

TENDER NO.: S-CEM/IP/EMCD/1010-SW/OTE/102-03/2020-2021

TENDER DOCUMENT

**SUB: SUPPLY AND INSTALLATION OF SIMULATION TOOL FOR EMI/EMC DESIGN**

DUE ON : 27.01.2021 at 14.00 Hrs.



SOCIETY FOR APPLIED MICROWAVE ELECTRONIC  
ENGINEERING AND RESEARCH

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

SAMEER- Centre for Electromagnetics,  
CIT Campus, 2nd Cross Road, Taramani, Chennai-600 113  
Phone No: (044)22541583/1817/22544020/4061  
(Fax). (044) 2254 1938/ 1424  
Website: <http://cem.sameer.gov.in>  
E-mail: purchase.chn.sameer@nic.in

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

Sealed Tenders are invited under Two Bid (Technical & Commercial) from reputed Original Software Developers (OSD)/ Indian Authorized Agents of Foreign Suppliers for the supply of simulation tool as mentioned below

1.	Description of Item	Quantity	Cost of Tender
	<b>SUPPLY AND INSTALLATION OF SIMULATION TOOL FOR EMI/EMC DESIGN</b>	<b>One</b>	<b>(In Indian Rupees) 1,500/- + 18 % GST(Rupees one thousand and five hundred only)</b>

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

**IMPORTANT DATES & TIME**

Last date and time of Submission of bids by the prospective bidders in Two Bid Format	<b>27.01.2021 14.00 hrs.</b>
Date and Time of Opening of Technical Bids	<b>27.01.2021 at 15.30 hrs.</b>
Venue of Opening of Bids	SAMEER-CEM, Taramani,Chennai - 600 113
Tenders to be submitted at	Security Gate, SAMEER-CEM,CIT Campus, 2 <sup>nd</sup> Cross Road, Taramani,Chennai - 600 113

**BIDDING DOCUMENTS FOR SIMULATION TOOL FOR EMI/EMC DESIGN**

<b>Section: A</b>	ELIGIBILITY/QUALIFICATION CRITERIA
<b>Section: B</b>	INSTRUCTIONS TO THE BIDDERS
<b>Section: C</b>	TERMS & CONDITION
<b>Section: D</b>	INSTRUCTIONS FOR BID SUBMISSION
<b>Section: E</b>	TECHNICAL BID
<b>Section: F</b>	PRICE BID
<b>Annexure-I</b>	MANUFACTURER'S AUTHORIZATION LETTER
<b>Annexure-II</b>	BIDDER'S PERFORMANCE STATEMENT FORM
<b>Annexure-III</b>	TENDER ACCEPTANCE LETTER
<b>Annexure-IV</b>	ELIGIBILITY OF BIDDER

## **SECTION-A ELIGIBILITY/QUALIFICATION CRITERIA**

1. Bids are invited from Original Software Developers (OSD) or their Indian agent of foreign principals specifically authorized by the OSD, to quote on their behalf for this tender. The OSD or their Indian agent of foreign principals shall have developed and supplied the Simulation tool for EMI/EMC Design software specified in the "Technical Specification". Such software must be of the most recent series incorporating the latest improvements in the software.
2. The Prospective bidder's should have experience in supply and successful installation of 5 similar software to the Government of India Department/PSU/Autonomous Body or any reputed organization. Purchase order copy along with proof of completion certificate must be provided along with technical bid.
3. Either the Indian Agent on behalf of the Principal/ Original Software Developers (OSD) or Principal/OSD itself can bid, but both cannot bid simultaneously for the same item/product in the same tender.
4. If an agent submits bid on behalf of the Principal/OSD, the same agent shall not submit a bid on behalf of another Principal/OSD in the same tender for the same item/ product.
5. In case a foreign bidder who does not have an agent in India quotes, then the foreign bidder shall have to furnish a certificate to the effect that the bidder is or will be represented by an agent in India and will be able to carry out the supply, maintenance, obligations etc. during the warranty and post-warranty period. In case of non-availability of Indian agent, the foreign bidder shall ensure a mechanism at place for carrying out the supply, maintenance, obligations etc. during the warranty and post-warranty period. And also, provide their service visit plan for mandatory visits and breakdown visits.
6. Details of service support facilities that would be provided after the warranty period should be submitted in the Service Support Details Form.
7. The Bidder will assume total responsibility for the fault-free operation of the software, , if any, and maintenance during the warranty period and provide necessary maintenance services and availability for five years after end of warranty period if, required.
8. In order to assess the financial solvency of a firm, The Programme Director, SAMEER-CEM may seek a report from the bankers of the technically evaluated lowest quoting firm in order to assess if the firm is financially capable of executing the purchase order/work successfully.
9. Bidders who meet the criteria given above are subject to be disqualified, if they have made untrue or false representation in the forms, statements and attachments

submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure, etc.,

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

11. Any additional bid participation criteria/eligibility conditions etc. mentioned in the Technical Specification sheet will also form and part of the Qualification Requirements along with those mentioned in this chapter.

## **SECTION B: INSTRUCTIONS TO THE BIDDERS**

The bid shall be submitted in accordance with these instructions and any bidder not confirming to the instructions as under is liable to be rejected. These instructions shall form the part of the contract.

1. While submitting the bid, if any of the prescribed conditions are not fulfilled or are incomplete in any form, the bid is liable to be rejected. If any bidder stipulate any condition of his own, such conditional bid is liable to be rejected

2. SAMEER-CEM reserves the right to reject any tender/bid wholly or partly without assigning any reason.

3. The Tender Opening Committee (TOC) shall have the right to verify the particulars furnished by the bidder independently.

4. Bidders shall take into account all costs including installation, commissioning, etc. for giving delivery of software at site i.e. SAMEER-CEM, Chennai before quoting the rates. In this regard no claim for any extra payment for any reasons shall be entertained.

5. The item should be delivered at SAMEER-CEM, Chennai and the supplier shall be responsible for any damage during the transit of goods.

6. In case, holiday is declared by the Government on the day of opening the bids, the bids will be opened on the next working day at the same time. The SAMEER-CEM reserves the right to accept or reject any or all the bids.

7. The bidders may submit duly filled and completed bidding document as per instruction contained in the bidding documents. Incomplete bid shall be rejected. The conditions of tender shall be governed by the details contained in complete bid document.

## SECTION C: TERMS & CONDITIONS

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

2. **Payment for supplier:** 100% payment shall be made by the SAMEER-CEM against Supply and installation of the software, at SAMEER-CEM and to the entire satisfaction of the user scientist and on production of unconditional performance bank guarantee for 3% of the PO value.

3. **GST:** Concessional GST (5%) rate will be applicable to SAMEER-CEM as per GOI, Ministry of Finance, Notification No. 47/2017-Integrated Tax (Rate) dt. /11/2017. It is certified that SAMEER-Centre for Electromagnetics is an Autonomous Institute of the Ministry of Electronics & Information Technology, Govt. of India and it is registered with the (DSIR) Department of Scientific & Industrial Research, Government of India vide their Registration No. F.No.11/354/1997/-TU-V dated 18th March 2019, Valid up to 31.03.2022. It is also certified that the material/goods purchased is required for Research & Development in SAMEER-CEM. Duly signed GST concessional Certificate will be provided along with PO.

4. **Taxes:** SAMEER-CEM is registered with Department of Scientific and Industrial Research (DSIR) for the purpose of availing custom duty exemption in terms of Government of India Notification No. 51/96-customs amended to 24/2007-customs dated 1st March 2007. **{approx. 5.20 % duty is applicable under this notification (5% Basic + cess /surcharge)}** and central excise duty exemption in terms of Government Notification no. 10/97-central excise amended to 16/2007-central excise dated 1st March 2007.

5. **DELIVERY:** Within 04 weeks from the date of Purchase order

6. **Warranty:** Software should carry a minimum 1 year maintenance & support on site /remote assistance 24x7 4 Hour Response from the date of Installation of the SOFTWARE. . The warranty also includes all software subscriptions (critical hot fixes, service packs, and major upgrades etc). During the warranty period, the bidder shall attend to all failures relating to software installation, configuration, management and performance.

7. **Liquidated Damages:-** As time is the essence of an order, the date of delivery should be strictly adhered to, penalty for late delivery will be imposed @ 0.5% (Half Percent) per week subject to a maximum of 10% of the total value of purchase. In case of delay in installation, the same rate of penalty shall be leviable.

8. **Cancellation:** SAMEER-CEM reserves the right to accept or reject or cancel any or all enquiries or quotations at any stage without assigning any reason thereof. In case of cancellation of order due to Non-compliance of the Terms and Conditions

and Breach of the Contract, No compensation will be paid towards progress of order/procurement.

9. **Governing Law:** The order placed will be contract between the supplier and the buyer and shall be governed by the LAWS of India and under the contract shall be taken by the parties only in Chennai, India to competent jurisdiction.

10. **Performance Bank Guarantee:** The successful bidder shall submit Performance Security Deposit (SD) for 3% of the purchase order value in the form of DD, fixed deposit receipt in favour of SAMEER-CEM, Chennai/BG (from any Indian Nationalized Bank). **Performance Security should remain valid for a period of sixty days beyond the warranty period**

### Section: D

#### Instructions for Bid Submission

1. The bid shall be submitted to the below mentioned address not later than **2:00 PM on 27.01.2021**.
2. The tender form for Technical bids shall be complete in all respects should be submitted in sealed cover superscribed - **“Technical Bid - Supply & Installation of Simulation tool for EMI/EMC Design”**
3. The tender form for price bid shall be complete in all respects should be submitted in sealed cover superscribed - **“Price Bid -Supply& Installation of Simulation tool for EMI/EMC Design”**
4. The above two sealed covers should be put together in another big cover/envelope which should be sealed with wax. The cover shall be superscribed as “Tender No:....., dated: ..... & Name of Tender **“Supply& Installation of Simulation tool for EMI/EMC Design”** and addressed to

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

5. Tender shall remain valid for a period of **six months** from the date of opening of the technical bid.
6. Rates should be quoted both in figures and in words in columns specified. All erasures and alterations made while filling the tender must be attested by initials of the bidder and

overwriting of figures is not permitted.

7. SAMEER-CEM reserves the right to accept or reject any or all the bids, either in whole or in part, without assigning any reasons for doing so.
8. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
9. Bidder are advised to go through the bid document carefully to understand the documents required to be submitted as the part of the bid.
10. Period of validity of the tender will be for 180 days.



## SECTION: E

### TECHNICAL BID

#### TECNNICAL SPECIFICATION

The software for the intended usage is supposed to have the following features.

##### **3D EM solvers including**

- Frequency Domain Solver, Time Domain Solver, TLM solver
- Ray tracing solver for large structures - GTD, PO,GO Asymptotic Solvers
- Low frequency, frequency/ time domain solvers

##### **2D circuit solvers and simulation**

- 2D Transmission Line method Solver
- Signal integrity, power integrity, and electromagnetic compatibility analysis
- Signal integrity, power integrity, and electromagnetic rule checks

#### **Features**

##### **Frequency-domain solver features**

- Automatic mesh generation (expert system) and adaptive mesh refinement with 3D mesh.
- Fast broadband adaptive frequency sweep.
- Excitation by waveguide ports, lumped element ports, plane wave ( linear, circular or elliptical polarization), lossy waveguide, Current sources.
- Lumped R, L, C elements at any location in the structure.
- Boundary conditions: electric, magnetic, open(PML), conducting wall, periodic with arbitrary phase shifter scan angle. Unit cell boundary conditions for periodic structures.
- Monitoring of electromagnetic fields (E, H, J, energy, power flow, far-field).
- Antenna far-field calculation (including gain, beam direction, sidelobe suppression, etc.) with and without far-field approximation.
- Antenna array far-field calculation.
- Parameter sweep and structure optimization for defined goals.

##### **Time-domain solver features**

- Automatic mesh generation and adaptive mesh refinement.
- Boundary conditions: electric, magnetic, open(PML), conducting wall, periodic.

- Excitation with port modes, discrete elements, discrete face ports, and plane waves (also circular and elliptical polarized).
- Broadband calculation of S-parameters.
- S-parameter sensitivity and yield analysis.
- SPICE and HSPICE model equivalent circuit extraction with model order reduction.
- Monitoring of electromagnetic fields at arbitrary frequency points in one simulation run.
- Broadband calculation of antenna far-fields, gain, directivity etc.
- Transient EM/circuit co-simulation with other solvers.

## **2D circuit simulator features**

- Interface for insertion and connection of circuit components.
- A database containing commonly used 2D EM-based microstrip, strapline and waveguide components, active, passive, linear and non-linear circuit elements and Time Signal Library.
- Seamless integration with 3D electromagnetic field simulations.
- Import of netlists and semiconductor device models from commonly used formats like Berkeley SPICE, Cadence PSpice or Synopsys HSPICE
- Import of measured or simulated data
- Parameter sweep and Optimisation.
- Transient EM/circuit co-simulation.
- SPICE and HSPICE model equivalent circuit extraction with model order reduction.

## **Cable Simulation features**

- Transmission line modelling for cables
- 3D full-wave analysis of the cable layout.
- Tool for direct modelling of cable/harness using GUI and support for generic cables like single wires, twisted cables, coaxial cables, and ribbon cables, support for cable shields - solid or braided
- Support for importing harness definition files like NASTRAN or STEP AP212 (KBL) format
- Import of 3D CAD data from SAT, Autodesk Inventor, IGES, VDA-FS, STEP, ProE, CATIA 4, CATIA 5, CoventorWare, Mecadtron, Nastran or STL
- Automatic meshing and extraction of 2D transmission line parameters

Sl. No	Description	Compliance Yes/No	Deviations, if any
1.	SUPPLY, INSTALLATION OF SIMULATION TOOL FOR EMI/EMC DESIGN	Bidder should submit compliance matrix	To be mentioned along with the compliance matrix
2.	<b>Warranty:</b> One Years on-site Comprehensive warranty and support from the date of installation.		
3.	<b>Installation:</b> Firm should install the Software at SAMEER-CEM, Chennai within two weeks from the date of delivery.		
4.	OSD must have capability for uninterrupted maintenance & support for a period of 5 years from the date of acceptance to avoid any operational problem due to obsolete or/ any other reasons.		
5.	Licence type: Perpetual, Floating		
6.	<b>DELIVERY:</b> Within 04 weeks from the date of Purchase order.		
7.	<b>TRAINING, DEMO &amp; TESTING:</b> 5-day training covering all the features requested.		
8.	1 set of comprehensive user manuals should be supplied along with software.		

**Technical Bid shall include the following**

- a. Bid (EMD) security declaration form
- b. Tender fee as specified in the invitation to bids
- c. Manufacturer's Authorization Letter
- d. Bidder's Performance Statement Form
- e. Tender Acceptance Letter (*duly signed by the bidder with company seal*).
- f. Bidders Eligibility Certificate (*duly signed by the bidder with company seal*).

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

Signature of the authorized person

Name:

Designation :

Company Seal

Date :

Place :

**SECTION F: RICE BID**

**PART A**

Sl. No.	Item Description	Qty	Unit Rate	Total Rate	Taxes	Total Price (inclusive of all taxes, duties, freight etc)
1	SUPPLY AND NSTALLATION OF SIMULATION TOOL FOR EMI/EMC DESIGN	1 No.				
2	Any other charges					
	<b>GRAND TOTAL</b>					

**Total price in Words:**

**PART B : (Optional)**

	Amount	Taxes	Total Amount
AMC 1 <sup>st</sup> year AMC including upgrades, maintenance and support beyond the first year warranty. This should cover free updates to the newer versions released and patches.			
AMC 2nd Year			
AMC 3rd Year			

**Note:** Vendors may kindly note that the AMC will be optional and may not be considered for deciding L1. AMC may be awarded to the successful bidder after the completion of warranty period at the discretion of the SAMEER-CEM and the amount quoted for the AMC will be fixed for three years. In case, SAMEER-CEM considers to award the AMC to the successful bidder the payment will be released at the end of each half year.

Signature of the Manufacturer/authorized agent

Name :

Company Seal:

Date :

Place:

## ANNEXURE -I

### ORIGINAL SOFTWARE DEVELOPER'S AUTHORIZATION LETTER

Dated-----

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

Dear Sir:

We \_\_\_\_\_ who are established and reputed manufacturers of having factories at \_\_\_\_\_ (*address of factory*) do hereby authorize M/s. \_\_\_\_\_ (*Name and address of Agent*) to submit a bid, negotiate and receive the order from you against your tender No. TENDER NO.: S CEM/IP/EMCD/1010-SW/OTE/102-03/2020-2021, for the supply and Installation Simulation tool for EMI/EMC Design. No company or firm or individual other than M/s \_\_\_\_\_ is authorized to bid and conclude the contract in regard to this business.

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

Yours faithfully,

(Name)

(Name of manufacturers)

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

**ANNEXURE -II**

**BIDDER'S PERFORMANCE STATEMENT FORM**

**(For Last 5 Supply and Installation )**

<b>Order placed by (full address of purchaser)</b>	<b>Description and quantity of ordered similar Software</b>	<b>Order No and Date</b>	<b>Price</b>	<b>Date of Completion of delivery as per Contract/Actual</b>	<b>Remarks indicating reasons for late delivery, if any</b>	<b>Has the Software been installed satisfactory?</b>	<b>Contact Person along with Tel.No., Fax No. &amp; e-mail address</b>

Name of the bidder .....

**Signature& Seal**

**Date :**

**Place:**

Annexure-III

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

Date:

To,

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

**Sub :** Acceptance of Terms & Conditions of Tender. Tender Reference No:  
**TENDER NO.:** TENDER NO.: S-CEM/IP/EMCD/1010-SW/OTE/102-  
03/2020-2021  
**Name of Tender :** Supply and Installation of Simulation tool for  
EMI/EMC Design

**Dear Sir,**

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

- i. <http://cem.sameer.gov.in>
- ii. <https://eprocure.gov.in/cppp>

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

2. I/We hereby certify that I /we have read the entire terms and conditions of the tender documents from Page No. 1 to 38 (including all documents like annexure(s), schedule(s), etc, which form part of the contract agreement and I /we shall abide hereby by the terms/conditions/clauses contained therein.

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

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

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

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

Yours faithfully,

(Signature of the Bidder, with Company Seal)



**Annexure-IV**

**Eligibility of Bidder**

*(As per the OM No. 6/18/2019-PPD dated 23.07.2020 issued by the Department of Expenditure, Public Procurement Division, Ministry of Finance, Government of India)*

**I/We have read clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I/We hereby certify that this bidder is not from such a country and eligible to be considered".**

Yours faithfully,

(Signature of the Bidder, with Company Seal)

*(To be given on Company Letter Head)*

**Annexure-V**

*(To be given on Company Letter Head)*

**Bid Security (EMD) Declaration**

This is to undertake that if we withdraw or modify our bid during the period of validity, or if we are awarded the contract and we fail to sign the contract, or to submit a performance security before the deadline defined in the tender document, we will be suspended for the period of time specified in the tender document from being eligible to submit Bids with SAMEER-CEM.

Yours faithfully,

(Signature of the Bidder, with Company Seal)