

TENDER DOCUMENT

Subject: Supply, Installation, Commissioning, performance testing and validation of Automated EMI/EMC Test Systems as per MIL-STD 461 F

TENDER NO.: SMR/PUR/CP010/2023 I/PT

PRE-BID MEETING: DATE: 10/05/2022 TIME: 02:30 PM

DUE ON : 02/06/2022 17:00hrs

EMD: Rs. 2500000

TENDER FEE: Rs. 1500+18% GST



प्रायोगिक सूक्ष्मतरंग इलेक्ट्रॉनिकी इंजीनियरी तथा अनुसंधान संस्था
SOCIETY FOR APPLIED MICROWAVE ELECTRONICS ENGINEERING & RESEARCH
आई आई टी कैंपस, पवई, पुंबई 400076. फोन: 022 25723030/7221 फैक्स : 022 25723254
IIT CAMPUS, POWAI, MUMBAI 400 076. TEL.: 022-25723030/7221, Fax: 022 25723254
WEB SITE : www.sameer.gov.in E-mail : purchase@sameer.gov.in

Table of Contents

INSTRUCTIONS TO BIDDERS (SECTION – I):	5
Introduction.....	6
1. Tender document	7
2. Earnest Money Deposit	7-8
3. Qualification Requirements and Tender Terms:	8
4. Promotion of Industry and Internal Trade	8-9
5. Performance Security	9
6. Purchase Preference (Preference to Make in India)	9
7. Qualification requirements proposal	9-10
8. Terms and conditions on Technical Bid and Price Bid.....	10-11
9. Submitting Tender/Bids.....	11
10. Pre-bid meeting	11
11. Opening of bids:	12
12. Capacity of bidder:	12
13. Intimation to Unsuccessful bidders.....	12
14. Date, Time and Venue for opening Tender:	12
15. Clarification:	12
16. Corrigenda:	12
17. Training	12
18. Installation	12
CONDITIONS OF CONTRACT.....	13
1. Definitions:	14
2. Supplier’s responsibilities:	14
3. Sub-contracts:	14
4. Contract price:	14
5. Copyright:	14
6. Patent rights:	14
7. Inspections and test:	15
8. Packing instructions:	15
9. Delivery and documents:	15-16
10. Insurance:	16

11. Incidental services:	16
12. Warranty terms:	16-17
13. Bank charges:	17
14. Amendments:	17
15. Assignment:	17
16. Extension of time:	17
17. Penalty clause:	18
18. Termination for default:	18
19. Termination for insolvency:	18
20. Settlement of disputes:	18
21. Applicable law:	19
22. Notices:.....	19
23. Site preparation and installation:.....	19
24. Taxes and duties:	19
25. Commercial invoice.....	19
26. Integrity pact and contract:	19
TECHNICAL SPECIFICATIONS (SECTION – II)	20
1. Specifications.....	21
2. General Requirements:	21-22
3. Detailed Technical requirements.....	22-46
4. Technical Terms and Conditions.....	47-50
COMMERCIAL TERMS & CONDITIONS (SECTION-III).....	51
1 Prices.....	52
2. Taxes, duties and levies applicable.....	52
3 Packing.....	52
4. Freight and insurance.....	53
5. Any other applicable charges	53
6. Mode of delivery	53
7. Delivery schedule.....	53
8. Warranty.....	53
9. Payment terms.....	53
10. Validity of quotation.....	53
11. Tender fee (Including GST).....	53
12. Earnest Money Deposit (EMD)	54

13. Performance security.....	54
14. Exemption for custom duty and excise duty.....	54
15. Sharing land border with India	54
16. Jurisdiction.....	54
Formats for Price bid and forms	55
1. Format for Price Bid (in INR) SECTION –IV.....	56
2. Format for Price Bid (in Foreign currency)	57
Annexure – I	58
1. Company Details	58
2. Financial Details of the Organization	59
Annexure – II	60
1. Prior Experiences	60
Annexure – III	61
1. Declaration Letter	61-62
Annexure – IV	63
1. Board Resolution form	63
Annexure – V	64
1. Bid Security Declaration Form	64
Annexure – VI	65
1. Self-Certification for Local Content.....	65

SECTION – I

INSTRUCTIONS FOR SUBMITTING THE OFFER

S A M E E R

Introduction:

SAMEER was set up as an autonomous R & D laboratory at Mumbai under the Ministry of Electronics and Information Technology (MeitY), Government of India. SAMEER, EMC Centre Navi Mumbai has been established in 2005 with an objective of offering comprehensive EMC test facility and measurement services in the area of EMI/EMC.

SAMEER invites tenders under two bid systems (technical bid and price bid) for the

Supply, Installation, Commissioning performance testing and validation of Automated EMI/EMC Test Systems as per MIL-STD 461 F standard:

1. **CE 101** (Conducted Emissions, Audio Frequency Current, Power Leads)
2. **CE 102** (Conducted Emissions, Radio Frequency Current, Power Leads)
3. **CE 106** (Conducted Emissions, Antenna Terminal)
4. **CS 101** (Conducted Susceptibility, Power Leads)
5. **CS 109** (Conducted Susceptibility, Structure Current)
6. **CS 114** (Conducted Susceptibility, Bulk Cable Injection)
7. **CS 115** (Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation)
8. **CS 116** (Conducted Susceptibility, Damped Sinusoidal Transients, Cables and Power Leads)
9. **RE 101** (Radiated Emissions, Magnetic Field)
10. **RE 102** (Radiated Emissions, Electric Field)
11. **RE 103** (Radiated Emissions, Antenna Spurious and Harmonic Output)
12. **RS 101** (Radiated Susceptibility, Magnetic Field)

INSTRUCTIONS FOR SUBMITTING THE OFFER

1. Tender Document: Interested bidders who meet the qualification criteria may submit their tender (both **Technical** and **Price bid**) in the manner mentioned in Para 9 of this chapter. Tender document can be purchased from the Accounts Section of SAMEER located at IIT Campus, Powai, Mumbai-76, between 1.30 pm to 4.30 pm, on cash payment, on all days except Saturdays, Sundays and public holidays. If the Tender document is downloaded from our website <http://www.sameer.gov.in> or <https://eprocure.gov.in/eprocure/app>, then the **Tender Fee is not applicable**.

2. Earnest Money Deposit (EMD):

A. Earnest Money Deposit should be submitted in the form of Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee from any commercial bank of India, drawn in favour of "**Society for Applied Microwave Electronics Engineering and Research**". If the EMD is given in the form of Bank Guarantee or Fixed Deposit, then it should be valid for minimum 15 days beyond the validity of the quotation. EMD also can be paid through online payment mode. Intimation should be sent to SAMEER once the online payment is done. A copy of the Transaction details should be enclosed with Technical Bid.

For online payment our banker's details are as below:

Beneficiary Name: **Society for Applied Microwave Electronics Engineering and Research (SAMEER)**

Name and address of the Bank: Canara Bank, IIT Powai Branch Mumbai 400 076.

Account Number: 2724101086829, Type of the Account: Saving,

IFS Code: CNRB0002724, MICR: 400015129

B. **Refund of EMD:** Unsuccessful tenderer's earnest money will be returned to them **without any interest** once the tender is finalized. Successful bidder's earnest money will be returned **without any interest** only after submission of Security Deposit (Performance Security).

C. **Forfeiture of EMD:** Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender. Successful tenderer's earnest money will be forfeited if tenderer does not execute purchase order / contract as per the terms and conditions mentioned therein.

D. **Exemption from submission of EMD :** Firms which are registered with Ministry of Electronics and Information Technology (MeitY) or All MSEs having registration as per provisions of the MSME Policy i.e. registration with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or directorate of Handicrafts and Handlooms or UdyogAadhaar Memorandum or any other body specified by Ministry of MSME are also exempt from payment of EMD. Proof of valid registration should be attached along with the Technical Bid, failing which the Tender will be rejected.

E. **Bid Security Declaration for EMD:** In lieu of submission of EMD, vendor may submit the "Bid Security Declaration" as per Annexure V, on their letterhead. It may be noted that the

Ministry of Finance had introduced the submission of Bid Security Declaration in lieu of the EMD, for a limited period only. If at any time the Ministry of Finance withdraws the facility of the submission of Bid Security Declaration or the relevant order of the said Ministry providing for the submission of Bid Security Declaration in lieu of the EMD ceases to be in force, the bidder will have to submit the EMD.

- F. SAMEER 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.
- G. Concessional GST (5%) Rates will be applicable to SAMEER as per GOI, Ministry of Finance, Notification No. 47/2017-Integrated Tax (Rate) date. 14/11/2017. It is certified that SAMEER 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. Duly signed GST concessional Certificate will be provided along with PO

3. Qualification Requirements and Tender Terms:

- A.** In a tender, either the Indian Agent on behalf of the Principal / OEM (Original Equipment Manufacturer) or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
- B.** 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.
- C.** Failure to adhere to the above conditions will lead to automatic disqualification of the bid. Tenders submitted by the Indian agent on behalf of his principal /OEM should be supported with a letter of authority from the Principal/ OEM.
- D.** In case the manufacturer does not have an authorized representative in India at the time of submission of the bids and the company appoints a representative later on, SAMEER will only correspond with the manufacturer.

4. Promotion of Industry and Internal Trade:

Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services or works only if they are registered with the Registration Committee, constituted by the Department of Promotion of Industry and Internal Trade (DPIIT). A valid registration certificate is to be attached. "Bidder from a country which shares a land border with India" means: -

- a. An entity incorporated, established or registered in such a country; or
- b. A subsidiary of an entity incorporated, established or registered in such a country; or
- c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
- d. An entity whose beneficial owner is situated in such a country; or
- e. An Indian (or other) agent of such an entity; or

- f. A natural person who is a citizen of such a country; or
- g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

The Successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India, unless such contractor is registered with the Registration Committee, constituted by the DPIIT.

5. Performance Security:

- a. The successful bidder has to give Performance Security Deposit in the form of an Account Payee Demand Draft / Fixed Deposit Receipt from an Indian commercial bank / Bank Guarantee from an Indian commercial bank / a counter Letter of Credit (LC) from our bankers (in case of foreign order), for 3 % of Order Value, immediately after receiving the purchase order. Performance Security should remain valid for a period of sixty days beyond the date of all contractual obligations including warranty obligations.
- b. **Forfeiture of Security Deposit:** Successful tenderers Performance Security will be forfeited if the purchase order / contract is not executed as per the terms and conditions mentioned therein.
- c. **Refund of Security Deposit:** Performance Security Deposit without any interest will be returned only after complete execution of purchase order (including warranty period), as per purchase order terms and conditions.

6. Purchase Preference (Preference to Make in India):

As prescribed in "Public Procurement (Preference to Make in India) order 2017 of GOI, Department of Industrial Policy and Promotion" (OM No. P-45021/2/2017-PP (BE-II dated 15th June 2017 as amended from time to time), purchase preference will be given to the bidder. Necessary certification for local content must be submitted by the prospective bidders strictly as per Annexure VI", on their letterhead.

7. Qualification requirements proposal

The qualification requirement proposal consisting of following details should be submitted along with the technical bid. Bidders are requested to submit their responses for the qualification requirements in four (4) parts, clearly labeled according to the following categories:

Part I –Board Resolution

- a. Board resolution authorizing the Bidder to sign/ execute the proposal as a binding document and also to execute all relevant agreements forming part of Tender document (Annexure-IV)

Part II – Details of the Organization

- a. This part must include a general background of the bidder organization (limited to 400 words) along with other details of the organization as per the format provided in Annexure–I (1). Enclose the mandatory supporting documents listed in format.
- b. The bidder must also provide the financial details of the organization as per format provided in Annexure – I (2). Enclose the mandatory supporting documents listed in format.

Part III – Relevant Project Experience of similar EMI/EMC Turnkey Projects

- a. Bidders must provide details (client organization, nature / scope of the project, project value) of **Supply, Installation, Commissioning performance testing and validation of Automated EMI/EMC Test Systems as per MIL-STD 461 F** as per the format provided in Annexure – II. The projects mentioned here should match with the projects quoted by the bidder in order to satisfy the qualification requirements. Enclose the mandatory supporting documents listed in format.

Part IV – Proof of Certification

Assessment and Certification of the required following letters

1. Declaration Letter

Declaration Letter on official letter as stated in Annexure III.

2. Relationship Declaration Letter:

If the bidder or any employee of the bidder or any person acting on behalf of the bidder, either directly or indirectly is closely related to any of the officers of the purchaser or alternatively, if any close relative of an officer of the purchaser has financial interest/stake in the bidder's firm, the same shall be disclosed by the bidder at the time of filling of Tender. Any failure to disclose the interest involved shall entitle the purchaser to rescind the contract without payment of any compensation to the Bidder.

The term close relative for this purpose would mean any person related by blood or marriage to the government servant.

8. Terms and conditions on 'Technical Bid' and 'Price Bid':

A. Technical Bid:

- ❖ Original manufacturer's technical specification sheet must support details provided in the technical bid with all the specifications/ relevant technical Literatures/Brochures/Catalogues for the item. Bids received without the printed technical specification sheet/brochures/catalogues for item will be technically disqualified.
- ❖ The Technical Bid should not contain any **price information**.
- ❖ The item and accessories quoted must be from original manufacturer and must be new (**No second-hand item/sub-item will be accepted**)
- ❖ In case the bidder is the authorized representative of a foreign manufacturer/supplier, a certificate from the principal must be included along with the technical bid.
- ❖ In case of deviation or substitution from the particular specification contained in the tender document, please indicate clearly as 'Alternative offer' and should contain sufficient details to show that the alternative would equally serve the purpose. All relevant technical data should be enclosed. In case of equipment, the itemized cost of essential accessories, optional accessories and spares required need to be specified
- ❖ **Technical Bid should contain the following:**
 - a. **Earnest Money Deposit (EMD) / valid certificate for exemption or Bid Security Declaration.**
 - b. Tender Fee Receipt Number (if the tender document is purchased from Accounts Section, SAMEER, Mumbai)
 - c. Qualification requirement documents
 - d. Manufacturer's authorization letter
 - e. Technical Specification

- f. Technical Terms and Conditions of the tender (**Section II**) duly filled stamped and signed
 - g. Commercial Terms & Conditions (**Section III**) duly filled, stamped and signed.
 - h. A copy of '**Price Bid**' with all financial figures **suppressed/deleted**.
 - i. Technical compliance statement
 - j. Certification for local content (Annexure VI)
 - k. A valid registration certificate from DPIIT as per Sr. No. 4 of section I, if applicable
- *Note:** Technical Bid without the above information will not be considered.

B. Price Bid:

Price bid shall contain the following information:

- a. Quotation for the items (including the price break up for all options and accessories).
- b. TAXES, DUTIES AND LEVIES if applicable should be clearly specified.
- c. Discount offered on quoted price (considering that SAMEER is a R&D organization).
- d. Total price should be mentioned in both figures and words. Alterations, if any, should be attested/initiated
- e. The bid shall be free of hidden cost / ambiguity.
- f. There shall be no overwriting.

9. Submitting Tender/Bids

Tender is to be submitted in **two separate sealed covers, superscripted as 'Technical Bid' and 'Price Bid'** respectively and both these sealed covers are to be put in a bigger cover which should also be sealed and duly super scribed. Tender should be addressed to '**The Purchase Officer, SAMEER, IIT Campus, Powai, Mumbai 400 076**'. Tender reference number including 'Due Date' should be clearly mentioned on all covers. Name, Address and contact details of the vendor should be mentioned at back side of all covers.

Tenders/Bids should be dropped in Tender Box only. Tender box is placed at **SAMEER, Mumbai office.**

Note: Tender received via email, fax and Late Tenders will not be considered.

10. PRE-BID MEETING:

The Pre-bid meeting will be held in online mode on **10-05-2022**. Interested vendors should send an email to purchase@sameer.gov.in for registration before the pre-bid meeting date; the link will be shared with registered vendors only. During the meeting bidders will have opportunity to discuss their technical proposal before submitting the actual bids.

11. OPENING OF BIDS:

The Technical Bids will be opened on the next working day after due date. Final selection of the Technical Bids will be based on the technical evaluation by **SAMEER**. Bidders may be invited to give a presentation if required by **SAMEER's technical evaluation team**. The Price Bid will not be opened on the day of opening of Technical Bids. The Price Bid of only those tenderers whose Technical Bid(s) are found technically suitable will be opened subsequently with intimation to the short-listed tenderers. The presentation may have to be made at SAMEER, Mumbai.

IMPORTANT NOTE:

- a. Participation in Public Tender Opening will be STRICTLY via ONLINE VIRTUAL PLATFORM.
- b. Vendors interested must fill the ONLINE FORM available at <http://publictender.sameer.gov.in/>, two working days before the tender opening date.
- c. On the day of tender opening, a virtual meeting link will be provided through mail to the vendors who have registered for participating in the tender. Only the vendors who have submitted the offer can participate in the online tender opening.
- d. It will be assumed that those Vendors who did not fill in the form are not interested in joining the Tender Opening Process.

12. CAPACITY OF BIDDER:

Any person signing a Tender shall submit documentary evidence that his signature on the Tender, submitted by him, is legally binding upon himself, his firm. If it is detected that the person so signing the Tender has no authority to do so, the Director General, SAMEER may, without prejudice to other civil and criminal remedies, not consider the Tender and hold the signatory liable for all costs and damages. The bidder shall produce a certificate from the Manufacturer of the offered product that they are the authorized dealer in India.

13. INTIMATION TO UNSUCCESSFUL BIDDERS

Unsuccessful bidders will not be formally informed of the result of their tender.

14. DATE, TIME AND VENUE FOR OPENING TENDER:

Next working day after due date at 10.30 AM at SAMEER, IIT Campus, Powai, Mumbai – 400 076

15. CLARIFICATION:

For any clarification, please mail at purchase@sameer.gov.in

16. CORRIGENDA:

Corrigenda, if any, to the tender document will be published on our website www.sameer.gov.in. The bidders are advised to check our website, before submitting the bid

17. TRAINING:

The supplier should provide detailed onsite training at SAMEER EMC Center Navi Mumbai at free of cost, after installation and commissioning of the said AUTOMATED TEST SYSTEMS at SAMEER-EMC Center. This training shall be to the satisfaction of SAMEER- EMC Center Scientists.

18. INSTALLATION:

Installation, commissioning, performance testing and validation of Conducted emission (CE101, CE102, CE106), Radiated emission (RE101, RE102, RE103) and Conducted susceptibility (CS101, CS109, CS114, CS 115, CS 116), Radiated susceptibility (RS 101) Automated Test Systems will be the sole responsibility of the Supplier / Indian Agent. The bid must include pre-requisite for installation of the AUTOMATED TEST SYSTEMS at SAMEER-EMC Center. Bidders shall also indicate in their offer the total expected time required for installation/commissioning and testing of AUTOMATED TEST SYSTEMS. However, the successful bidder shall arrange and complete the installation of the AUTOMATED TEST SYSTEM within 60 days from the date of arrival of the AUTOMATED TEST SYSTEM at SAMEER-EMC Center. **The successful bidder should take all precautionary measures to ensure the safety of the workmen during installation of the AUTOMATED TEST SYSTEMS and SAMEER shall not be responsible in case of any eventuality.**

CONDITIONS OF CONTRACT

S A M E E R

1. DEFINITIONS:

In this Contract, the following terms shall be interpreted as indicated. The following words and expressions shall have the meanings hereby assigned to them:

- a) "Contract Price" means the price payable to the Supplier as specified in the Purchase Order, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract
- b) "Day" means calendar day.
- c) "Completion" means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Purchase Order.
- d) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser as per the Purchase Order.
- e) "Related Services" means the services incidental to the supply of the goods, such as transportation, insurance, installation, commissioning, training and initial maintenance and other such obligations of the Supplier as per the Purchase Order.
- f) "Supplier" means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Purchase Order.
- g) "The final destination", where applicable, means the place of delivery as indicated in the Purchase Order.

2. SUPPLIER'S RESPONSIBILITIES:

The Supplier shall supply all the Goods and Related Services included in the Scope of Supply and the Delivery and Completion Schedule, as per Purchase Order Terms.

3. SUB-CONTRACTS:

The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract. Sub-contract shall be only for bought-out items and sub-assemblies.

4. CONTRACT PRICE:

Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Purchase Order shall not vary from the prices quoted by the Supplier in its bid.

5. COPYRIGHT:

The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

6. PATENT RIGHTS:

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

7. INSPECTIONS AND TEST:

The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services or as discussed during the course of finalizing the contract. The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the contract specifications at no extra cost to the Purchaser. The Purchaser shall notify the Supplier in writing in a timely

manner of the identity of any representatives retained for these purposes. The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at the point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data shall be furnished to the inspectors at no charge to the Purchaser.

8. PACKING INSTRUCTIONS:

Each package will be marked on three sides with proper paint/indelible ink, the following:

- i. Purchaser Name & Address
- ii. Item Nomenclature
- iii. Order/Contract No.
- iv. Country of Origin of Goods
- v. Packing list reference number

9. DELIVERY AND DOCUMENTS:

Delivery of the Goods and completion and related services shall be made by the Supplier in accordance with the terms specified by the Purchaser in the Purchase Order. The details of shipping and / or other documents to be furnished by the supplier will also be specified in Purchase Order.

Delivery of the goods should be made as per the Delivery Schedule incorporated in the Purchase Order. The supplier should immediately intimate the shipment details to enable to clear shipment from custom clearance within free period of time.

The supplier shall notify the purchaser the full details of the shipment including order/contract number, railway receipt number /AWB etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall e-mail the following documents to the purchaser with a copy to the Clearing Agent.

- i. 3 copies of the Supplier invoice showing Order/contract number, goods, description, quantity, unit price, total amount;
- ii. Acknowledgement of receipt of goods from the consignee(s) by the transporter;
- iii. Certificate of Insurance;
- iv. Manufacturer's/Supplier's test certificate and guarantee;
- v. Inspection Certificate issued by the nominated inspection agency, if any, or the Supplier's factory inspection report;
- vi. Certificate of country of origin of the goods to be issued by the seller or a recognized Chamber of Commerce or another agency designated by the local Government for this purpose;
- vii. Two copies of the packing list identifying the contents of each package;
- viii. Airway Bill / Bill of Lading;
- ix. Certificate issued by the Manufacturer OR Beneficiary declaring that the goods have been manufactured as per the agreed specifications;
- x. Declaration by the Beneficiary that the goods are handed over to the freight forwarder for onward dispatch to the destination port

The above documents should be received by the Purchaser before arrival of the Goods, if not received; the Supplier will be responsible for any consequent expenses.

Please make appropriate commitments in writing that the instrument model being offered is current and is not likely to be obsolete within the next couple of years and that spare parts will be available for it for at least ten years after the installation. The Installation of the equipment is deemed complete only after all the sub-units of the main equipment such as EMI Receivers, Power Amplifiers, Test Generators, Antenna etc., are installed and tested as per the specifications in the offer/brochure/Purchase order and demonstrated to the satisfaction of the end user.

10. INSURANCE:

- a) **For Local Order:** To be arranged by supplier.
All the items shall be delivered to SAMEER-EMC Centre, CBD Belapur Navi Mumbai after obtaining a shipping release in the appropriate pro-forma from the purchaser. The Vendor shall be fully responsible for the safe delivery of all the items from and to SAMEER – EMC Center Navi Mumbai and shall satisfy the purchaser that adequate measures have been taken for the same.
- b) **For Import Order:** Will be arranged by SAMEER from FCA International Airport

11. INCIDENTAL SERVICES:

The supplier may be required to provide any or all of the services, as discussed during the course of finalizing the contract. User Manual and detailed Service Manual to be supplied along with the equipment.

12. WARRANTY TERMS:

- a) Bidders (OEM/ Agents) must submit offers with at 3 (three) years (Standard + Extended) comprehensive and onsite warranty after successful installation of the test system in all respects at Site, i.e., SAMEER-EMC Center, Navi Mumbai
- b) The Supplier should warrant that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- c) The Supplier is further required to warrant that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in India.
- d) The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity to the Supplier to inspect such defects. Upon receipt of such notice, the Supplier shall, within a reasonable period of time expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.
- e) If during the period of warranty any component or spare part is need to be brought from abroad, all associated cost shall be borne by the supplier including the cost of customs duty. All incidental charges / additional duties incurred for importing warranty replacements are to be borne by the suppliers.

- f) All the costs involved in the replacement of the defective material/goods/parts, including the transportation cost, shall be borne by the supplier.
- g) If having been notified, the Supplier fails to remedy the defect within a reasonable period of time the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.
- h) If within the period of warranty, the equipment is reported by the buyer to have failed to perform as per specification, the seller shall either replace or rectify the same free of charge, maximum within 10-14 working days for spares available in India and 45 working days for spares to be imported after notification of such defects received by the seller. Warranty of equipment would be extended by such duration.

13. Bank Charges:

All banking charges outside India will be borne by the supplier and inside India charges will be borne by the purchaser.

14. AMENDMENTS:

The Purchaser may at any time, by written order given to the Supplier make changes within the general scope of the Contract at mutually agreed terms.

15. ASSIGNMENT:

The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

16. EXTENSION OF TIME:

Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified in the contract. If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without penalty, in which case the extension shall be ratified by the parties by amendment of the Contract. Except as provided under the Force Majeure clause, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to Penalty Clause unless an extension of time is agreed upon pursuant to above clause without the application of penalty clause.

17. PENALTY CLAUSE:

Subject to clause on Force Majeure, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Purchase order the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to 0.5 percent of the order value

for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of 10 Percent. Once the maximum is reached, the Purchaser may consider termination of the Contract for Default.

18. TERMINATION FOR DEFAULT:

The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part

- a. If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the contract, or within any extension thereof granted by the Purchaser
- b. If the Supplier fails to perform any other obligation(s) under the Contract.
- c. If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent or collusive or coercive practices.

In the event the purchaser terminates the contract in whole or in part, he may take recourse to any one or more of the following actions:

- d. The Security deposit is to be forfeited;
- e. The purchaser may procure, upon such terms and in such manner as it deems appropriate, stores similar to those undelivered, and the supplier shall be liable for all available actions against it in terms of the contract.

19. TERMINATION FOR INSOLVENCY:

The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

20. SETTLEMENT OF DISPUTES:

The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract. If, after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Supplier are unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms. These mechanisms may include, but are not limited to conciliation mediated by a third party, adjudication in an agreed national or international forum, and national or international arbitration.

21. APPLICABLE LAW:

The Contract shall be interpreted in accordance with the laws of India and all disputes shall be subject to jurisdiction of courts located at Mumbai.

22. NOTICES:

Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing and confirmed to the other party's address specified in the Purchase Order.

23. SITE PREPARATION AND INSTALLATION:

The Purchaser is solely responsible for the construction of the equipment sites in compliance with the technical and environmental specifications. The Purchaser will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the installation of the Equipment, if required. The supplier shall inform the purchaser about the site preparation, if any, needed for installation, of the goods at the purchaser's site immediately after placement of Purchase Order.

24. TAXES AND DUTIES:

Suppliers shall be entirely responsible for all taxes, duties, license fees, road permits, etc., incurred until delivery of the ordered Goods to the Purchaser at the final destination.

25. Commercial Invoice produced by Reprographic system or automated computerized system marked as original is not acceptable.

26. Integrity Pact and Contract:

The successful bidder may be required to sign an integrity pact with SAMEER. The integrity pact will commit SAMEER and the successful bidder to take all measures necessary to prevent corruption. The successful bidder will also be required to execute a contract with SAMEER, binding both the parties.

DECLARATION:

I/We _____ have read the entire terms and conditions of this Tender document and are agreeable to the terms and conditions mentioned herein.

Sign. of Bidder:

Name:

Designation:

Company's Seal:



SECTION – II
TECHNICAL SPECIFICATIONS

S A M E E R

1. Specifications of Automated EMI/EMC Test Systems as per MIL-STD 461 F

- The total EMI/EMC System shall be supplied in one phase. A tentative list of equipment and their broad specifications are given in the following sections.
- However, any other equipment/ components(s)/accessory not explicitly indicated in this requirement but is/are considered essential for the system performance, operation and maintenance shall be indicated and included or excluded in the offer.
- It is the sole responsibility of the vendor to prove the performance specifications of the integrated system as per the required standards, irrespective of the constituent equipment and their specifications offered or used in it.

Note: The successful vendor needs to coordinate with Chamber supplier and electrical department during the installation of the test equipment.

Note: The successful vendor shall provide the automation software to carry out ALL the testing mentioned below as per the international standards.

2. General requirements:

Test and Measurement Equipment of following Automated EMI / EMC Tests as per MIL-STD 461F need to be provided.

a) Conducted Emission (CE) & Conducted Susceptibility (CS) System:

i. Conducted Emission Tests as per MIL-STD 461 F

Sr. No.	Test	Details
1	CE 101	Audio Frequency Currents, Power leads, 30 Hz to 10 kHz
2	CE 102	Radio Frequency Potentials, Power leads, 10 kHz to 10 MHz
3	CE 106	Antenna Port, 10 kHz to 40 GHz

ii. Conducted Susceptibility tests as per MIL – STD 461F:

Sr. No.	Test	Details
1	CS 101	Power leads, 30 Hz to 150 kHz
2	CS 109	Structure current, 50 Hz to 100 kHz
3	CS 114	Bulk cable injection, 4 kHz to 200 MHz
4	CS 115	Bulk cable injection, Impulse excitation
5	CS 116	Damped Sinusoidal transients, cables and power leads, 10 kHz–100 MHz

b) Radiated Emission (RE) and Radiated Susceptibility (RS) systems:

i. Radiated Emission as per MIL-STD 461 F

Sr. No.	Test	Details
1	RE 101	Magnetic field, 30 Hz to 100 kHz
2	RE 102	Electric field, 10 kHz to 18 GHz
3	RE 103	Antenna Spurious & Harmonic outputs, 10kHz to 40GHz

ii. Radiated Susceptibility tests as per MIL – STD 461 F

Sr. No.	Test	Details
1	RS101	Magnetic field, 30 Hz to 100 kHz

3. Detailed Technical requirements:

All test systems should be appropriately grouped in test racks; racks details are as follows:

A. Test Rack 1:

- i. CE 101 Conducted Emissions Power Leads 30 Hz to 10 kHz
- ii. CE 102 Conducted Emissions Power Leads 10 kHz to 10 MHz
- iii. RE 101 Radiated Emissions Magnetic Field 30 Hz to 100 kHz
- iv. RE 102 Radiated Emissions Electric Field 10 kHz to 18 GHz

General features of Rack:

- It should be 19" rack with cooling/exhaust fan and internal cabling
- Automatic switching unit of signal paths up to 18 GHz. The switching paths should be operated through system controller.
- A suitable power distribution with power line filters.

I. Broad Specifications. of CE 101, CE 102, RE 101 and RE 102 Test Rack Test equipment:

Sr. No.	Parameters	Specifications	Remark	Comply/Not Comply/ Deviation
1.	Measurement Receiver			
	Compliance Standard	Fully Compliant to latest CISPR 16-1-1 Edition 4 and MIL-STD-461F.		
	Frequency Range	20 Hz to 40GHz		
	Mode	Receiver and spectrum analyzer modes.		
	Scan	Frequency domain and time domain.		
	Frequency Resolution	0.01Hz or better		
	Frequency reference & Aging per year	$\leq 1 \times 10^{-7}$ /year		
	Detectors (Receiver mode)	Max. Peak, Quasi-peak, average, Min. Peak, RMS-average, CISPR – average		
	IF and Resolution Bandwidths	-6dB EMI Bandwidth: Mil-Std-461: 10 Hz, 100 Hz, 1 kHz, 10kHz, 100 kHz, 1 MHz CISPR: 200Hz, 9kHz, 120kHz, 1MHz. -3 dB Bandwidth: 10Hz to 8 MHz or better		
	Video Bandwidth	1Hz to 8MHz or better		
	Max. input Level: DC Voltage :	RF input, AC coupled 50V RF input, DC coupled 0V		
	CW RF power (Average power):	RF attenuation ≥ 10 dB, with pre-selection off and preamplifier off: 30dBm		
	Built in Preamplifier	100kHz to 40GHz with min 20dB Gain		
	Built in Pre-selector	Should be in built in the receiver up to 40GHz, should be specified at -6dB bandwidth from 20Hz -40GHz		
	Input attenuator range	0 to 70 dB in 2 dB steps or better		
	1dB compression of l/p Mixer (with pre-selector off, preamplifier off and LNA off)	+ 7 dBm throughout the Frequency		
	Units of Levels Axis	Logarithmic Level Display: dBm, dBmV, dB μ V, dB μ A, dBpW, dBpT etc.		
	Interface	USB ports, IEEE488.2, LAN		
	Data storage	≥ 32 GB or more		
	Display	8 inch or more size Color LCD/LED		
	Trigger	Free run, line, video, external		
	Impedance	50 Ω		
	VSWR	≤ 3.5		
	Power requirements	Single Phase- 240 VAC $\pm 10\%$, 50 Hz $\pm 10\%$		
	Software	EMI Measurement Software For CE101, CE102, CE106, RE101, RE102 and RE103 compliance with MIL-STD- 461F		

	GUI	Keyboard and Mouse		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
	Documents	Hard and soft copy of operational manual		
	DC blocks	Single/multiple DC blocks shall be provided from 10 MHz to 40 GHz with connectors suitable to RF input ports of receiver.		
2.	RF switching unit			
	Frequency Range	DC to 18 GHz		
	Relay type	6x SPDT, Coaxial relay (Suitable relay type can be offered for automated switching operation)		
	Connector type	SMA or N Type		
	VSWR	≤ 2		
	Insertion Loss	≤ 1.0 dB		
	Isolation	50 dB, typical		
	Remote control:	USB/ IEEE-488.2(GPIB)/ LAN/RS232		
	Adaptors	19 inch rack adaptors		
	Max Power Input	3W (at 18GHz, increases with reducing Frequency)		
3.	Low frequency signal generator			
	Frequency Range	DC to 250 kHz		
	Number of channels	1		
	Impedance	50 Ω		
	Amplitude Level	10mVpp – 10Vpp (into 50 Ω)		
	Harmonics	≤ -30 dBc		
	Spurious (non-harmonics)	≤ -40 dBc		
	Interface	USB/ IEEE-488.2(GPIB)/ LAN		
	Waveforms	Sine, Square, Ramp, Triangle, Pulse, Arbitrary		
	Modulation	AM, FM, PM, FSK, Pulse Modulation		
	Power Requirement	230 V ± 10% AC, 50 Hz ± 10%		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory		
4.	Synthesized Signal Generator			
	Frequency Range	100 kHz to 40GHz		
	Frequency Resolution	0.01Hz or better		
	Reference oscillator aging rate	≤ 1x10 ⁻⁶ per year		
	Level	-20 dBm to +10 dBm or better		
	Level Resolution	0.01dB		

	Sweep	Type: Step Frequency range: full band Trigger: Auto/free run, external, remote control		
	SSB Phase Noise	-90dBc or better at 10GHz @ 20kHz offset		
	Harmonics	-30 dBc or better throughout the band		
	Non harmonics	-50dBc or better throughout the band with 10kHz offset and 10dBm power		
	Modulation	AM, FM, PM, Pulse modulation (on/off ratio 40dB min). Built-in modulation source shall be available for all modulations.		
	Data export	Min. 2 USB ports		
	Power supply	230 V _{AC} ±10%, 50 Hz ±10 %		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
5.	Accessories/Instruments for CE101			
5.1	Precision Resistor			
	Value	1 Ω ± 1%		
	Power Rating	25 W		
5.2	Current Probe and calibration fixture			
	Frequency range	20 Hz to 100MHz		
	Clamp inner diameter	32 mm		
	Max. Current (DC to 400Hz)	200 Amp		
	RF Connector	N Female		
	Calibration fixture	Suitable fixture shall be provided to calibrate.		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
5.3	Oscilloscope			
	General	Automatic measurement, auto-set feature, Cursor measurements & waveform setup		
	3dB Bandwidth	1 GHz		
	No. Of Channels	2		
	Real Time sample Rate (Max.)	5 GSa/sec half channels 2.5 GSa/sec all channels		
	Input Impedance	50 Ω, 1 MΩ (selectable)		
	Coupling	AC, DC		
	Time base range	0.5 ns/div to 50 sec/div		
	Display	8 Inch or better, capacitive touch enabled color LCD or better		
	Interface	LAN/ USB/RS232		

	Data export	Min. 2 USB ports		
	Associated Probes	10: 1x1 No., 1:1x2 Nos		
	Power supply	230 V _{AC} ± 10%, 50 Hz ± 10%		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
5.4	Line Impedance Stabilization Network (LISN)			
	RF output Socket	50 Ω, BNC/N		
	Frequency Range	10kHz to 100MHz		
	Impedance Requirements of MIL-STD461F	50μH+ 5Ω 50 Ω		
	Maximum Input Current rating	70 A		
	Supported Power System	DC, 50/60 Hz and 400Hz		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an		
	Quantity	04 Nos.		
	Shall fulfil the requirements of Mil-Std-461F			
5.5	RF Terminations			
	Frequency Range	DC to 1GHz		
	Impedance	50 Ω		
	VSWR	≤ 1.2		
	Power rating	5W, typical		
	Connector	Suitable to terminate LISN RF port		
	Qty.	04 Nos.		
5.6	Cables and adapters as required for CE101			
6	Instruments for CE102			
6.1	Bi Directional Attenuators			
	Frequency Range	DC to 1GHz		
	Attenuation	20dB		
	Impedance	50 Ω		
	VSWR	≤ 1.2		
	Power rating	5W		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
	Qty.	02 Nos.		
6.2	Cables and adapters as required for CE102			
7	Instruments for RE101			
7.1	Magnetic Pick-up coil			
	Frequency Range	20Hz to 100kHz		
	Input Impedance	50 Ω		
	Diameter	133 mm		
	No. of turns	36		

	Wire	DC Resistance between 5 and 10 Ohms		
	Shielding	Electrostatic		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters (antenna factor) as per SAEARP958 from an ISO/IEC 17025 Accredited calibration Laboratory.		
7.2	Cables and adapters as required for RE 101			
8	Instruments for RE102 (10kHz to 18GHz)			
8.1	Active Rod Antenna			
	Frequency Range	9 kHz to 30 MHz		
	Polarization	Linear		
	Input Impedance	50 Ω		
	Type	Fixed Length Rod for repeatability as per MIL-STD-461F		
	Square counterpoise	At least 60cm on a side		
	Rod Height	41 Inches (1.041 m)		
	RF Connector	BNC /N female		
	Power Supply	Built in rechargeable Battery		
	Battery Charger	Suitable Battery Charger compatible with 230 V, 50 Hz		
	RF cable with ferrite and grounding kit	Shall be provided as per MIL-STD-461F		
	Calibration adapter	Suitable to calibrate antenna as per SAEARP958		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters (antenna factor at 1m distance) as per SAEARP958 from an ISO/IEC 17025 Accredited calibration Laboratory.		
	Preamplifier	Antenna base shall have built-in preamplifier and matching unit		
	Antenna mount/Tripod	Antenna mount/Tripod that can be used to fulfil antenna position in MIL-STD-461 F		
8.2	Bi conical antenna			
	Frequency Range	30 MHz to 300 MHz		
	Polarization	Linear		
	Input Impedance	50 Ω		
	VSWR	≤ 2.5 , average		
	Power Handling	Suitable power handling for measurement as per MIL-STD-461 F		
	RF Connector	N female		
	Length	137 cm tip to tip, typical or suitable length for measurement as per MIL-STD-461 F		

	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters (antenna factor at 1m distance) as per SAEARP958 from an ISO/IEC 17025 Accredited calibration Laboratory.		
8.3	Double ridge Horn Antenna -1			
	Frequency Range	200MHz to 2GHz		
	Polarization	Linear		
	Input Impedance	50 Ω		
	Opening	69cm X 94.5cm, typical		
	Input Power	Suitable power handling for measurement as per MIL-STD-461 F		
	VSWR	< 2.0 typical		
	RF Connector	N female		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters (antenna factor at 1m distance) as per SAEARP958 from an ISO/IEC 17025 Accredited calibration Laboratory.		
8.4	Double ridge Horn Antenna -2			
	Frequency Range	1 GHz to 18 GHz		
	Polarization	Linear		
	Input Impedance	50 Ω		
	Opening	24.2cm X 13.6cm, typical		
	Input Power	Suitable power handling for measurement as per MIL-STD-461 F		
	VSWR	\leq 2.1		
	RF Connector	N female		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters (antenna factor at 1m distance) as per SAEARP958 from an ISO/IEC 17025 Accredited calibration Laboratory.		
	Antenna mounting adapters suitable for antennas mentioned in 8.1, 8.2, 8.3 and 8.4 and Test Rack2 Double Ridge Horn Antenna			
8.4	Tripods			
	Tripods with suitable mounting adapters for each EMI antenna specified above shall be provided.			
8.5	External Preamplifiers			
	Frequency Range	10kHz to 18 GHz		
	Gain	28 dB typical		
	Noise Figure	< 3.5 dB typical		
	VSWR	\leq 2.5		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		

8.6	Stub radiator		
	Frequency range	30MHz to 18GHz	
	Qty.	01 No.	
8.7	Cables and adaptors as required for RE102 test		
9.	Measurement Software		
	Measurement Software will be used for automation of CE101, CE102, RE101 and RE102 test system. It should be Windows based Menu driven, user friendly interactive and selectable by functional keys. Also should Support GUI environment for instrument and system configuration.		
	Software should provide selection of the following menu driven features: <ul style="list-style-type: none"> • Verification/calibration of the EMI receiver. • Enable user to compare results graphically. • Building user's own limit levels. • Save the measurement data for later use in internal / external memory. • Correction of measured data for transducer factor, cable loss and internal correction. • Rescan the selected frequency band of signals, if desired. 		
	Software should preferably support IEEE 488/RS-232/USB/LAN interfaces for instrument control.		
	Generating test reports in graphical and tabulated data format, giving list of stimulus, emissions crossing the limit levels etc.		
	Context sensitive online help facility.		
	Ability to export reports to MS-Office based documents or PDF or HTML format.		
	Database for limit lines of MIL, EN, CISPR, IEC, etc., standards.		
	EMI Evaluation and calculation tool for diagnostic purpose, such as Peak search, acceptance analysis, sub range maxima, sub range minima, maxima limitation, keep frequencies, merge result, add result, exclude range, exclude ranges		
10.	System controller		
	CPU	Intel Core i7, 3.4 GHz, 8 MB Cache or better	
	Chipset	Intel Q8 series or latest	
	Bus Architecture	3 PCI (PCI/ PCI Express) or more	
	Memory	16 GB DDR4 RAM with 32 GB Expandability	
	Hard Disk Drive	500GB SSD	
	Monitor	24 inch larger LED/ TFT Digital Color Monitor TCO- 05 certified	
	Keyboard	104 keys	
	Mouse	Optical with USB interface	
	Bays	2 Nos. or above	
	Ports	6 USB Ports or more (at least 2 USB with 3.0), audio ports for microphone and headphone in front. 1 RS 232 , RJ – 45	
	DVD ROM Drive	8X or better DVD ROM Drive	

	Networking facility	-10/100/1000 on board integrated Network Port with remote booting facility remote system installation, remote wake up, TPM enabled 1.2 chip using any standard management software -Bluetooth -WIFI		
	Operating System	Windows 11 Professional preloaded, as specified, with Media and Documentation and Certificate of Authenticity		
	OS Certifications	Windows 11 OS certification		
	Preloaded Software	MS-office 2016 or latest, Kaspersky or Quick heal Antivirus (Latest Version) with 1 year License		
	Compatible GPIB / IEEE 488.2 communication s/w with requisite h/w; Fiber optics Interface card :NI 480 Original CD/DVD pack with License for all above S/W and Drivers)			
	Ports for user end, use other than those already used for system: Connectors/ports required for automated testing of CE101, CE102, RE101 and RE102 tests			
11	Additional accessories/ Cables or adapters as required for CE101, CE102, RE101 and RE102 tests			
12	Test Rack Subsystem – Test rack with lockable castor wheels, Power distribution system, Heat dissipation unit and all necessary cables (for CE101, CE102, RE101 and RE102 tests)			
13	Any other item essential for the tests (Please OFFER)			

B. Test Rack 2:

- i. CE106, Conducted Emissions, Antenna Terminal, 10 kHz to 40GHz
- ii. RE 103, Radiated Emissions, Antenna Spurious and Harmonic Outputs, 10kHz to 40GHz

General features of Rack:

- It should be 19” rack with cooling/exhaust fan and internal cabling
- Automatic switching unit of signal paths up to 40 GHz. The switching paths should be operated through system controller.
- A suitable power distribution with EMI power line filters.

II. Broad Specifications. of CE 106 and RE 103 Test Rack Test equipment:

Sr. No.	Parameters	Specifications	Remark	Comply/Not Comply/ Deviation
1	Measurement Receiver		The EMI Receiver in Rack1 will be used	
2	RF Switching Unit			
	Frequency Range	DC to 40 GHz		
	Relay type	6 X SPDT, Coaxial relay (Suitable relay type can be offered for automated switching operation)		
	Connector type	SMA 2.9 (K-type female)		
	VSWR	≤ 2		
	Insertion Loss	≤ 1.0 dB		
	Isolation	50 dB		
	Remote control	USB/IEEE 488.2(GPIB)/LAN		
	Adaptors	19 inch rack adaptors		
	Max Power Input	3W (at 40GHz, increases with reducing Frequency)		
	Qty.	01 No.		
3	Low Frequency Signal Generator		The equipment in Rack1 will be used	
4	Synthesized Signal Generator		The equipment in Rack1 will be used	
5	Line Impedance Stabilization Network (LISN)		The equipment in Rack1 will be used	

6	Tunable Band Rejection Filter Network set			
	Frequency Range	10kHz to 40GHz (in Various Bands) Offer suitable tunable band rejection filter network up to maximum available frequency range		
	Rejection	50dB (minimum)		
	Connector	N Female		
7	Bi Directional Attenuators			
	Frequency	DC to 2.4GHz		
	Attenuation	40 dB		
	Impedance	50 Ω		
	Average Power	300W		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
8	Bi Directional Attenuators			
	Frequency	1GHz to 18GHz		
	Attenuation	30dB and 40 dB		
	Impedance	50 Ω		
	Average Power	Offer suitable power handling for RE103 test		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
	Qty.	2 Nos. for each attenuation level		
9	Bi Directional Attenuators			
	Frequency	18GHz to 40GHz		
	Attenuation	10 dB and 20 dB		
	Impedance	50 Ω		
	Average Power	20W		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
	Qty.	2 Nos. for each attenuation level		
10	High Power Bi Directional Attenuators			
	Frequency	DC to 500MHz		
	Attenuation	30dB		
	Impedance	50 Ω		
	Average Power	Offer suitable power handling for CE106/RE103 test		

	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
	Qty.	2 Nos.		
11	Dual Directional Couplers		1 set covering full frequency range and power rating.	
	Frequency Range	10 kHz to 40 GHz (or multiple frequency range)		
	Impedance	50 Ω		
	Insertion loss	0.1dB - 0.5dB		
	Coupling factors	30 -60 dB		
	Power rating	Offer suitable power handling and frequency sub ranges to cover full frequency range as per RE103 test.		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
12	Dummy Loads		1 set covering full frequency range.	
	Frequency and power handling	a) DC to1GHz b) 1GHz to 18 GHz c) 18GHz to 40 GHz: Offer suitable power handling for above mentioned each frequency for CE106 test		
	Impedance	50 Ω		
13	Active Rod Antenna		Antenna in Rack1 will be used	
14	Bi conical antenna (20MHz to 300MHz)		Antenna in Rack1 will be used	
15	Double ridge Horn Antenna -1(200MHz to 2GHz)		Antenna in Rack1 will be used	
16	Double ridge Horn Antenna -2 (1 to 18GHz)		Antenna in Rack1 will be used	
17	Double ridge Horn Antenna -3			
	Frequency Range	18 GHz to 40 GHz		
	Polarization	Linear		
	Input Impedance	50 Ω		
	Input Power	20W (CW)		
	VSWR	≤ 2		

	RF Connector	N/K female		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters (antenna factor at 1m distance) as per SAEARP958 from an ISO/IEC 17025 Accredited calibration Laboratory.		
18	Tripods			
	Tripods with suitable mounting adapters for antennas as mentioned in Sr. No. 17 shall be provided.			
19	External Preamplifiers (10kHz to 18GHz)		Equipment in Rcak1 will be used	
20	External Preamplifiers (18GHz to 40GHz)			
	Frequency Range	18GHz to 40GHz		
	Gain	35dB		
	Noise Figure	< 3dB		
	VSWR	< 2.5		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
21	Measurement Software (for CE106 and RE103)			
	Measurement Software will be used for automation of CE106 and RE103. It should be Windows based Menu driven, user friendly interactive and selectable by functional keys. Also should Support GUI environment for instrument and system configuration for automated operations.			
	Software should provide selection of the following menu driven features:			
	<ul style="list-style-type: none"> • Verification/calibration of the EMI receiver. • Enable user to compare results graphically. • Building user's own limit levels. • Save the measurement data for later use in internal / external memory. • Correction of measured data for transducer factor, cable loss and internal correction. • Rescan the selected frequency band of signals, if desired. 			
	Software should preferably support IEEE 488/ RS-232/ USB/ LAN interfaces for instrument control.			
	Generating test reports in graphical and tabulated data format, giving list of stimulus, emissions crossing the limit levels etc.			
	Context sensitive online help facility.			
	Ability to export reports to MS-Office based documents or PDF or HTML format.			
	Database for limit lines of MIL, EN, CISPR, IEC, etc., standards.			
	Automation of CE106/RE103 Tests: The fundamental should be determined either automatically and the limit lines automatically generated as per MIL461 F requirements.			

	EMI Evaluation and calculation tool for diagnostic purpose, such as Peak search, acceptance analysis, sub range maxima, sub range minima, maxima limitation, keep frequencies, merge result, add result, exclude range, exclude ranges			
22	System controller			
	CPU	Intel Core i7, 3.4 GHz, 8 MB Cache or better		
	Chipset	Intel Q8 series or latest		
	Bus Architecture	3 PCI (PCI/ PCI Express) or more		
	Memory	16 GB DDR4 RAM with 32 GB Expandability		
	Hard Disk Drive	500GB SSD		
	Monitor	24 inch larger LED/ TFT Digital Color Monitor TCO- 05 certified		
	Keyboard	104 keys		
	Mouse	Optical with USB interface		
	Bays	2 Nos. or above		
	Ports	6 USB Ports or more (at least 2 USB with 3.0), audio ports for microphone and headphone in front. 1 RS 232 , RJ – 45		
	DVD ROM Drive	8X or better DVD ROM Drive		
	Networking facility	-10/100/1000 on board integrated Network Port with remote booting facility remote system installation, remote wake up, TPM enabled 1.2 chip using any standard management software -Bluetooth -WIFI		
	Operating System	Windows 11 Professional preloaded, as specified, with Media and Documentation and Certificate of Authenticity		
	OS Certifications	Windows 11 OS certification		
	Preloaded Software	MS-office 2016 or latest, Kaspersky or Quick heal Antivirus (Latest Version) with 1 year License		
	Compatible GPIB / IEEE 488.2 communication s/w with requisite h/w; Fiber optics Interface card :NI 480 Original CD/DVD pack with License for all above S/W and Drivers)			
	Ports for user end, use other than those already used for system: Connectors/ports required for automated testing of CE106 and RE103 tests			
	Fiber Optic Extender			
23	Additional accessories/ Cables, adapters as required for CE106 and RE103 tests			
24	Test Rack Subsystem – Test rack with castor wheels, Power distribution system, Heat dissipation unit and necessary cables			
25	Any other item essential for the tests (Please OFFER)			

C. Test Rack 3:

- i. CS 101 Conducted Susceptibility Power leads 30 Hz to 150 kHz
- ii. CS 109 Conducted Susceptibility Structure current, 50 Hz to 100 kHz
- iii. RS 101 Radiated Emissions Magnetic Field 30 Hz to 100 kHz

General features of Rack:

- It should be 19” rack with cooling/exhaust fan and internal cabling
- A suitable power distribution with EMI power line filters.

III. Broad Specifications. of CS 101, CS 109 and RS 101 Test Rack Test equipment:

Sr. No.	Parameters	Specifications	Remark	Comply/Not Comply/ Deviation
1	Low frequency signal generator			
	Frequency Range	DC to 20MHz		
	Number of channels	1		
	Impedance	50 Ω		
	Amplitude Level	10mVpp – 10Vpp (into 50 Ω)		
	Harmonics	≤ -30 dBc		
	Spurious (non-harmonics)	≤ -50 dBc		
	Interface	USB/ IEEE-488.2(GPIB)/ LAN		
	Waveforms	Sine, Square, Ramp, Triangle, Pulse, Arbitrary		
	Modulation	AM, FM, PM, FSK, pulse modulation		
	Power Requirement	230 V ± 10% AC, 50 Hz ± 3 Hz		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory		
2.	Power Amplifier			
	Frequency	DC to 200 kHz		
	Power Output	Offer suitable output power as per CS101/CS109/RS101/test requirement		
	Slew Rate	Offer suitable for test requirement		
	Gain	Offer suitable gain as per CS101/CS109/RS101/test requirement		
	AC Power	AC 230 V±10%, 50 Hz ±10 %		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory		
3	Oscilloscope			
	General	Automatic measurement, auto-set		

		feature, Cursor measurements & waveform setup		
	3dB Bandwidth	1 GHz		
	No. Of Channels	2		
	Real Time sample Rate (Max.)	5 GSa/sec half channels 2.5 GSa/sec all channels		
	Input Impedance	50 Ω, 1 MΩ (selectable)		
	Coupling	AC, DC		
	Time base range	0.5 ns/div to 50 sec/div		
	Display	8 inch or better, Capacitive touch enabled color LCD or better		
	Interface	LAN / USB		
	Data export	Min. 2 USB ports		
	Associated Probes	100:1 1x1 No., 10: 1x1No., 1:1x2Nos		
	Power supply	230 V ± 10% AC, 50 Hz ± 10%		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an ISO/IEC 17025 Accredited calibration Laboratory.		
4	Precision Resistor	Resistance: 0.5Ω ±1% Power rating: 200 W		
5	Feed through Capacitor assembly (Delta & Wye Capacitor)	<ul style="list-style-type: none"> • 10μF feed through Tolerance: ± 10% Current handling > 100 A • Voltage rating: 600V. DC/ 275V. rms at 50 Hz/ 250V. rms at 40Hz • Delta Capacitor Assembly 		
	Isolation Transformer 1	<ul style="list-style-type: none"> • Power rating: 800 Watts • Input/output voltage: 240 / 240 Volts AC Operating frequency 50 Hz to 400Hz 		
6	Audio Isolation Transformer 2	<ul style="list-style-type: none"> • Current rating: 100A • Operating frequency: 30Hz - 250kHz • Audio power: 200W 		
7	LISN (1-Line)			
	RF output Socket	50 Ω, BNC/N		
	Frequency Range	10kHz -50MHz		
	Impedance Requirements of MIL-STD-461F	50μH+ 5Ω 50 Ω		
	Maximum Input Current rating	70 A		
	Supported Power System	DC, 50/60Hz and 400Hz		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an		
	Qty.	04 Nos.		

8	Current probe		
	Frequency Range	20 Hz to 100 MHz	
	Max. DC or Peak AC Current	300 A (f<1kHz)	
	Max. RF Current (RMS)	2 A (f > 1 MHz)	
	Max. Power at RF connector	2 W (f > 1 MHz)	
	Clamp Inner Diameter	30 mm or more	
	RF Connector	N Female	
9	RF Voltmeter (Measurement Receiver)		
	Range Selection	RMS / Peak, DC Voltage, Frequency	
	Input Impedance	1 M Ω /40 pF	
	Remote Control	IEEE 488.2/USB/RS-232	
	RMS Measurement	Voltage Range : 0.1 mV – 500V	
	Frequency	DC to 30 MHz	
	Read out	Digital	
10	Radiating Loop Antenna	<ul style="list-style-type: none"> • Diameter: 12 cm • No. of turns:20 • Wire: No. 12 insulated copper • Magnetic Flux Density: 9.5 x 10 (exp⁺⁷) T/ ampere of applied current at a distance of 5 cm from the plane of the loop 	
11	Loop sensor	<ul style="list-style-type: none"> • Diameter: 4 cm • Number of turns: 51 • Wire: 7-41 Litz wire (7 strand, No. 41AWG) • Shielding: Electrostatic 	
12	Measurement Receiver		The EMI Receiver in Rack1 will be used
13	Coaxial Load and Attenuators		
	RF Load	50 Ω , BNC/N type suitable for RS101	
	Attenuator	30 dB N Type suitable for RS 101	
14	Cables, adapters, connectors, and terminations necessary to conduct CS101, CS109 and RS101 tests		01 set
15	Measurement Software for CS101, CS109 and RS101 tests		
	It should be Windows based Menu driven, user friendly interactive and selectable by functional keys for automated operations.		
	Modular and flexible enough to allow the user to adapt the system to new Regulations I Standards or extend or modify the hardware due to new test requirements.		
	User's selection of MIL STD 461F susceptibility threshold levels.		
	Software program should comply with any make of USB / RS 232 / IEEE 488 / LAN compatible equipment,		
	Enable the system to calibrate the test equipment		
	Generating test reports in graphical and tabulated data format.		

	Ability to export reports to Doc, RTF, PDF or HTML		
	Graphical representation of the results on computer screen.		
	Download the results data in internal I external memory, Context sensitive on line help facility.		
16	System controller		
	CPU	Intel Core i7, 3.4 GHz, 8 MB Cache or better	
	Chipset	Intel Q8 series or latest	
	Bus Architecture	3 PCI (PCI/ PCI Express) or more	
	Memory	16 GB DDR4 RAM with 32 GB Expandability	
	Hard Disk Drive	500GB SSD	
	Monitor	24 inch larger LED/ TFT Digital Color Monitor TCO- 05 certified	
	Keyboard	104 keys	
	Mouse	Optical with USB interface	
	Bays	2 Nos. or above	
	Ports	6 USB Ports or more (at least 2 USB with 3.0), audio ports for microphone and headphone in front. 1 RS 232 , RJ – 45	
	DVD ROM Drive	8X or better DVD ROM Drive	
	Networking facility	-10/100/1000 on board integrated Network Port with remote booting facility remote system installation, remote wake up, TPM enabled 1.2 chip using any standard management software -Bluetooth -WIFI	
	Operating System	Windows 11 Professional preloaded, as specified, with Media and Documentation and Certificate of Authenticity	
	OS Certifications	Windows 11 OS certification	
	Preloaded Software	MS-office 2016 or latest, Kaspersky or Quick heal Antivirus (Latest Version) with 1 year License	
		Compatible GPIB / IEEE 488.2 communication s/w with requisite h/w; Fiber optics Interface card :NI 480 Original CD/DVD pack with License for all above S/W and Drivers)	
		Ports for user end, use other than those already used for system: Connectors/ports required for automated testing of CS101, CS109 and RS101 tests	
		Fiber Optic Extender	
17	Test Rack Subsystem – Test rack with lockable castor wheels, Power distribution system, Heat dissipation unit and necessary cables		
18	Printer		
	Type	Ink Tank	
	Color	Color	
	Functions	Print, scan and copy	
	Print size	A4	

	Compatible operating system	Windows 11		
	Interface	USB2.0 or better		
	Power supply	230 V \pm 10% AC, 50 Hz \pm 10%		
	Qty.	01 No.		
19	Test Rack Subsystem – Test rack with lockable castor wheels, Power distribution system, Heat dissipation unit and all necessary cables			
20	Any other item essential for the tests (Please OFFER)			



D. Test Rack 4:

- i. CS 114 Conducted Susceptibility Bulk cable injection, 4 kHz to 200 MHz
- ii. CS 115 Conducted Susceptibility Bulk cable injection, Impulse excitation
- iii. CS 116 Damped Sinusoidal transients, cables and power leads, 10 kHz–100 MHz

General features of Rack:

- It should be 19” rack with cooling/exhaust fan and internal cabling
- A suitable power distribution with EMI power line filters.

IV. Broad Specifications. of CS 114, CS 115 and CS 116 Test Rack Test equipment:

Sr. No.	Parameters	Specifications	Remark	Comply/Not Comply/ Deviation
1	Specifications of equipment/accessories for CS114			
1.1	Dual Channel Power Meter with Power Sensors			
	Frequency range	4 kHz to 500 MHz (sensor dependent)		
	No. of channels	2		
	Power Measurement range	1nW to 2W		
	Impedance	50 Ω		
	Range selection	Automatic / Manual		
	Remote control operation	IEEE 488/USB/RS-232		
	Power sensors	As per requirements		
	Input Power	230 V _{AC} ±10%, 50 Hz ± 10%		
	Power meters and Power sensor with capability to measure unmodulated (CW) and broadband modulated power (average power, pulse power, peak envelop power, AM, reflection)			
	Temperature compensation, Linearization, zeroing and frequency response correction required. Digital filters (averaging) for noise suppression at reduced power levels fast range selection and memory for storage of setups required			
	Power meter should not affect VSWR and attenuation			
1.2	Current injection probes			
	Current injection probes (Insertion loss characteristics as per Fig. CS114-2 of MIL STD 461 F)			
1.2.1	Injection Probe 1			
	Frequency range	4 kHz to 100 MHz		
	Internal diameter	≥ 35 mm		
	Rated power	200 W		
	Winding Current	50 A		
1.2.2	Injection Probe 2			
	Frequency range	2 MHz to 400 MHz		
	Internal diameter	≥ 35 mm		
	Rated power	200 W		
	Winding Current	50 A		
	Note: Single Current Injection probe with lower frequency			

	adapter will also be considered. (Insertion loss characteristics comply as per fig. CS114-2 of MIL-STD 461 F)			
1.3	Monitoring Current Probes			
	Frequency range	4kHz to 400MHz		
	Clamp inner diameter	≥ 32 mm		
	Nominal impedance	1Ω - 5 Ω		
	Maximum current (DC – 400 Hz)	200A		
	Maximum current {RF (CW)}	40A		
	Maximum current (Pulse)	60A		
1.4	Calibration fixture	<ul style="list-style-type: none"> • Frequency Range: 20 Hz to 500 MHz • For Injection Probes having 3.2 cm to 4.4 cm dia. window. • Coaxial transmission line with 50 Ω characteristic impedance, Coaxial connections on both ends, and space for an injection around the center conductor. 		
1.5	High Frequency Signal generator			
	Frequency range	4 kHz to 1 GHz		
	Internal LF Source	0.1 Hz to 100 kHz		
	Harmonics	-30 dBc or better		
	Output level	-20 dBm to 10 dBm		
	Reverse Power Protection	Should have reverse power protection		
	Resolution of setting	0.01Hz		
	Settling time	<3ms (1.6ms)		
	SSB phase noise	- 50 dBc or better		
	Wide band noise	- 50 dBc or better		
	modulation types	AM/FM/PM		
	Remote control	USB/IEEE 488.2/RS-232		
	Input Power	230 V _{AC} ±10%, 50 Hz ± 10%		
1.6	Bi-directional Attenuators	<ul style="list-style-type: none"> • Frequency Range: DC to 2.4 GHz • Attenuation Level: 10 dB and 20 dB • Power rating: 100W 	01 No. for each attenuation level	
1.7	Coaxial load	<ul style="list-style-type: none"> • Frequency range: DC to 500 MHz • Power rating: 200 W • Impedance: 50 Ω 		
1.8	Power Amplifier(Suitable for CS114 Test)			
	Frequency range	4 kHz to 250 MHz		
	Output Power	70 W (CW)		
	Input Power	+ 10 dBm Max.		

	Gain (min)	50 dB		
	Harmonics	-20 dBc or better		
	Impedance	50 Ω		
	Spurious	-40dBc or better		
	Remote control	IEEE488.2/USB/RS-232		
	Cooling	Forced Air		
	RF Input & Output Connector	N-Type Female		
	Input Power	230 V _{AC} \pm 10%, 50 Hz \pm 10%		
	Built-in directional couplers for forward and reverse power monitoring			
1.9	Line Impedance Stabilization Network (LISN)			
	RF output Socket	50 Ω , BNC/N		
	Frequency Range	10kHz to 100MHz		
	Impedance Requirements of MIL-STD-461F	50 μ H+ 5 Ω 50 Ω		
	Maximum Input Current rating	70 A		
	Supported Power System	500 V _{DC} , 415AC/50/60Hz and 115V/400Hz		
	Calibration	Accredited calibration certificate and report containing calibration data for all important parameters as per manufacturer specification from an		
	Qty.	04 Nos.		
2	Specifications of equipment/accessories for CS115			
2.1	Pulse generator			
	Standard	Complying to MIL STD 461 F, CS 115 waveform		
	Pulse Shape	Rectangular		
	Rise / fall time	\leq 2ns		
	Pulse repetition rate	Up to 30 Hz Adjustable		
	Polarity	Positive and Negative (selectable)		
	Output load	50 Ω		
	Output level (50 Ohm)	Output level (50 Ohm): up to 150 dB μ V/MHz)		
	Output Flatness	\pm 1dB		
2.2	Current injection probes		Current Injection probe of CS114 will be used	
2.3	Current Probe		Current probe of CS114 will be used	
2.4	Calibration fixture		Calibration fixture of CS114 will be used	

2.5	Oscilloscope		
	Bandwidth	500 MHz	
	No. of Channels	02 Min.	
	Sample rate	2.5 GS/s per channel	
	Time base range	1ns to 10s per division	
	Display	Color active LCD/LED	
	Interface	IEEE 488 compatible/USB/RS-232	
	Probes	10:1 -1No., 1:1 -2 Nos.	
	Qty.	01 No.	
2.6	High Voltage Attenuator	Attenuation: 40dB, N(m)-N(f), for >2.5 kV pulses Power Rating: 25W Impedance: 50 Ohm	
2.7	Coaxial load	Power Rating: 25W for >2.5 KV pulses Connector: N-male Impedance: 50 Ohm	
2.8	Coaxial Attenuators	Attenuation: 10dB, N(m)-N(f) Power Rating: 5 W Impedance: 50 Ohm Qty.: 02 Nos.	
2.9	Line Impedance Stabilization Network (LISN)		LISNs of CS114 will be used
2.10	Drive RF Cable		
	Impedance	50 Ω	
	Length	2 m	
	Insertion loss	\leq 0.5dB at 500 MHz	
	Connector	N-male to N-male	
3	Specifications of equipment/accessories for CS116		
3.1	Damped sinusoidal transient generator		
	Waveform	Damped Oscillatory Wave	
	Test Frequencies	10kHz, 30kHz, 100kHz, 300kHz, 1MHz, 3MHz, 10MHz, 30MHz & 100MHz)	
	Comply Standard	MIL-STD-461F	
	Output impedance	\leq 100 Ohms	
	Output Peak Current	Max. 10 A	
	Damped factor	15 \pm 5	
	Input Power	230VAC \pm 10%, 50 Hz \pm 10%	
	Output voltage	Adjustable	
	Panel mounted digital voltmeter		
3.2	Current injection Probe		Current Injection probe of CS114 will be used
3.3	Oscilloscope		Oscilloscope of CS115 will be used
3.4	Calibration fixture		Calibration fixture of CS114 will

		be used	
3.5	Current Probes	Current probe of CS114 will be used	
3.6	Coaxial Termination	Coaxial termination of CS114 will be used	
3.7	Line Impedance Stabilization Network (LISN)	LISNs of CS114 will be used	
3.8	Cables, adapters, connectors, and terminations necessary to conduct CS114, CS115 and CS116 tests	1 Set	
4	Measurement Software for CS114, CS115 and CS116 tests		
	It should be Windows based Menu driven, user friendly interactive and selectable by functional keys for automated operations.		
	Modular and flexible enough to allow the user to adapt the system to new Regulations I Standards or extend or modify the hardware due to new test requirements.		
	User's selection of MIL STD 461F susceptibility threshold levels.		
	Software program should comply with any make of USB / RS 232 / IEEE 488 / LAN compatible equipment,		
	Enable the system to calibrate the test equipment		
	Generating test reports in graphical and tabulated data format.		
	Ability to export reports to Doc, RTF, PDF or HTML		
	Graphical representation of the results on computer screen.		
	Download the results data in internal I external memory, Context sensitive on line help facility.		
5	System controller		
	CPU	Intel Core i7, 3.4 GHz, 8 MB Cache or better	
	Chipset	Intel Q8 series or latest	
	Bus Architecture	3 PCI (PCI/ PCI Express) or more	
	Memory	16 GB DDR4 RAM with 32 GB Expandability	
	Hard Disk Drive	500GB SSD	
	Monitor	24 inch larger LED/ TFT Digital Color Monitor TCO- 05 certified	
	Keyboard	104 keys	
	Mouse	Optical with USB interface	
	Bays	2 Nos. or above	
	Ports	6 USB Ports or more (at least 2 USB with 3.0), audio ports for microphone and headphone in front. 1 RS 232 , RJ – 45	
	DVD ROM Drive	8X or better DVD ROM Drive	
	Networking facility	-10/100/1000 on board integrated Network Port with remote booting facility remote system installation, remote wake up, TPM enabled 1.2 chip using any	

		standard management software -Bluetooth -WIFI		
	Operating System	Windows 11 Professional preloaded, as specified, with Media and Documentation and Certificate of Authenticity		
	OS Certifications	Windows 11 OS certification		
	Preloaded Software	MS-office 2016 or latest, Kaspersky or Quick heal Antivirus (Latest Version) with 1 year License		
	Compatible GPIB / IEEE 488.2 communication s/w with requisite h/w; Fiber optics Interface card :NI 480 Original CD/DVD pack with License for all above S/W and Drivers)			
	Ports for user end use other than those already used for system:			
	Connectors/ports required for automated testing of CS114, CS115 and CS116 tests			
	Fiber Optic Extender			
6	Test Rack Subsystem – Test rack with castor wheels, Power distribution system, Heat dissipation unit and necessary cables			
7	Any other item essential for CS114, CS115 & CS116 tests (Please OFFER)			

S A M E E R

4. Technical Terms and Conditions

Sr. No.	Description	Description/Details
1.	Parallel testing requirements of SAMEER:	<ul style="list-style-type: none"> • The instruments shall be grouped (as mentioned above in technical specifications) and offered as different blocks in racks to enable SAMEER to use and maintain each system block / rack independently as far as possible. • The system shall be designed in an optimum way to make the following Military tests as far as possible: <ul style="list-style-type: none"> ➤ Conducted Emission tests in shielded CE Lab ➤ Conducted Susceptibility tests (other than CS 114, CS 115, and CS 116) in shielded CS Lab. ➤ Conducted Susceptibility tests (CS 114, CS 115, and CS 116) in non-shielded CS Lab. ➤ RE / RS tests in the Shielded Anechoic Chamber
2.	System design, Setup & Layout	<ul style="list-style-type: none"> • The system shall be designed to share some important common system instruments between different test regulations, and at the same time to be in a position to run more than one test at a time for optimum use of the system. • The system design shall take into consideration of the temporary and final layouts (for designing of interconnections between racks, cable lengths, etc.) of SAMEER-EMC Centre Lab locations to minimize system complexities
3.	System Engineering and Installation:	<ul style="list-style-type: none"> • The system shall have complete menu driven and operator interactive software for automatic operation of the system for performing EMI/EMC tests as per Military requirements on EUT in the entire or selected band of frequency range. • The system must be configured and demonstrated in the manual mode also. • The system shall have the facility for self-calibration, self-checks, self-diagnostic functions using USB/RS232/IEEE-488 bus compatible equipment, transducers and cables. • The system shall be configured and engineered such that all the constituent equipment required for EMI/EMC testing as per MIL-STD-461F requirement is assembled in 19" system racks with lockable castor wheels. • Each 19" rack shall be provided with fans and internal cabling. It must include the following accessories apart from equipment: <ul style="list-style-type: none"> ➤ Relay switch unit for automatic switching of signal paths to eliminate change of connectors manually. Relay switch unit should cover entire frequency range up to 40 GHz. This switching unit path should be operated through system controller. ➤ POWER SUPPLY: The System with all its constituent equipment shall operate on single phase, 230 Vac±10%, 50± 10 % Hz. ➤ The equipment plugs shall be compatible to the Indian type socket.

4.	MANUALS:	<ul style="list-style-type: none"> • Two sets of hard copies and one set of soft copies for the following are to be supplied • Detailed System operation • Detailed block diagrams with cable layouts for the system • Maintenance manuals • Service manuals for each constituent equipment along with block diagrams • Software support for future upgradation. • Calibration Certificates for Equipment/Accessories (as mentioned in technical specifications).
Eligibility criteria		
5.	Proven system	<p>a) The vendor must have experience in executing turnkey systems, operating in India for the last 3 years. Some of the important similar equipment mentioned in the lab requirements, must have been supplied and maintained to some of the important EMI/EMC labs in India.</p> <p>b) The warranty period shall be given for three years for the total system including for third party equipment.</p> <p>c) The system design shall be capable of testing for CE & CS (Other than CS114,115&116) tests in CE & CS lab respectively and also in the main chamber for larger EUTs.</p> <p style="text-align: center;">Vendors shall provide details of equipment supplied to Indian labs and satisfactory service provided to them with documented proof.</p> <p>Literature shall be submitted in technical bid for evaluation of specifications.</p> <p>i) Technical catalogues of OEMs giving detailed specifications of complete system / sub-system / equipment / accessory should be made available along with the quotation for Technical Evaluation of the Bid.</p> <p>ii) The technical proposals forwarded by the bidders will be evaluated by a Technical Evaluation Committee (TEC). The TEC will examine the extent of the variations / differences if any, in the technical characteristics of the equipment and also their suitability, offered by various vendors w.r.t the standards required to meet and prepare a compliance statement short listing the vendors. The TEC can invite any vendor for technical presentation of the system and also for clarifications of specifications to determine suitability of the equipment for the standards.</p>
6.	References	<p>The supplier shall provide following reference cases information along with technical offer:</p> <ul style="list-style-type: none"> • A minimum of ONE similar test systems with similar test instrumentation has successfully executed and installed by the vendor. • The vendor shall produce reference names with contact numbers. • The vendor shall produce at least one reference letter from an end customer for the successful supply and installation of test System of similar specifications.
7.	Local service support	<p>The vendor shall have a full-fledged office in India (or an Indian Representative) to give maintenance support</p>

8.	Factory acceptance test	<ul style="list-style-type: none"> • 2 to 3 scientists will be deputed from the SAMEER for carrying out acceptance test procedure at firm's premises for 5 working days for Factor Acceptance Test. • In case no one is deputed from SAMEER due to unforeseen problems an integrated test report shall be submitted by the vendor before dispatching the system.
9.	Onsite installation	The supplier shall provide onsite system installation of the test system for acceptance purpose.
10.	Acceptance	The Test system acceptance procedure is performed with an onsite verification of the performances of test setup as per the standards.
11.	Training	The supplier should provide detailed onsite training at SAMEER-EMC Centre Navi Mumbai at free of cost, after installation and commissioning of the said AUTOMATED TEST SYSTEMS at SAMEER-EMC Centre.
12.	Delivery schedule	<ul style="list-style-type: none"> • The total System shall be supplied in one phase • However, any other equipment/ components(s)/accessory not explicitly indicated in this requirement but is/are considered essential for the system performance, operation and maintenance shall be indicated and included or excluded in the offer • Call for Factory acceptance tests (FAT) shall be given within 6 months after the purchase order and the reception of the L/C. • Onsite installation and acceptance tests will be made within about 3 months after the system arrives at customer site.
13.	Acceptance of facility	<p>a)Factory Acceptance Test: Test plan for FAT and training program shall be sent for acceptance by SAMEER before inviting for FAT. All instruments and accessories shall be verified during the factory acceptance test at vendor's site, prior to its delivery to the purchaser. The results of these tests should be presented and handed over to the purchaser. The supplier shall intimate at least 60 days in advance for FAT so as to make travel plans by SAMEER scientists.</p> <p>b) Installation & Commissioning in Labs and Acceptance Test: All instruments and accessories shall be installed & commissioned in the established labs at customer's site and shall be demonstrated for each test on an appropriate DUT for acceptance test. The results of these tests should be presented and handed over to the purchaser.</p> <p>c)All the acceptance tests shall be performed as per required specifications for the full power and field levels required by the regulations.</p>
14.	Warranty	<p>a) The supplier shall warrant that the equipment to be supplied shall be new and free from all defects and faults in materials used workmanship and manufacture and shall perform in full conformity with the specifications and applicable standards.</p> <p>b) The system supplied shall be covered by a warranty of three 3years (Standard + Extended) from the date of acceptance after I&C in labs as mentioned above including for the equipment manufactured by 3rd party suppliers.</p> <p>c) If within the period of warranty, the equipment is reported by the buyer to</p>

		<p>have failed to perform as per specification, the seller shall either replace or rectify the same free of charge, maximum within 10-14 working days for spares available in India and 45 working days for spares to be imported after notification of such defects received by the seller. Warranty of equipment would be extended by such duration.</p> <p>d) If any customs duty or any other Govt. levy is to be paid including the freight charges on the replacement components/modules, it will be to the supplier's accounts only during warranty period.</p>
15.	In service life / shelf life:	<p>The equipment shall have minimum of 10 years of In-service life / shelf life. The bidder shall provide guarantee certificates for supporting major equipment from OEMs for a period of 10 years.</p>
16.	Pricing:	<p>a) The supplier shall quote price of each item and also a total system for CE Lab, CS Labs and RE up to 40 GHz.</p> <p>b) Equipment / accessories that can be shared for more than one test need not be quoted / offered separately for all the concerned tests. Instead, these are offered / quoted at one place only and at other tests with an annotation "Same as test(s)..." shall be indicated.</p>

S A M E E R

SECTION – III
**COMMERCIAL & OTHER TERMS
AND CONDITIONS**

S A M E E R

1. Commercial & Other Terms and Conditions

Vendor to state Complied / Not Complied – Deviations if any in the given column

Sr.No.	DESCRIPTION	DESCRIPTION	Comply /Not comply /Deviation
1	PRICES	<p>a) For Import Order: Prices quoted should be on the basis of FCA (nearest Int. Airport at shipper’s country), Name of the Airport should be mentioned clearly.</p> <p>b) For Local Order: Prices should include delivery charges up to SAMEER EMC Center, CBD Belapur, Navi Mumbai. Any additional charges, taxes and levies should be clearly mentioned. In the event of a Purchase Order, it will be the responsibility of the supplier to pay whatever charges are payable to different agencies in their country. The purchaser will not pay any charges other than the agreed price as per the contract.</p>	
2	TAXES, DUTIES AND LEVIES APPLICABLE	<p>(Existing applicable rates should be mentioned)</p> <p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p> <p>5.</p>	
3	PACKING	<p>The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit. In order to maintain safety of the equipment, we prefer to have wooden crating with adequate cushion inside for transportation of any goods. The Material to be dispatched with International standard packing to withstand Rigors, and to avoid any transit damages.</p>	

4	FREIGHT AND INSURANCE	<p>a) For Local Order: To be arranged by supplier. All the items shall be delivered to SAMEER-EMC Centre, CBD Belapur Navi Mumbai after obtaining a shipping release in the appropriate pro-forma from the purchaser. The Vendor shall be fully responsible for the safe delivery of all the items from and to SAMEER – EMC Center Navi Mumbai and shall satisfy the purchaser that adequate measures have been taken for the same.</p> <p>b) For Import Order: Will be arranged by SAMEER from FCA International Airport.</p>	
5	ANY OTHER APPLICABLE CHARGES	SUPPLIER TO SPECIFY	
6	MODE OF DELIVERY	<p>a) For Local Order: By road</p> <p>b) For Import Order: By Air</p>	
7	DELIVERY SCHEDULE	<p>All the material needs to be delivered within six months from the date of purchase order.</p> <p>The installation, commissioning and handing over of all the deliverables under the scope of purchase order need to be completed within eight months from the date of purchase order.</p>	
8	WARRANTY	<p>3 Years (Comprehensive onsite warranty)</p> <p>If standard warranty does not cover 3 years period, additional charges to comply the 3 years warranty should be quoted in price bid under warranty section</p>	
9	PAYMENT TERMS	<p>a. For Import order: 90 % against Irrevocable Letter of Credit or Sight Draft and balance 10 % through wire transfer after acceptance of material at SAMEER EMC Centre Navi Mumbai.</p> <p>b. For Local order: 75 % after delivery followed by inspection balance 25 % against Test, Installation & acceptance (whichever is applicable) of material / consignment, at SAMEER- EMC Centre Navi Mumbai.</p>	
10	VALIDITY OF QUOTATION	180 DAYS MIN FROM THE DUE DATE.	
11	Tender Fee (Including GST)	<p>Tender document may be purchased from the Accounts Section of SAMEER, Mumbai on cash payment or by Demand Draft from any commercial bank of India, drawn in favour of “Society for Applied Microwave Electronics Engineering and Research”.</p> <p>If the Tender document is downloaded from website, then the Tender Fee is not applicable.</p>	

12	EARNEST MONEY DEPOSIT (EMD)	<p>a. Earnest Money Deposit (EMD) should be submitted in the form of Account Payee Demand Draft, Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee from any commercial bank of India, drawn in favour of "Society for Applied Microwave Electronics Engineering and Research".</p> <p>b. For exemption, please refer SECTION I, 2 d</p> <p>c. In lieu of EMD, vendor may submit "Bid security Declaration" on their letterhead. (vendor should mention the applicable option from above in the Remark column)</p>	
13	PERFORMANCE SECURITY	<p>The successful bidder has to give Security Deposit in the form of an Account Payee Demand Draft / Fixed Deposit Receipt from an Indian commercial bank / Bank Guarantee from an Indian commercial bank / a counter Letter of Credit (LC) from our bankers (in case of foreign order), for 3 % of Order Value, immediately after receiving the purchase order. Performance Security should remain valid for a period of sixty days beyond the date of all contractual obligations including warranty obligations.</p>	
14	EXEMPTION FOR CUSTOM DUTY AND EXCISE DUTY	<p>SAMEER 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.</p>	
15	SHARING LAND BORDER WITH INDIA	<p>a. Yes / No b. If Yes, whether necessary valid registration certificate is attached along with Technical bid.</p>	
16	JURISDICTION	MUMBAI	

SECTION – IV
**FORMATS FOR PRICE BID AND
FORMS**

S A M E E R

Format for Price Bid (in INR)**IMPORTANT**

Vendor is required to submit the price bid in the given format on their LETTER HEAD.
One copy of the price bid without the financial figure should be enclosed along with the Technical Bid.

1. Format for Price Bid (in INR)**IMPORTANT**

Vendor is required to submit the price bid in the given format on their LETTER HEAD.
One copy of the price bid without the financial figure should be enclosed along with the Technical Bid.

ITEM	DESCRIPTION	QUANTITY	RATE IN INR	PRICE IN INR
I	Supply, Installation, Commissioning, performance testing and validation of Automated EMI/EMC Test Systems as per MIL-STD 461 F comply with Section-II (Technical specifications), Technical terms and conditions and Section-III (Commercial & other terms and conditions).			
II	Additional charges to comply three years warranty (If standard warranty does not cover 3 years period)			
III	OTHER CHARGES			
1.	TAXES AND DUTIES APPLICABLE ON TEMS			
	I			
	II			
	III			
	IV			
2.	FREIGHT from Vendor's manufacturing facility to SAMEER-EMC Centre Navi Mumbai			
3.	INSURANCE			
4.	ADDITIONAL CHARGES IF ANY			
	TOTAL AMOUNT			
	TOTAL AMOUNT (IN WORDS)			
Vendor's Signature:		Seal:		

2. Format for Price Bid (in Foreign currency)

IMPORTANT

Vendor is required to submit the price bid in the given format on their LETTER HEAD.
One copy of the price bid without the financial figure should be enclosed along with the Technical Bid.

ITEM	DESCRIPTION	QUANTITY	RATE IN (Name of currency)	PRICE IN (Name of currency)
I	Supply, Installation, Commissioning, performance testing and validation of Automated EMI/EMC Test Systems as per MIL-STD 461 F comply with Section-II (Technical specifications), Technical terms and conditions and Section-III (Commercial & other terms and conditions).			
II	Additional charges to comply three years warranty (If standard warranty does not cover 3 years period)			
III	ADDITIONAL CHARGES IF ANY			
IV	FCA CHARGES (Name of the Int. Airport) (From Vendor's manufacturing/shipping facility to Manufacturer's country's Intl. Airport			
	TOTAL AMOUNT			
	TOTAL AMOUNT (IN WORDS)			
	Vendor's Signature: Seal:			

Annexure – I

1. Company Details

1	Name of the Company	
2.	Detailed Address for Correspondence	
3.	Contact Person's Name with Telephone and Email Details (To whom all references shall be made regarding this Tender)	
4.	Year of Registration/ Incorporation	
5.	Date of Commencement of Business	
6.	Address of the Headquarters	
7.	Number of Employees as on tender submitting date	
8.	List of similar projects/systems developed for other clients	
9.	Other Relevant Information	
10.	Mandatory Supporting Documents a) Enclose a copy of Registration document (in case of a company not being a government body/undertaking/PSU), Certificate of Incorporation from Registrar of Companies (ROC) b) Relevant sections of Memorandum of Association of the company or filings to the stock exchanges to indicate the nature of business of the company	

2. Financial Details of the Organization

	FY 2019-20	FY 2020-21	FY 2021-22
Revenue (in INR Crores)			
Profit before Tax (in INR Crores)			
Revenue from similar Project/system Developed/delivered (In INR Crores)			
Other Relevant Information			
Mandatory Supporting Documents: a. Auditor Certified financial statements for the Last three financial years; 2019-20, 2020-21, and 2021-22 (Please include only the sections on P&L, revenue and the assets, not the entire balance sheet.) b. Unaudited financial statements certified by the Company auditor for the 2021-22 (in case the auditor certified statement for 2021-22 is not available)			

Annexure – II

1. Prior Experiences

Following details for each similar project/system developed/delivered should be attached. The photograph of the product/system developed and feedback letter from client may be also be attached.

1	Name of Client / Firm:	
2	Address and contact details	
3	Nature of Assignment	
4	Description of Project / system along with technical specs	
5	Current Status	
6.	Approx. value of the Assignment /job provided by your firm under the contract (in Rupees):	
7.	Mandatory Supporting Documents: a) Letter from the client duly indicating the salient points like cost, period, scope of project and successful completion of the projects	
8.	Complete details of the scope of the project shall be provided to indicate the relevance to the Qualification criterion.	

Annexure – III

1. Declaration Letter

(Company letterhead)

[Date]

To,

Director General,
SAMEER, IIT Campus, Powai
Mumbai – 400 076

Dear Sir,

Ref: Tender Notice for Selection of Service Provider for supplying of **Supply, Installation, Commissioning, performance testing and validation of Automated EMI/EMC Test Systems as per MIL-STD 461 F** at SAMEER-EMC Centre, Navi Mumbai.

Having examined the Tender document, the receipt of which is hereby duly acknowledged, we, the undersigned, intend to submit qualification requirements in response to the Tender document for **Supply, Installation, Commissioning, performance testing and validation of Automated EMI/EMC Test Systems as per MIL-STD 461 F**

We attach hereto the response as required by the tender, which constitutes our proposal.

Primary and Secondary contacts for our company are:

	Primary	Secondary
Contact person Name		
Title		
Company Name		
Address		
Phone No.		
Mobile No.		
Email id		

We confirm that the information contained in this response or any part thereof, including its exhibits and other documents or instruments delivered or to be delivered to SAMEER is true, accurate verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the department in its short-listing process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the short-listing process, we are liable to be dismissed from the selection

process or termination of the contract during the project, if selected to do so, for Supply, Install and Commission of EMI/ EMC Test Equipment as per MIL-STD 461F.

We are not involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this contract

We are not black-listed by any Government Organization/ Public Sector Undertaking

We agree for unconditional acceptance of all the terms and conditions set out in the Tender document.

It is hereby confirmed that I/We are entitled to act on behalf of our company/ corporation/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Dated this Day of 2022

(Signature)

(In the capacity of)

(Name)

Duly authorized to sign the Tender Response for and on behalf of:

(Name and Address of Company) Seal/Stamp of bidder

Witness Signature:

Witness Name:

Witness Address:

Annexure – IV

1. Board Resolution form

CERTIFICATE AS TO AUTHORISED SIGNATORIES

I,, the Company Secretary
of....., certify that who
signed the above Bid is authorized to do so and bind the company by authority of its board/
governing body.

Date:

Signature:

(Name)

S A M E E R

(Company Seal)

Annexure – V

Bid Security Declaration Form

Dated:

To,

Registrar,
Society for Applied Microwave Electronics Engineering and Research
IIT Campus, Powai,
Mumbai 400076

Sir,

I, the undersigned, declare that:

1. I am duly authorized to submit bid and undertakings in response to your tender No. _____.
2. I understand that the bidders are required to submit Bid Security of the prescribed amount, while submitting bids in response to tender enquiries of the Society for Applied Microwave Electronics Engineering and Research (SAMEER).
3. As an alternative to the Bid Security, I hereby declare that my firm, which is submitting the current bid, will be suspended for the period of time specified in the request for bid document or for a period of three years if no such period of time is specified in the request for bid document, from being eligible to submit bids for contracts with SAMEER,
 - i. if we withdraw or modify the bid during the period of validity (including the extended period of validity) **or**
 - ii. If we fail to sign the contract, or to submit the performance security before the deadline prescribed in the request for bid document or in the communication sent by SAMEER.

Signature with seal:

Name: _____

Designation _____

Name of the firm _____

Place _____

Annexure - VI

Self-Certification for Local Content
(Should be on the letter head of the bidder)

*We [name of manufacturer] hereby confirm in respect of quoted item(s) that Local Content is equal to or more than 50% and we come under 'Class-I Local Supplier' Category. Being 'Class-I Local Supplier', we are eligible for Purchase Preference in accordance with Department of Promotion of Industry and Internal Trade's Order No. P45021/2/2017-PP (B.E.-II) dated 15.06.2017, as modified, vide the said Department's orders No. P-45021/2/2017-PP(BE-II) dated 28/05/2018, No. P-45021/2/2017-PP(BE-II) dated 29/05/2019 and No. P-45021/2/2017-PP(BE-II) dated 04/06/2020

OR

*We [name of manufacturer] hereby confirm in respect of quoted items(s) that Local Content is more than 20% but less than 50% and we come under 'Class-II Local Supplier' Category, as per the said order of Department of Promotion of Industry and Internal Trade

OR

*We [name of manufacturer] hereby confirm in respect of quoted items(s) that Local Content is less than or equal to 20% and we come under 'Non Local Supplier' Category.

The details of the location (s) at which the local value addition made is /are as under:

- 1.....
- 2.....
- 3.....

*Strike out whichever is not applicable

Date:

Seal & Signature of the Bidder

NOTE: -

- 1 Bidder should submit Self-certification that the item offered meets the minimum local content (as above) giving details of the location(s) at which the local value addition is made in case the bidder wishes to avail the benefits under the make in India policy, if applicable.
- 2. In cases of procurement for a value in excess of Rs. 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content to avail the benefits under the make in India policy, if applicable.
- 3. The orders quoted above are available on our website(<https://www.sameer.gov.in/tenders.asp#page>)