2(b) in general terms and conditions]**

The average Gross Annual Turnover of M/s

_____ address

_____ for the past three financial years are given below and certified that the statement is true and correct.

_____ years	S. no.	Financial Turnover in Crores (Rs)
1.	2016-16	
2.	2016-18	
3.	2018-19	

Total Rs. _____ (In Crores)

Average gross annual turnover _____ (Crores) Rs.

Note:

Turn over for the year 2018-19 may also be considered, if the accounts are audited and certified by Chartered Accountant. Turn over issued over by the Central Excise Department shall also be considered.

Date:
Signature of Auditor/Seal

Signature of the Bidder

Name and address:

Tel. No.

Mob. No.

(On Bidders letter head)

AUTHORISATION LETTER FOR ATTENDING TENDER OPENING

No.

Date: _____

To,
The Director,
National Centre for Seismology
Ministry of Earth Sciences
New Delhi-110003, India

Subject- Tender No. _____

Sir,

Mr. _____ has been authorized to be present at the time of opening of above tender due on _____ at _____, on my/our behalf.

Yours faithfully

Signature of Bidder

Copy to: Mr _____ for information and for production before the _____ (MM) _____ at the time of opening of bids.