

TENDER DOCUMENT

TENDER NO.: S-CEM/IP/3038/PTE/100-01/2020-2021

SUB: Supply, Installation, Commissioning, Performance testing and validation of Antenna/RF measurement system and Shielded chamber

DUE ON

17.07.2020 : 14.00 Hrs.



SOCIETY FOR APPLIED MICROWAVE ELECTRONICS
ENGINEERING AND RESEARCH

(An Autonomous R&D Institution under the Ministry of Electronics &
Information Technology, Govt. of India)

SAMEER- Centre for Electromagnetics,
CIT Campus, 2nd Cross Road, Taramani, Chennai-600 113
Phone No: (044)22544061/22544020
(Fax). (044) 2254 1938/ 1424
Website: <http://cem.sameer.gov.in>
E-mail: purchase.chn.sameer@nic.in

INDEX

SR.NO	TITLE	PAGE NO
1	Notice Inviting Tender (NIT) and Index	1-3
2	Instructions to Bidder (ITB) for submission of bid etc., and Terms & Conditions	
	A. Eligibility/Qualification Criteria	4-5
	B. The Bidding Documents	5-6
	C. Preparation of Bids	6-11
	D. Submission of Bids	11-13
	E. Opening & Evaluation of Bids	13-18
	F. Payment Terms	18-19
	G. Penalty Clause	19-21
3	Technical Bid	21-31
4	Price Bid	32
5	Annexure-I: Manufacturer's Authorization Letter	33
6	Annexure-II: Bidder's Performance Statement Form	34
7	Annexure-III: Service Support Details Form	35
8	Annexure-IV: Deviation Statement Form	36
9	Annexure-V: Technical Specification Compliance Statement Form	37
10	Annexure-VI : Declaration Certificate by the Third Party Agency	38
11	Annexure-VII: Tender Acceptance Letter	39-40

NOTICE INVITING TENDER(NIT)
(Submission of Tender in Two Bid Format)

Sealed Tenders are invited under Two Bid format (Technical & Commercial) from reputed Manufactures/ Indian agent of foreign principals for the supply of item mentioned below.

Sl. No.	Item Description	Quantity	Earnest Money Deposit (EMD)
			(In Indian Rupees)
1.	Antenna/RF measurement system and Shielded chamber	One	28,75,500 /-
			Cost of Tender
			(In Indian Rupees) 2,500/-

Tender Documents can be downloaded from SAMEER-CEM website<<http://cem.sameer.gov.in>> and CPPP website<<https://eprocure.gov.in/cppp/>>

IMPORTANT DATES

SAMEER-CEM, Chennai invites bids from interested parties for **Supply, Installation, Commissioning, Performance testing and validation of Antenna/ RF Measurement System and Shielded chamber** as per the schedule mentioned below.

Tender Schedule

Tender Reference No.	S-CEM/IP/3038/PTE/100-01/2019-2020
Date and time of publishing and downloading of bid document	5 th June,2020
Date of Pre-Bid Meeting	24 th June,2020 at 11:00 Hrs. in Conference Hall of SAMEER-CEM,2nd Cross Road, Taramani, Chennai - 600 113
Last date and time of submission of bids	17 th July,2020, 14:00 Hrs
Date, time and Place of opening of Technical Bid.	17 th July,2020 at 15:00 Hrs. at SAMEER-CEM,2nd Cross Road,Taramani,Chennai - 600 113
Date and time of opening of financial Bids	To be announced later
Validity of Tender	180 days
EMD	Rs.28,75,500 /- (Rupees twenty eight lakhs seventy five thousand and five hundred only)
Cost of Tender	Rs.2500/- (Rupees two thousand and five hundred only) Non-refundable.

IMPORTANT TO NOTE

1. Any queries regarding the tender should be addressed to Head-Administration, SAMEER-CEM,2nd Cross Road,Taramani,Chennai - 600 113 (either through letter or through e-mail:-ramamoorthi.sameer@nic.in or purchase.chn.sameer@nic.in or contact no.044-22544020/22544061 up to 1 day before pre-bid meeting.
2. All communication, addendum/corrigendum related to this tender will be issued only on the SAMEER-CEM website cem.sameer.gov.in and CPPP.
3. Programme Director,SAMEER-CEM reserves the right to reject any or all the bids without assigning any reason.

4. The Date and time mentioned in the tender schedule shall be strictly adhered.
5. The bids will be opened in the presence of bidders/representatives. If any unscheduled holiday occurs on the date of submission/opening, then next working day shall be prescribed as date of submission/opening. Prospective bidders are requested to submit their offers in **Two-Bid format** only as per tender documents.
6. Requests for postponement of date and time of submission and opening of bids will not be entertained.
7. Fax/e-mail bids will not be accepted
8. Late/Delayed bids shall not be opened

Note-Changes suggested by prospective bidder in Pre-Bid meeting may be incorporated in the tender document at the sole discretion of the tender inviting authority and for which corrigendum will be issued separately and uploaded only on the SAMEER-CEM website cem.sameer.gov.in and CPPP.

INSTRUCTIONS TO BIDDER (ITB) FOR SUBMISSION OF BID etc.,
AND TERMS & CONDITIONS

SECTION-A ELIGIBILITY/QUALIFICATION CRITERIA

1. Eligible Bidders

1.1 Bids are invited from manufacturers or their Indian agent of foreign principals specifically authorized by the manufacturers, to quote on their behalf for this tender. The manufacturers or their Indian agent of foreign principals shall have designed, manufactured, tested and supplied the Antenna RF Measurement system and Shielded chamber similar to the type specified in the "Technical Specification". Such system must be of the most recent series/models, incorporating the latest improvements in design.

1.2 Either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid, but both cannot bid simultaneously for the same item/product in the same tender.

1.3 If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.

1.4 Details of service support facilities that would be provided after the warranty period should be submitted in the Service Support Details Form.

1.4 The Bidder will assume total responsibility for the fault-free operation of the chamber, application software, if any, and maintenance during the warranty period and provide necessary maintenance services and availability of spares for ten years after end of warranty period if, required.

1.5 In order to assess the financial solvency of a firm, The Programme Director, SAMEER-CEM may seek a report from the bankers of the technically evaluated lowest quoting firm in order to assess if the firm is financially capable of executing the purchase order/work successfully.

1.6 Bidders who meet the criteria given above are subject to be disqualified, if they have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure, etc.,

1.9 If before/after the placement of the Purchase Order it is found/noticed that the supplier has been black-listed/debarred then such supplier will be dropped from the tendering process as technically not suitable to quote or order will be cancelled. Thus, black-listed/debarred firms are requested not to participate in our tendering process.

1.10 Any additional bid participation criteria/eligibility conditions etc. mentioned in the

Technical Specification sheet will also form and part of the Qualification Requirements along with those mentioned in this chapter.

SECTION-B: THE BIDDING DOCUMENTS

2. Cost of Bid Document

Tender document can be purchased from the Accounts Section of SAMEER-CEM located at CIT Campus, 2nd Cross Road, Taramani, Chennai – 600 113 between 10.00 AM and 5.00 PM, on cash payment of Rs. 2500/- (Rupees two thousand five hundred only) on all days except Saturdays, Sundays and public holidays. If the tender document is downloaded from our website <<http://cem.sameer.gov.in>>or <<https://eprocure.gov.in/cppp>>, then Tender fee should be paid along with Technical Bid (EMD & Tender Fee should be paid separately)

3. Contents of Bid Document

The goods required, bidding procedures and contract terms are prescribed in this bid document. The Bidder is expected to examine all instructions, forms, terms ,conditions and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and shall result in rejection of the bid.

4. Amendment to Bid Document

4.1 At any time prior to the deadline for submission of bids, SAMEER-CEM may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the Bid Document by amendment. Such amendments shall form an integral part of bid documents and it shall amount to an amendment of relevant clauses of the Bid Document.

4.2 The prospective bidders are required to keep a watch on the SAMEER-CEM website <<http://cem.sameer.gov.in>> for any amendment to the tender document or clarifications to the queries raised by the bidders in till 01 (one) day prior to the opening of the tender. SAMEER-CEM reserves the right to reject the bids if the bids are submitted without taking into account these amendments/ clarifications. Further, bidders will be fully responsible for downloading the tender document and amendments thereto if, any for their completeness.

4.3 In order to allow prospective bidders to take reasonable time in which to effect the amendment into account in preparing their bids, SAMEER-CEM, at its discretion, may also extend the deadline for the submission of bids.

SECTION - C. PREPARATION OF BIDS

5. Language of Bid

The Bid prepared by the Bidders and all correspondence and documents relating to the bid exchanged by the bidder shall be written in English language only.

6. Documents Comprising the Bid

6.1 The bid is required to be submitted **in two Bid Format(Technical & Commercial bid)**. The bidders shall submit their bids in sealed covers (Tender No. & Due date must be compulsorily mentioned on the envelope containing the bid)

6.2 Detailed Specifications, Catalogues, List of users & Technical Details, Technical Compliance Sheet, Pre-Installation Requirements, payment terms, warranty terms etc., must be submitted along with technical bid.

6.3 Technical Bid shall include the following

- (i) EMD as specified in the invitation to bids
- (ii) MSME/NSC Certificate If,EMD waiver is claimed
- (iii) Tender fee as specified in the invitation to bids
- (iv) Service Support Details Form
- (v) Deviation Statement Form
- (vi) Technical Specification Compliance Statement Form
- (vii) Manufacturer's Authorization Letter
- (viii) Bidder's Performance Statement Form
- (ix) Equipment Data sheet/Technical specification.
- (x) Tender Acceptance Letter duly signed by the bidder

7.Prices

7.1 The Bidder shall indicate the unit price and total price of the item it proposes to supply under the order and enclose it with the price bid. SAMEER-CEM is a Govt funded R&D centre. Please consider quoting special prices applicable to R&D institutions as per your company policies.

7.2 Full Prices in Foreign Currency or in Indian Rupees may be given in the bid for

- i. Near Field Antenna/RF measurement facility (650MHz- 50GHz) - 1no.**
- ii. Shielded chamber with dimensions 8.0m(L) x 3.5m(W) x 3.5m(H) - 1 no.**

7.3 Prices indicated shall be entered separately in the following manner (*For Indigenous and Imported Items*):

- i. For Indigenous Item: Price should be quoted FOR at SAMEER-CEM, Chennai,

inclusive of packing, forwarding, installation and commissioning charges etc.
For Imported item: Price shall be quoted on CIP (Destination port).

- ii. **Taxes:** SAMEER-CEM is registered with Department of Scientific and Industrial Research (DSIR) for the purpose of availing custom duty exemption in terms of Government of India Notification No. 51/96-customs amended to 24/2007-customs dated 1st March 2007. **{approx. 5.20 % duty is applicable under this notification (5% Basic + cess/surcharge)}** and central excise duty exemption in terms of Government Notification no. 10/97-central excise amended to 16/2007-central excise dated 1st March 2007.
- iii. Concessional GST (5%) Rates will be applicable to SAMEER-CEM as per GOI, Ministry of Finance, Notification No. 47/2017-Integrated Tax (Rate) dt. 14/11/2017. It is certified that SAMEER-Centre for Electromagnetics is an Autonomous Institute of the Ministry of Electronics & Information Technology, Govt. of India and it is registered with the (DSIR) Department of Scientific & Industrial Research, Government of India vide their Registration No. F.No.11/354/1997/-TU-V dated 18th March 2019, Valid up to 31.03.2022. It is also certified that the material/goods purchased is required for Research & Development in SAMEER-CEM. Duly signed GST concessional Certificate will be provided along with PO
- iv. We don't issue any 'Form C' or 'Form D'.
- v. If there is no explicit mention of taxes in offer, then quoted price will be *deemed inclusive* of such taxes. **No other charges except those mentioned clearly in the price bid will be paid.**
- vi. Packing, forwarding, documentation, freight and insurance charges and installation charges must be clearly mentioned separately. Vague terms like "packing, forwarding, transportation etc., would be extra" without mentioning the specific amount/percentage of these charges will NOT be accepted. Such offers shall be treated as incomplete and will be rejected.

8. Training

The supplier should provide detailed onsite training at SAMEER-CEM Chennai at free of cost, after installation and commissioning of the said measurement system at SAMEER-CEM. This training shall be to the satisfaction of SAMEER-CEM Scientists.

9. Installation

Installation, commissioning, performance testing and validation (*by the third party*) of Antenna RF Measurement system and Shielded Chamber will be the sole responsibility of the Supplier / Indian Agent. Installation with all infrastructural works have to be done by the supplier. The bid must include pre-requisite for installation of the chamber at SAMEER-CEM. Bidders shall also indicate in their offer the total expected time required for installation/commissioning and testing of measurement system. However, the successful bidder shall arrange and complete the installation of the Antenna RF

Measurement system and Shielded Chamber within 45 days from the date of arrival of the said unit at SAMEER-CEM. **The successful bidder should take all precautionary measures to ensure the safety of the workmen during installation of the measurement system and SAMEER shall not be responsible in case of any eventuality.**

10. Warranty

a) Bidders (OEM/ Agents) must submit offers **with minimum 3 (Three) years** comprehensive and onsite warranty after successful installation of the measurement system in all respects at Site, i.e., SAMEER-CEM, Chennai (which would be considered for the tender evaluation purpose). During this warranty period ,if performance of measurement system degrades due to deterioration of materials like absorbers, RF cables etc., it should be replaced at free of cost.

b) The successful installation date along with the date to be reckoned for start of the warranty period needs to be certified by the vendor & the user scientist after third party validation. **The warranty offered should be unconditional and the vendor should agree to replace or repair at their cost. The spare parts for the repair during warranty period have to be provided by the vendor.**

c) All costs /expenses incurred towards repair/service during warranty period (like courier/Freight, Insurance, Customs etc) shall be reimbursed/borne by supplier / manufacturer to SAMEER. Alternatively, supplier / manufacturer shall take up the total responsibility of courier/Freight, Insurance, Customs etc. for repair/service during warranty period.

11. Validation of the chamber by third Party :

Tests and Validation shall be carried out by the bidder or third party nominated by the bidder. Test and validation shall be conducted by a reputed accredited testing agency as per the standard procedures. While appointing the third party validation Agency, the bidder shall pass instruction to the appointed third party validation Agency to comply and respond to the advice/queries made by SAMEER-CEM directly with the validation agency in connection with the validation. The third party agency must submit the inspection certificate in Original together with the Declaration Certificate (as per Format mentioned in Annexure-VI) to SAMEER-CEM.

12. Delivery Period:

a) In case of foreign suppliers, the firm delivery period is 180 days from the date of design approval by SAMEER-CEM and after opening irrevocable Letter of Credit (LC) by sight. **However, the successful bidder shall submit the design plan within 30 days on receipt of Purchas order. No Part shipment is permitted.**

b) In case of **Indigenous suppliers**, the firm **delivery period is 180 days** after issue of

Purchase Order. Delivery is to be made at SAMEER-CEM, Chennai. Delivery must be on FREIGHT PAID BASIS for despatch by Road.

c) The bidder must provide information regarding mode of shipment whether it is by **Air/Sea/Road/Rail.**

13. Bid Currencies

Prices shall be quoted in Indian Rupees (INR) or in freely convertible foreign currency preferably in **USD (\$), Euro (€), Yen (¥), GBP (£) and SFr (CHF).**

14. Documents Establishing Bidder's Eligibility and Qualifications

The bidder shall furnish, as part of its bid, documents establishing the bidder's eligibility to bid and their qualification to perform the contract if the bid is accepted.

15. Documents Establishing Goods' Eligibility and Conformity to Bid Document

15.1 The documentary evidence of the chamber eligibility shall consist of a statement on the **country of origin** of the goods and services offered which shall be confirmed by a **certificate of origin at the time of shipment.**

15.2 Specifications are basic essence of the product. It must be ensured that the offers are strictly as per our tendered specifications. At the same time, it must also be kept in mind that merely copying our specifications in their quotation shall not make firms eligible for consideration. The documentary evidence of conformity of the Antenna/RF measurement system and Shielded chamber to the Bid Document may be in the form of literature, drawings and data, and shall consist of:

- (i) A detailed description of the essential technical and performance characteristics Antenna/RF measurement system and Shielded chamber
- (ii) A list giving full particulars, including available sources and current prices, of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Antenna/RF measurement system and Shielded chamber for a period of 10 years, following commencement of the use of the goods by the Purchaser; and
- (iii) An item-by-item commentary on the SAMEER-CEM Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the \ Technical Specifications.

16. Period of Validity of Bids

Bids must remain valid for at least **180 days** after the date of bid opening prescribed by SAMEER-CEM. A bid valid for a shorter period may be rejected by the Purchaser as non-responsive.

16.1 In exceptional circumstances, SAMEER-CEM may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (fax or e-mail). The bid security shall also be suitably extended, if applicable.

17. Patent Right & IPR Laws:

The supplier shall indemnify SAMEER-CEM against all third-party claims of infringement of Patent, Trademark or Industrial Design Rights arising from the use of Goods or any part thereof in the Purchaser's country (INDIA). The vendor should be sure about his claim on the ownership of technology and total compensation in the event of a claim should be paid to the buyer in case of patent infringement.

18. Right to Information Act.2005

The bidder may indicate if any information in his tender includes information of commercial confidence, trade secrets or intellectual property, the disclosure of which would harm the competitive position of their company.

19. Format of Bid

The tenders are invited on two bid systems i.e. the qualifying bid (technical bid including tender fee and EMD) and then the price bid:

19.1 The tender form for Technical bids shall be complete in all respects should be submitted in sealed cover superscripted - **“Technical Bid – Supply, Installation, Commissioning , Performance testing and Validation of Antenna/RF Measurement system and Shielded Chamber.**

19.2 The tender form for price bid shall be complete in all respects should be submitted in sealed cover superscribed - **“Price Bid –Supply, Installation, Commissioning , Performance testing and Validation of Antenna/RF Measurement system and Shielded Chamber. ”**

19.3 The above two sealed covers should be put together in another big cover/envelope which should be sealed with wax. The cover shall be superscribed as **“Tender No:....., dated: & Name of Tender “Supply, Installation, Commissioning , Performance Testing and Validation of Antenna/RF Measurement system and Shielded Chamber”** and addressed to

The Programme Director,
Society for Applied Microwave Electronics Engineering and
Research(SAMEER) -
Centre for Electromagnetics, CIT Campus, 2nd Cross Road, Taramani,
Chennai - 600 113, Tamil Nadu, India.

Further, the sentence "NOT TO BE OPENED" before due date and time of tender opening, should also to be indicated on this envelope. If the outer big envelope is not sealed and marked properly as above, SAMEER will not take any responsibility for its misplacement, premature opening etc. The bid document shall be submitted in the above mentioned address latest **by 14.00 hrs. on 17th July,2020.**

20. The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. All pages of the bid, except for un-amended printed literature, shall be initialled /endorsed by the person or persons signing the bid.

20.1 Any interlineations, erasures or overwriting shall be valid only if the person or persons signing the bid initial them.

20.2 The Bidder shall furnish information on commissions or gratuities, if any paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract as per the bid form.

SECTION - D. SUBMISSION OF BIDS

21. BID SECURITY (EARNEST MONEY DEPOSIT):

21.1 The bidders shall furnish as part of the bid, a Bid Security (EMD) for an amount of **Rs.28,75,500/- (Rupees twenty eight lakhs seventy five thousand and five hundred only)** in the form of Demand Draft/ Banker Cheque from any nationalized Bank in favour of "SAMEER - Centre for Electromagnetics" payable at Chennai. The EMD will bear no interest whatsoever. The EMD & Tender fee should be enclosed with the Technical Bid.

21.2 The bid security is to protect SAMEER against the risk of bidder's conduct, which warrant the bid security's forfeiture.

21.3 In case the Bidder claims for waiver of EMD, the bidder shall provide documentary proof of being registered with the National Small Industries Corporation (NSIC)/MSME or the concerned Ministry or Department as per Rule 170 (i) of GFR 2017 of Government of India. The registration must remain valid till the Bid Validity period. **In case, the bid is submitted as an Indian agent of a foreign principal and the eligibility criteria conditions were met through foreign principal, then the EMD Exemption cannot be claimed under the MSME status of Indian agent. However, EMD exemption can be claimed by direct Indian subsidiary of foreign company if, registered with MSME**

21.4 Bids without Earnest Money or documentary evidence for waiver of the same as indicated above shall be summarily rejected as non-responsive.

21.5 Unsuccessful bidder's EMD will be returned within 30 days from the date of placement of order to the successful bidder.

21.6 The EMD of successful bidder will be retained as Retention Money and the same will be returned after submitting the Bank guarantee.

21.7 No interest is payable on the EMD.

21.8 The bid security(EMD) may be forfeited:

- (a) If a bidder withdraws his bid during the period of bid validity or makes modifications to his tender which are not acceptable to SAMEER-CEM
- (b) If the bidder fails to sign the contract and does not furnish the performance security.
- (c) Failure to full fill the contract terms & conditions

21.9 Fax or e-mail bids will be rejected.

22. Deadline for Submission of Bids

22.1 Bids must be received at SAMEER-CEM in the address specified not later than the time and date specified in the NIT. In the event of the specified date for the submission of Bids being declared a holiday for SAMEER-CEM, the Bids will be received up to the appointed time on the next working day.

22.2 SAMEER-CEM may, at its discretion, extend this deadline for submission of bids by amending the bid documents.

23. Late Bids

Any bid received after the deadline for submission of bids prescribed by SAMEER-CEM, will be rejected and/or returned to the Bidder.

24. Modifications and Withdrawal of Bids

The Bidder may modify or withdraw its bid after the submission of bid provided that written notice of the modification or withdrawal is received by SAMEER-CEM prior to the deadline prescribed for submission of bids.

24.1 No bid may be modified subsequent to the deadline for submission of bids.

24.2 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the bid form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security

SECTION- E: OPENING AND EVALUATION OF BIDS

25. Opening of Bids

25.1 SAMEER-CEM through its "TENDER OPENING COMMITTEE (TOC)" will open bid in the presence of Bidders/representatives who choose to attend, as per the schedule given in invitation to bids.

25.2 Bidders interested in participating in the bid opening process, should depute their representatives along with an authorization letter to be submitted to SAMEER-CEM (Tender Opening Committee) at the time of bid opening as mentioned in the NIT.

25.3 The Bidders' representatives who are present shall sign the bid opening attendance sheet evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for SAMEER-CEM, the Bids shall be opened at the appointed time and location on the next working day.

25.4 The bidder's names, bid modifications or withdrawals, specifications, and the presence or absence of requisite bid security and such other details, TOC at its discretion, may consider appropriate, will be announced at the bid opening meeting.

26. Bids that are received late shall not be considered for further evaluation, irrespective of the circumstances.

26.1 If any correction in the price quoted in the tender in words and/or figures shall be encircled in red ink by the bidders/representative and signed. The members of the tender opening committee shall endorse this.

27. Clarification of Bids

27.1 To assist in the examination, evaluation and comparison of bids, the Purchaser may, at its discretion ask the bidder for any clarification(s) of its bid/offer. The request for clarification and the response shall be in writing and no change in the prices or substance of the bid shall be sought, offered or permitted. **However, no post Bid clarifications at the initiative of the Bidder shall be entertained/considered.**

27.2 Any clarification and confirmation from the vendor after opening of the bid should not result in modification of their original offer in order to suit or meet the tendered specifications which would not be considered and accepted. Technical evaluation will be done strictly as per the details mentioned by the vendor in original offer with respect to the tendered specifications of SAMEER-CEM.

27.3 Any item not quoted in their original offer will not be accepted even though the

bidder is willing to provide the materials + the unmentioned items at the same cost.

27.4 Any confirmation/clarification/modification by the bidder against the letter from SAMEER-CEM for communicating them the technical points of rejection would not make the firm technically suitable and their offer will stand as technically rejected. **Technical evaluation will be done strictly as per original offer submitted by the vendor with respect to the tendered specifications of SAMEER-CEM.**

28. Preliminary Examination

28.1 The TOC will examine the bids to determine whether they are complete, whether required tender fee and EMD have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

28.2 The TOC shall examine the bids to confirm that all documents and technical documentation as requested have been provided, and to determine the completeness of each document submitted

(a) All the tenders received will first be scrutinized to see whether the tenders meet the basic requirements as incorporated in the NIT. The tenders, which do not meet the basic requirements, are to be treated as unresponsive and ignored. The following are some of the important points, for which a tender may be declared as unresponsive and to be ignored, during the initial scrutiny:

- (i) The Bid is unsigned.
- (ii) The Bidder is not eligible.
- (iii) Tender fee and EMD are not submitted.
- (iv) The Bid validity is shorter than the required period.
- (v) The Bidder has quoted for goods manufactured by a different firm without the required authorization letter from the manufacturer/OEM.
- (vi) Bidder has not agreed to give the required performance security.
- (vii) The goods quoted are sub-standard, not meeting the required specification etc.
- (viii) Against the schedule of Requirement (incorporated in the tender enquiry), the bidder has not quoted for the entire requirement as specified in that schedule.
- (ix) The bidder has not agreed to some essential condition(s) incorporated in the tender enquiry.

29. Prior to the detailed evaluation, the TOC will determine the substantial responsiveness of each bid to the bidding documents. For purposes of this clause, a substantive responsive bid is one, which conforms to all terms and condition of the bidding documents without material deviations, reservations or omissions. A material deviation, reservation or omission is one that:

- (a) affects in any substantial way the scope, quality or performance of the items and Related Services specified in the Contract; or
- (b) limits in any substantial way, inconsistent with the Bidding Documents, the Purchaser's rights or the Bidder's obligations under the Contract; or
- (c) If rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids.

29.1 The TOC determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

29.2 If a bid is not substantially responsive, it will be rejected by the TOC and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation or omission.

30. Non-conformities between the figures and words of the quoted price

30.1 Any discrepancy between quoted prices in figures and that in words, if noted will be sorted out in the following manner:

(a) If there is a discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the TOC there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.

(b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected.

(c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

30.2 If there is such discrepancy in a bid, the same is to be conveyed to the bidder with target date on the above lines and if the bidder does not agree to the observation of the TOC, the tender is liable to be ignored and its Bid Security may be forfeited.

31. Non-conformity, Error and Omission

31.1 Provided that a Bid is substantially responsive, the TOC may waive any non-conformities or omissions in the Bid that do not constitute a material deviation.

31.2 Provided that a bid is substantially responsive, the TOC may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

32. Examination of terms & Conditions, technical Evaluation

32.1 The TOC shall examine the Bid to confirm that all terms and conditions specified in the tender document have been accepted by the Bidder without any material deviation or reservation including the terms & conditions mentioned.

32.2 Prior to the detailed evaluation, the TOC determine the *substantial responsiveness* of each bid to the Bid Document as mentioned. Deviations from or objections or reservations to critical provisions such as those concerning Bid Security/ Performance Security, Warranty, Taxes& Duties will be deemed to be a material deviation. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

32.3 TOC shall evaluate the technical aspects of the Bid submitted to confirm that all requirements specified in Schedule of Requirement of the Bidding Documents have been met without any material deviation or reservation.

32.4 If, after the examination of the terms and conditions and the technical evaluation with respect to the tendered technical specification of SAMEER-CEM, the Purchaser determines that the Bid is not substantially responsive in accordance with ITB, it shall reject the Bid.

32.5 SAMEER-CEM may waive any minor informality, non-conformity, or irregularity in a bid, which does not constitute a material deviation, provided such a waiver, does not prejudice or affect the relative ranking of any Bidder.

32.6 After downloading, the language of standard clauses etc. mentioned in this 'Bid Document' should not be tampered with/ changed/modified in any manner whatsoever. If any such modification etc. comes to our knowledge at any stage, the bid shall be rejected immediately and EMD shall also be forfeited.

33. Evaluation & Comparison of Bids.

33.1 Conversion to Single Currency: -To facilitate evaluation and comparison, the TOC will convert all bid prices expressed in the amounts in various currencies in which the bid prices are payable to Indian Rupees at the selling exchange rate established by the Reserve Bank of India <www.rbi.org> prevailing rate on the date of opening the Price bid.

33.2 For the bids surviving the technical evaluation which have been found to be substantially responsive shall be evaluated and compared.

33.3 To evaluate a Bid, the TOC shall only use all the factors, methodologies and criteria defined below. No other criteria or methodology shall be used.

34. PROCESS OF EVALUATION (BETWEEN INR QUOTE & FOREIGN CURRENCY QUOTE): -

(a) For goods manufactured in India: -

1. The price of the item shall be quoted on the basis F.O.R destination (delivered at SAMEER-CEM), as specified in the bidding document.

(i) GST and other taxes like excise duty etc., which will be payable on the goods of the contract is awarded. SAMEER-CEM is not entitled for issuing C&D form.

(ii) All Charges involved for inland transportation, insurance, Road Permit if required for delivering the goods at the desired destination i.e., F.O.R, SAMEER-CEM, Chennai, Tamil Nadu.

(iii) The installation, training, accommodation and travel charges if any

(b) The goods manufactured in abroad: -

(i) The price of the items shall be quoted on the basis of CIP (Destination Port) as specified in the bidding document.

(ii) Installation & Training charges if any.

(iii) In case, where the foreign principal quotes and he does not have an agent in India then the foreign service engineer visits and AMC charges should be provided. The foreign service engineer's visit during installation would be added for the purpose of cost comparison and selection.

(c) (i) Indigenous quote:

The final landing cost of items, freight, forwarding, insurance, taxes etc. shall be the basis of evaluation.

(ii) Foreign quote:

The CIP price shall be the basis of evaluation.

(iii) Foreign Vs. Indigenous quote:

The final landing cost of purchase taking into account, freight, forwarding,

insurance, taxes etc, customs clearance charges, Bank/LC charges, transportation upto SAMEER- CEM

35. PROCESS OF EVALUATION: (BETWEEN TWO OR MORE FOREIGN CURRENCY QUOTE):-

SAMEER-CEM shall evaluate the bids for deciding a technically suitable lowest quoting would be on CIP (Destination Port).

35.1 If the bidder quoted certain optional items, these items should not be taken into consideration for the evaluation of the bid unless the specifications of the optional item quoted by the bidder are part of original indented specification.

36. Contacting SAMEER-CEM

36.1 No bidder shall contact SAMEER-CEM or concerned scientist on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of SAMEER-CEM, it should do so in writing.

36.2 Any effort by a bidder to influence SAMEER-CEM in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid.

SECTION-F: PAYMENT TERMS

37. Payment Terms

37.1 Payment for Indigenous supplier: 100% payment shall be made by the SAMEER-CEM against Supply, installation, Commissioning, Performance testing and validation of Antenna/RF measurement system and Shielded Chamber at SAMEER-CEM in good condition and to the entire satisfaction of the user scientist and on production of unconditional performance bank guarantee for 5% of the PO value .

a) Successful bidder is requested to furnish the following details for making payment.

- (i) 11digit core banking Account Number.
- (ii) Type of Account (Saving/Current)
- (iii) Name of Account Holder
- (iv) Name of Bank & Branch
- (v) IFSC Code Number
- (vi) MICR Number

37.2 Payment for Foreign Suppliers:

70% (seventy percent) of the payment will be released by Irrevocable Letter of Credit(BY SIGHT) **on presentation of complete and clear shipping documents.** Balance 30% will be released after satisfactory installation, commissioning testing and validation of the antenna/RF measurement system and **Shielded Chamber** at site after adjusting

liquidated damages, if any. **The above payment is subject to submission of Performance Bank Guarantee (PBG) by the successful bidder for 10% of the purchase order value covering the period of warranty + 60 days within 21 days after satisfactory installation, commissioning testing and validation of the Antenna/RF measurement system and Shielded Chamber at SAMEER CEM.**

37.3 Commission for Indian Agent

Bidders must clearly indicate in their offer whether they have any Agent in India. If so, bidders must furnish the names and addresses of their agents and state clearly whether agents are authorised to receive any commission. The rate of commission amount must be indicated, which will be payable only in non-convertible Indian currency. Unless otherwise specified it will be assumed that Agency commission has been included in the offered price. If there is no mention about the commission amount, it will be assumed that no commission is involved against this purchase. Commission to Indian Agents shall be released only after successful installation & commissioning by the Bidder/Indian agent.

37.4 No outright advance payments will be made to the firms.

- (i) No extra charge will be paid by SAMEER-CEM,. Supplier shall take care for all transit risks for the safe delivery of the item.
- (ii) The L/C will be confirmed at the suppliers cost, if requested specifically by the supplier. **All bank charges abroad shall be to the account of the beneficiary i.e. supplier and all bank charges in India shall be to the account of the opener i.e. purchaser.** If L/C is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges thereof would be to the suppliers' account. Payment of local currency portion shall be made in Indian Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed.

SECTION - G: PENALTY CLAUSE

38. Penalty clauses: -

38.1 Penalty (Liquidated Damages) @ **0.5%** of basic price per week will be deducted from Manufacturer's/ Indian Agent's Bill for delay in Delivery & Despatch beyond Delivery dates (as extended by SAMEER-CEM in Purchase Order and Letter of Credit Schedule). Maximum deduction for failing to deliver within SAMEER-CEM approved delivery period & extensions will be limited to **5%** of Ex-works Value (equivalent in Indian Rupees) for non-fulfilment of delivery deadlines and any other contractual obligations as per Purchase Order. Once the maximum is reached, SAMEER-CEM may consider termination of the Contract.

38.2 Delay in Installation beyond contractual deadline will result in forfeiture of EMD and Performance Bank Guarantee.

38.3 For any clarification, please mail at purchase.chn.sameer@nic.in

38.4 **Corrigenda:** Corrigenda, if any, to this tender will be published on our website <http://cem.sameer.gov.in>. The bidders are advised to check our website before submitting the bid.

38.5 PERFORMANCE GUARANTEE

The successful bidder has to give Performance Bank Guarantee (PBG) in the form of Demand Draft / Fixed Deposit Receipt from an Indian Nationalised bank / a counter Letter of Credit (LC) (in case of foreign order) **for 10 % of Purchase Order Value. Performance Bank Guarantee should remain valid for a period of sixty days beyond the warranty period.**

38.6. SAMEER-CEM Clearing Agent in India for imported consignment

M/s. BalmerLawrie& Co Ltd.,
628, Anna Salai, Teynampet,
Chennai-600 018, Tamil Nadu, India
Phone 91-44- 24302463 - 24348104
E-mail: thiyagarajan.j@balmerlawrie.com , baskar.m@balmerlawrie.com
Mobile: 9940015440 / 9551324005

38.7 Delivery & Documents:

Details of Shipping and other Documents to be furnished by the Supplier are

(i) For Goods manufactured within India

Within 24 hours of dispatch, the supplier shall notify SAMEER-CEM the complete details of dispatch and also supply following documents by registered post / speed post and copies thereof by FAX or e-mail.

(ii) For Goods manufactured abroad

- i) Supplier's original invoice giving full details of the goods including quantity, value, and so on;
- ii) Packing list;
- iii) Certificate of country of origin of the goods to be given by the seller or a recognized chamber of commerce or another agency designated by the local Government for this purpose;
- iv) Certificate of pre-dispatch inspection by the purchaser's representative; if applicable
- v) Manufacturer's test certificate and guarantee;
- vi) Certificate of insurance;
- vii) Bill of lading/ airway bill/ rail receipt or any other dispatch document, issued by a Government agency (like the Department of Posts) or an agency duly

authorized by the concerned Ministry/Department, indicating:

- a) Name of the vessel/carrier;
- b) Bill of lading/airway bill;
- c) Port of loading;
- d) Date of shipment;
- e) Port of discharge and expected date of arrival of goods; and
Any other document(s) as and if required in terms of the contract.

Note:

1. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)
2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses

38.8 Insurance:

(i) The goods supplied under the contract, shall be fully insured in a freely convertible currency against loss or damage. Insurance liabilities will be as per the basis of delivery point/INCOTERMS in case of imported items, the supplier shall arrange and pay for air/marine insurance making, SAMEER-CEM as beneficiary.

38.9 Pre-bid meeting

To provide a level playing field, pre-bid meeting will be held at the address mentioned in the tender schedule for clarifying issues/clearing doubts, if any, about the specifications and other allied technical/commercial details of the **Antenna/RF measurement system** and **Shielded Chamber** and its related accessories projected in the bidding document. The date, time and place of the pre-bid meeting are indicated in the tender schedule. Bidders are requested to submit written queries in advance of the meeting either through e-mail <ramamoorthi.sameer@nic.in, purchase.chn.sameer@nic.in> or registered speed post to the address mentioned above. After the meeting, the techno-commercial requirements may be revised if, considered necessary by way of a formal corrigendum and shared with all the prospective bidders.

COVER-I(Technical Bid)

Format for Technical Bid

Technical specifications of Near Field Antenna/RF measurement system (650MHz-50GHz),Shielded chamber, equipments and associated accessories.

Sr. no.	System Requirement	Description
1.	Frequency bands	<ul style="list-style-type: none">• 650MHz- 6GHz• 6 GHz- 18GHz• 18GHz - 50 GHz <p>The measurement facility may be a single unit covering all the frequency bands or separate units for covering the respective band.</p>
2.	Technology	Near-field <i>(Preferably multi-probe configurations.)</i>
3.	Measurement capabilities	
3.1	Basic Antenna Measurement:	Facility should be capable for the evaluation of following antenna parameters <ul style="list-style-type: none">• Radiation pattern (2D & 3D)• Radiation pattern in any polarization (linear, dual linear or circular)• Gain• Directivity• Beamwidth• Cross polar discrimination• Antenna efficiency

		<ul style="list-style-type: none"> • Axial Ratio <p><i>(Facility should be capable for performing Single and Multiple frequency sweep measurements)</i></p>																					
3.2	Array Antenna Measurement	<ul style="list-style-type: none"> • Side lobe levels • Gain <p><i>(Single and Multiple frequency sweep measurements)</i></p>																					
3.3	Over The Air (OTA) testing capability	Total Radiated Power(TRP) Total Isotropic Sensibility(TIS) and Effective Isotropic Radiated Power (EIRP) <i>(Single and Multiple frequency sweep measurements)</i>																					
3.4	MIMO measurements	Massive MIMO measurement capability <i>(Single and Multiple frequency sweep measurements)</i>																					
4	Max. size of Device under test (DUT)	<ul style="list-style-type: none"> • 45cm X 45cm over the frequency of operation • Extendable up to 2.7 mtrs x 45 cm by incorporating Linear scanner. 																					
5	Max. weight of DUT(centered load)	<ul style="list-style-type: none"> • Maximum of 10 kg with non-metallic mast • Maximum of 50 kg with metallic mast (Heavy DUT mast) 																					
6	Dynamic range	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Min.(dB)</th> <th style="text-align: center;">Typ.(dB)</th> </tr> </thead> <tbody> <tr> <td>• 650MHz - 6GHz :</td> <td style="text-align: center;">65</td> <td style="text-align: center;">70</td> </tr> <tr> <td>• 6GHz - 18GHz :</td> <td style="text-align: center;">55</td> <td style="text-align: center;">60</td> </tr> <tr> <td>• 18GHz - 25GHz :</td> <td style="text-align: center;">60</td> <td style="text-align: center;">65</td> </tr> <tr> <td>• 25GHz - 35GHz :</td> <td style="text-align: center;">55</td> <td style="text-align: center;">60</td> </tr> <tr> <td>• 35GHz - 40GHz :</td> <td style="text-align: center;">50</td> <td style="text-align: center;">55</td> </tr> <tr> <td>• 40GHz - 45GHz :</td> <td style="text-align: center;">45</td> <td style="text-align: center;">50</td> </tr> </tbody> </table>		Min.(dB)	Typ.(dB)	• 650MHz - 6GHz :	65	70	• 6GHz - 18GHz :	55	60	• 18GHz - 25GHz :	60	65	• 25GHz - 35GHz :	55	60	• 35GHz - 40GHz :	50	55	• 40GHz - 45GHz :	45	50
	Min.(dB)	Typ.(dB)																					
• 650MHz - 6GHz :	65	70																					
• 6GHz - 18GHz :	55	60																					
• 18GHz - 25GHz :	60	65																					
• 25GHz - 35GHz :	55	60																					
• 35GHz - 40GHz :	50	55																					
• 40GHz - 45GHz :	45	50																					

		<ul style="list-style-type: none"> • 45GHz - 50GHz : 35 40
7	Over sampling	Measurement system should be incorporated with oversampling option for near-field measurement.
8	Linear Scanner Option	Linear Scanner provision must be incorporated additionally for enabling the large (long column) antenna measurements like BTS.
8.1	Linear Scanner Details	<p>Geometry : Cylindrical</p> <p>Standard Rail length : 6.5 meters</p> <p>Antenna maximum weight : 75kg</p>
9	System configurations	<p><u>Software Requirements</u></p> <p>Preliminary settings, Measurement control, Data acquisition and advanced post processing modules,</p> <p>System Calibration, Probe correction options</p> <p>Near-field/far-field transform</p> <p>OTA and Massive MIMO measurement features</p> <p>LTE FDD & LTE TDD, 1st 5G NR FR1(Sub 6GHz) aggregated carrier</p>
10	Equipments	<ul style="list-style-type: none"> • AUT/DUT Positioner • Probe arrays (Both vertical and horizontal) for near field scanning • Power and control unit • Tx and Rx amplification units along with the Instrumentation rack
10.1	OTA Equipments	<ul style="list-style-type: none"> • Active switching unit • Transfer switching unit

		<ul style="list-style-type: none"> • I/O switch port 																
10.2	Equipment compatibility	<p>The measurement system should be compatible with the following Network Analyzers</p> <ul style="list-style-type: none"> i. Keysight E8363B Network Analyzer ii. Keysight E8364B Network Analyzer iii. Keysight N5244B PNA-X Network Analyzer <p>The measurement system should also be compatible with Radio Communication Tester.</p>																
11	Shielded Chamber:																	
		The facility must be protected from external electromagnetic interference by installing an appropriate shielded chamber lined with absorbers.																
11.1	Chamber Dimensions :	8.0m(L) x 3.5m(W) x 3.5m(H)																
11.2	Shielding effectiveness:	<p>Shielding effectiveness for different frequency bands;</p> <table border="0"> <thead> <tr> <th>Frequency</th> <th>Shielding Effectiveness (dB)</th> </tr> </thead> <tbody> <tr> <td>650MHz - 6GHz</td> <td>≥ 80</td> </tr> <tr> <td>6GHz - 18GHz</td> <td>≥ 80</td> </tr> <tr> <td>18GHz - 40GHz</td> <td>≥ 80</td> </tr> <tr> <td>40GHz - 50GHz</td> <td>≥ 80</td> </tr> </tbody> </table> <p>Vendor needs to demonstrate the following Shielding Effectiveness at the following discrete frequency :</p> <table border="0"> <thead> <tr> <th>Frequency</th> <th>Shielding Effectiveness (dB)</th> </tr> </thead> <tbody> <tr> <td>600MHz</td> <td>≥90</td> </tr> <tr> <td>4GHz</td> <td>≥100</td> </tr> </tbody> </table>	Frequency	Shielding Effectiveness (dB)	650MHz - 6GHz	≥ 80	6GHz - 18GHz	≥ 80	18GHz - 40GHz	≥ 80	40GHz - 50GHz	≥ 80	Frequency	Shielding Effectiveness (dB)	600MHz	≥90	4GHz	≥100
Frequency	Shielding Effectiveness (dB)																	
650MHz - 6GHz	≥ 80																	
6GHz - 18GHz	≥ 80																	
18GHz - 40GHz	≥ 80																	
40GHz - 50GHz	≥ 80																	
Frequency	Shielding Effectiveness (dB)																	
600MHz	≥90																	
4GHz	≥100																	

		10GHz ≥ 100 18GHz ≥ 100 40GHz ≥ 90
12	Accessories	<ul style="list-style-type: none"> • Standard Gain Antennas covering the total frequency band of 0.65GHz to 50 GHz with calibrated gain data. • RF cables, connectors, adapters and associated accessories for performing the tests over the frequency bands 0.65GHz to 50GHz • Metallic mast (Mast for heavy AUT/DUT), Non-Metallic mast • Provisions for mounting the AUT/other units • PC to Central Instruments <p>PC with GPIB card; 22" flat screen monitor</p> <p>Minimum Requirements:</p> <p>8 GB RAM; 80GB Hard Disk; Windows 7 or later 64 bit OS; 1280 X 800 pixels resolution, 4 USB ports</p> <ul style="list-style-type: none"> • Laptop support interface <p>Heavy DUT support interface option must be provided</p> <ul style="list-style-type: none"> • Carrier Aggression dual Pol antenna LTE 5G NR FR1(Sub 6GHz) • Provision for monitoring/viewing the tests online
13	Services	<ul style="list-style-type: none"> • Installation • Training • Warranty for 3 years • AMC 5 Years

2.2 OTA Performance Measurement Specifications

ACCORDING TO CTIA SPECIFICATIONS

TRP accuracy free space	<± 2.5dB
TRP accuracy talk position	<± 2.5dB
TRP repeatability	± 0.5 dB
Typical TRP measurement time	< 5 min
TIS accuracy free space	<± 2.5dB
TIS accuracy talk position	<± 2.5dB
TIS repeatability	± 0.5 dB
Typical TIS measurement time	30 min to 60 min

2.3 OTA Performance Measurement Specifications

CTIACOMPARABLE

<i>GSM/WCDMA protocols:</i>	
TIS based on Rx Level accuracy	<± 3.2 dB
TIS based on Rx Level repeatability	<± 2 dB
TIS based on Rx Level measurement time (Typically)	< 10 min
<i>CDMA2000 protocol:</i>	
TIS optimized accuracy	<± 2.0 dB
TIS optimized repeatability	<± 0.5 dB Typical
TIS optimized measurement time	< 15min

2.4 Peak gain accuracy requirements

PEAK GAIN ACCURACY	10dBiAUT	20dBiAUT	30dBiAUT
0.65 GHz-0.8GHz	±1.5 dB	N.A	N.A
0.8GHz-1GHz	±1.1 dB	N.A	N.A
1GHz-6GHz	±0.8 dB	±0.7dB	N.A
6GHz-18GHz	±0.9dB	±0.7dB	±0.6dB
18 -35GHz	±0.9dB	±0.7dB	±0.6dB
35 -50GHz	±0.9dB	±0.7dB	±0.6dB
Peakgainrepeatability	±0.3dB	±0.3dB	±0.3dB

Vendor should demonstrate the 'Peak gain accuracy' values using a calibrated antenna

2.5 -10dB Side Lobes Accuracy

- 10dB SIDE LOBES ACCURACY	10dBiAUT	20dBiAUT	30dBiAUT
0.65 GHz-0.8GHz	±1.6dB	N.A	N.A
0.8GHz-1GHz	±1.1 dB	N.A	N.A
1GHz-6GHz	±0.9dB	±0.6dB	N.A
6GHz-16GHz	±0.8 dB	±0.5 dB	±0.4 dB
16GHz-18GHz	±1.0 dB	±0.6 dB	±0.4dB
18-35 GHz	N.A	N.A	N.A
35-50GHz	N.A	N.A	N.A

Vendor should demonstrate the '-10dB Side Lobes Accuracy' values using a calibrated antenna

2.6. -20dB Side Lobes Accuracy

- 20dB SIDELOBES	10dBiAUT	20dBiAUT	30dBiAUT
0.65 GHz - 0.8 GHz	±4.5dB	N.A	N.A
0.8 GHz - 1 GHz	±3.5dB	N.A	N.A
1 GHz - 6 GHz	±2.7dB	±0.9dB	N.A
6GHz-16GHz	±2.4dB	±0.8 dB	±0.5 dB
16GHz-18GHz	±3.2dB	±1.0dB	±0.6dB
18 - 35 GHz	N.A	N.A	N.A
35 - 50 GHz	N.A	N.A	N.A

Vendor should demonstrate the '-20dB Side Lobes Accuracy' values using a calibrated antenna

Technical Terms and Conditions		
i)	Review/ Inspection Requirements	<ul style="list-style-type: none"> • Supplier shall provide the details of Antenna/RF measurement system and Shielded Chamber for review by SAMEER. • Site Inspection and acceptance should be based on mutually agreed terms and conditions.
ii)	Warranty clause	<ul style="list-style-type: none"> • Warranty of the Antenna/RF measurement system, Shielded Chamber and associated accessories will be for a period of 3years. During this period, if performance of facility degrades due to deterioration of materials like absorbers, RF cables etc. should be replaced free of cost.

iii)	Compliance certificates	<p>Supplier shall provide compliance certificate for Antenna/RF measurement system, Shielded Chamber and associated accessories.</p> <p>* Supper shall provide performance certificate of at least one recently installed Antenna/RF measurement and system Shielded chamber in India along with technical bid. Vendor shall give a presentation on their technical bid proposal.</p> <ul style="list-style-type: none"> • SAMEER technical team can visit a similar measurement facility installed by the supplier (in India) to assess the performance and service. • Delivery will be made within 180 days from the date of the drawing approval given by SAMEER. However before shipment, approval from SAMEER need to be taken. Delivery means goods arriving on site.
iv)	AMC(optional)	<ul style="list-style-type: none"> • The supplier shall take up AMC contract for a minimum period of 5 years after warranty period. • An annual maintenance contract shall be proposed which includes: • Yearly onsite visit for test and verification Antenna/RF measurement system, Shielded Chamber and associated accessories. Faulty and worn parts shall be replaced. • AMC charges per year shall be quoted in the price bid
v)	Factory Acceptance Test	3 scientists will be deputed from SAMEER for witnessing factory acceptance test at supplier's premises for a minimum of 5 working days. In case no one is deputed from SAMEER due to unforeseen

		problems, an integrated test report shall be submitted by the supplier before dispatching the system.
vi)	Training	Training for SAMEER scientists for 5 working days shall be provided at SAMEER.

Technical Bid shall include the following

- a. EMD as specified in the invitation to bids
- b. MSME/NSC Certificate If, EMD waiver is claimed
- c. Tender fee as specified in the invitation to bids
- d. Service Support Details Form
- e. Deviation Statement Form
- f. Technical Specification Compliance Form
- g. Manufacturer's Authorization Letter
- h. Bidder's Performance Statement Form
- i. Equipment Data sheet/Technical specification
- j. Tender acceptance letter duly signed by the bidder

I/We certify that all the terms and conditions of the tender documents are acceptable to us.

Signature of the authorized person

Name :

Designation :

Company Seal :

Cover-II (Price)

Format for Price Bid

IMPORTANT

Bidder is required to submit the price bid in the given format on their LETTER HEAD.

ITEM	DESCRIPTION	QUANTIY	PRICE IN INR	PRICEIN (Name of the currency)
1	Near Field Antenna/RF measurement facility (650MHz-50GHz)	1		
2	Shielded chamber with dimensions 8.0m(L) x 3.5m(W) x 3.5m(H)	1		
3	Any other related Accessories			
1.	TAXES AND DUTIES APPLICABLE ON ITEMS			
	I			
	II			
	III			
	IV			
2.	INSURANCE			
3.	Installation, Commissioning & Performance Testing charges			
4	Commission for Indian Agent			
5	Third Party validation			
	TOTAL AMOUNT			
	TOTAL AMOUNT (IN WORDS)			

Signature of the Manufacturer/authorized agent

Name:

Company Seal:

Date :

Place :

ANNEXURE -I

MANUFACTURER'S AUTHORIZATION LETTER

Dated-----

To
The Programme Director
SAMEER-Centre for Electromagnetics
CIT Campus, 2nd Cross Road,
Taramani
Chennai - 600 113
INDIA.

Dear Sir:

We _____ who are established and reputed manufacturers of having factories at _____ (*address of factory*) do hereby authorize M/s. _____ (*Name and address of Agent*) to submit a bid, negotiate and receive the order from you against your tender enquiry.

No company or firm or individual other than M/s _____ is authorized to bid and conclude the contract in regard to this business.

We hereby extend our full guarantee and warranty as per the requirement of SAMEER-CEM mentioned in the tender document for the goods and services offered by the firm.

Yours faithfully,

(Name)
(Name of
manufacturers)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to bind the manufacturer. It should be included by the Bidder in its techno-commercial un priced bid.

ANNEXURE -II

BIDDER'S PERFORMANCE STATEMENT FORM

(For a Period of Last 5 Years)

Order placed by (full address of purchaser)	Descripti on and quantity of ordered similar Antenna/ RF measure ment system and Shielded Chamber	Order No and Date	Price	Date of Completi on of delivery as per Contract/ Actual	Remarks indicating reasons for late delivery, if any	Has the Antenna/R F measurem ent system and Shielded Chamber been installed satisfactor ly?	Contact Person along with Tel.No., Fax No. & e- mail address

Name of the bidder

Signature& Seal

Date :

Place :

ANNEXURE-III

SERVICE SUPPORT DETAILSFORM

SL. No.	Nature of training imparted	List of similar type items's /services in the past 3 years or as per Tender Enquiry/Document	Address, Telephone Nos., Fax and email address of the firm located in India	Value of minimum stock of consumable spares held at all times

Signature and Seal of the manufacturer/Bidder

Place:

Date:

ANNEXURE-IV

DEVIATION STATEMENT FORM

The following are the particulars of deviations from the requirements of the tender document and specifications:

CLAUSE	DEVIATION	REMARKS (INCLUDING JUSTIFICATION)

**Signature and Seal of the
Manufacturer/Bidder**

Place :

Date :

NOTE:

Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations"

ANNEXURE-V

TECHNICAL SPECIFICATION COMPLIANCE STATEMENT FORM

An item-by-item commentary on the SAMEER-CEM Technical Specifications demonstrating substantial responsiveness of the item's to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications. (Technical literature/brouchers/manuals should be attached along with this format)

ITEM NAME			
SI.No	Tender Specifications	Bidder's Specifications	Remarks/Deviation if any

(Technical literature/brochure/manuals should be attached along with this format)

Please note:

1. Compliance statement should compare the specifications of the quoted model to the required specifications. This statement should also give the page number(s) of the technical literature where the relevant specification is mentioned.
2. Bids must have supporting documents (technical literature or copies of relevant pages from the service manual or factory test data) for all the points noted above, failure regarding which may result in rejection of bid.

Signature of the authorized person:

Name :

Designation :

Company Seal :

Date :

ANNEXURE-VI

DECLARATION CERTIFICATE BY

THE THIRD PARTY AGENCY

TO WHOM IT MAY CONCERN

This is to certify that following **Antenna/RF measurement system and Shielded chamber** offered to us for validation by M/s _____ has been validated by us as per the standards mentioned in the technical specifications.

Date :

Signature of Third Party

Seal

ANNEXURE-VII

TENDER ACCEPTANCE LETTER
(To be given on Company Letter Head)

Date:

To,

The Programme Director,
Society for Applied Microwave Electronics Engineering and
Research(SAMEER) -
Centre for Electromagnetics, CIT Campus, 2nd Cross Road, Taramani,
Chennai - 600 113, Tamil Nadu, India.

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: **S-CEM/IP/3038/GTE/100-01/2020-2021**

Name of Tender:- **Supply, installation, Commissioning,
Performance testing and validation of Antenna/RF measurement
system and Shielded chamber**

Dear Sir,

1. I/ We have downloaded/obtained the tender document(s) for the above mentioned 'Tender' from the web site(s) namely:

i. <http://cem.sameer.gov.in>

ii. <https://eprocure.gov.in/cppp>

as per your advertisement, given in the above mentioned website(s).

2. I/We hereby certify that I /we have read the entire terms and conditions of the tender documents from Page No. 1 to 45 (including all documents like annexure(s), schedule(s), etc , which form part of the contract agreement and I /we shall abide hereby by the terms/conditions/clauses contained therein.

3. The corrigendum(s) issued from time to time by SAMEER-CEM too have also been taken into consideration, while submitting this acceptance letter.

4. I/We hereby unconditionally accept the tender conditions of above mentioned tender document(s) /corrigendum(s) in its totality/entirety.

5. I/We do hereby declare that our Firm has not been blacklisted/debarred by any Govt.Department/Public sector undertaking.

6. I/We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then SAMEER-CEM shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours

faithfully,

(Signature of the Bidder, with Official