No. A3(72523)2025/PUR/SERC **Date: 17.10.2025**

OPEN TENDER ENQUIRY (OTE)

FOR

SUPPLY ,INSTALLATION , COMMISSIONG & TRAINING OF 2500kN SERVO-HYDRAULIC UNIVERSAL TESTING MACHINE

Publish Date & Time	:	**17.10.2025 / 2.00 PM**
Document Download Start Date & Time	:	**17.10.2025 / 2.00 PM**
Seeking Clarification Start Date	:	**18.10.2025 / 2.00 PM**
Seeking Clarification End Date	:	**06.11.2025 / 2.00 PM**
Pre - Bid Conference Meeting	:	**07.11.2025 / 11.00 AM**
Venue for Pre-Bid conference	:	**CMC Conference Hall**
Bid Submission Start Date & Time	:	**16.11.2025 / 2.00 PM**
Tender Closing Date	:	**17.12.2025 / 2.30 PM**
Tender Opening Date	:	**18.12.2025 / 3.00 PM**

CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE,
CSIR Road, Taramani
Chennai – 600 113Tamil Nadu, INDIA
Tel: 91 - 44 – 2254 9108 / 2254 4777
Email: puroff.serc@csir.res.in

INVITATION FOR BIDS / NIT
(THROUGH CPPP Portal – www.etenders.gov.in)

01. Director, CSIR – Structural Engineering Research Center (SERC), Taramani, Chennai - 600 113, INDIA, invites encrypted bids on www.etenders.gov.in from manufacturers, their authorized distributors for purchase of items listed below. **The tender is only open for local suppliers as per Public procurement Preference to Make in India, Order No. P-45021/2/2017-PP (BE-II) dt 16th September, 2020 and as amended from time to time.**

SI.No.	Tender No.	Description ofItems	Qty	Single/Double bid	Bid Security (BS) / EMD
	A3(72523)2025/ PUR / SERC	Supply, Installation, Commissioning & Training of 2500kN Servo-Hydraulic Universal Testing Machine as per Chapter - 4	As per Chapter-4	Single Stage Two Envelope System Bid (Double Bid System)	Rs. 33,00,000/- (Rupees: Thirty-Three Lakhs Only) Or Bid Securing Declaration (BSD) (As per Annexure – V)

Interested Bidders may obtain further information from the office of the
Controller of Stores & Purchase
CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE(CSIR-SERC)
CSIR Road, Taramani
CHENNAI – 600 113
Tamil Nādu, INDIA
Tel : 91 - 44 – 22549108,22544477
Email : puroff@serc.res.in / puroff.serc@csir.res.in

02. **A Pre-Bid Conference will be held at 11.00 a.m. on 07.11.2025 @ 11.00 AM in CMC Conference Hall.** All prospective bidders are requested to kindly submit their queries, if any to the email id – **puroff.serc@csir.res.in** on or before 06.11.2025@2.00 p.m.

03. The Tender Document is available at www.etenders.gov.in and is downloadable free of cost. The Tender Document can also be seen at our website www.serc.res.in under the heading "Tenders".

04 **All bids must be accompanied by a proof of bid security in favor of Director, CSIR-SERC as specified above. The EMD may be in the shape of Bank Guarantee / Bid Securing Declaration (Annexure – V) / electronically transfer in form of NEFT/RTGS and must be delivered to the above office prior to the due date and time for submission of the bid as indicated above.** EMD exemption is available for MSEs. Traders are outside the ambit of MSE policy.

05. Purchase preference is applicable for class 1 local suppliers in terms of Make in Order, 2017 with all subsequent amendments till date. Purchase preference would also be applicable for MSE's in terms of MSMED Act. However, traders are outside the ambit of MSE policy.

06. The above tender is non-divisible in nature.

07. The Integrity Pact is available at Annexure – XV and the same needs to be filled up and signed to become eligible for participating in this tender.

08. The Director, CSIR-SERC, Chennai, reserves the right to accept any or all tenders either in part or in full or to split the order without assigning any reasons there for.

Controller of Stores & Purchase
(For & On behalf of CSIR-INDIA)

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TENTATIVE TIME SCHEDULE OF PROCUREMENT PLANNING

Sl. No.	Stage	Tentative Frame Time
1.	**Date of Bid Opening**	**XX**
2.	**Date of Completion of Technical Bid Evaluation**	**XX + 30**
3.	**Date of Communication of Rejection of Bids**	**XX + 40**
4.	**Date of Receipt of context, if any, form Bidders**	**XX + 50**
5.	**Opening of Financial Bid**	**XX + 60**
6.	**Notification of Award**	**XX + 90**

CHAPTER - 1

INSTRUCTIONS TO BIDDERS

Contents of Chapter – 1

A. INTRODUCTION

1.1. *Eligible Bidders*

1.1.1 This Invitation for Bids is open to all manufacturers or their authorized distributors registered on www.etenders.gov.in having the credentials of local suppliers as per make in India order No.P-45021/2/2017-PP (BE-II) dt 16th Sept. 2020 and as amended from time to time. *The offer(s) will not be entertained if the same distributor/dealer is representing more than one OEM. Similarly, one OEM should not authorize more than one distributor / dealer for this tender. Further, an authorized distributor/dealer and the OEM should not quote simultaneously.*

1.1.2 A supplier or bidder shall be considered to be local supplier if the local content of the product is either

(i) 50% or above (Eligible for preferential purchases)

ii) 20% or above

As per public procurement (Preference to Make in India), Order 2017 – Revision No. P-45021/2/2017-PP (BE-II) dt 16th September, 2020 and as amended from time to time.

1.1.3 MSEs would be treated as owned by Scheduled Caste/Schedule Tribe enterprises as under:

(a) In case of proprietary MSE, proprietor(s) shall be SC/ST.

- In case of partnership MSE, the SC/ST partners shall be holding at least 51% (fifty-one percent) shares in the unit.
- In case of Private Limited Companies, at least 51% (fifty-one percent) share shall be held by SC/ST promoters

1.1.4 MSEs owned by women shall also be determined as per the above analogy/criteria.

1.1.5 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation of Bids.

1.1.6 Bids from Joint Ventures, Consortium or Associations so long as they are formed and registered prior to the bid submission date is acceptable.

1.1.7 The bidders who have been temporarily suspended or removed from the list of registered suppliers by the purchaser or banned from Ministry/country wide procurement shall be ineligible for participation in the bidding process.

1.1.8 – I. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority. Further, any bidder (including bidder from India) having specified Transfer of Technology (ToT) arrangement with an entity from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the competent authority.

II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "Bidder (or entity) from a country which shares a land border with India" for the purpose of this Order 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

IV. The beneficial owner for the purpose of (iii) above will be as under:

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation—

a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;

b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

VI. 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 Competent Authority.

VII. The registration shall be valid at the time of submission of bid and at the time of acceptance of bid.

VIII. If the bidder was validly registered at the time of acceptance / placement of order, registration shall not be a relevant consideration during contract execution

1.1.9 **Reciprocity clause**

Entities of countries which have been identified by the nodal Ministry / Department as not allowing Indian companies to participate in their Government procurement for any item related to that nodal Ministry shall not be allowed to participate in Government procurement in India for all items related to that nodal Ministry / Department, except for the list of items published by the Ministry / Department permitting their participation.

1.2 *Cost of Bidding*

1.2.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and "the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

1.3 *Code of Integrity*

1.3.1 The bidders/suppliers should sign a declaration about abiding by the Code of Integrity for Public Procurement in bid documents. In case of any transgression of this code, the bidder is not only liable to be removed from the list of registered suppliers, but it would be liable for other punitive actions such as cancellation of
contracts, banning and blacklisting or action in Competition Commission of India, and so on.

1.3.2 **Code of integrity for Public Procurement:** The Purchaser as well as bidders, suppliers, contractors and consultants should observe the highest standard of ethics and should not indulge in the following prohibited practices, either directly or indirectly, at any stage during the procurement process or during execution of resultants contracts:

"corrupt practice": making offers, solicitation or acceptance of bribe, rewards or gifts or any material benefit, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process or contract execution;

"Fraudulent practice": any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefits may be obtained or an obligation avoided. This includes making false declaration or providing false information for participation in a tender process or to secure a contract or in execution of the contract;

"anti-competitive practice": any collusion, bid rigging or anti-competitive arrangement, or any other practice, coming under the purview of the Competition Act, 2002, between two or more bidders, with or without the knowledge of the purchaser, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels;
"Coercive practice": harming or threatening to harm, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

"conflict of interest": participation by a bidding firm or any of its affiliates that are either involved in the consultancy contract to which this procurement is linked; or if they are part of more than one bid in the procurement; or if the bidding firm or their personnel have relationships or financial or business transactions with any officials of purchaser who are directly or indirectly related to tender or execution process of contract; or improper use of information obtained by the (prospective) bidder from the purchaser with an intent to gain unfair advantage in the procurement process or for personal gain; and

"Obstructive practice": materially impede the purchaser's investigation into allegations of one or more of the above mentioned prohibited practices either by deliberately destroying, falsifying, altering; or by concealing of evidence material to the investigation; or by making false statements to investigators and/or by threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or by impeding the purchaser's Entity's rights of audit or access to information;

1.3.3 **Obligations for Proactive disclosures:**

i. The purchaser as well as bidders, suppliers, contractors and consultants, is obliged under Code of Integrity for Public Procurement to suo-moto proactively declare any conflicts of interest (coming under the definition mentioned above – pre-existing or as and as soon as these arise at any stage) in any procurement process or execution of contract. Failure to do so would amount to violation of this code of integrity; and

ii. The bidder must declare, whether asked or not in a bid document, any previous transgressions of such a code of integrity with any entity in any country during the last three years of being debarred by any other Procuring Entity. Failure to do so would amount to violation of this code of integrity;

iii. To encourage voluntary disclosures, such declarations would not mean automatic disqualification for the bidder making such declarations. The declared conflict of interest would be evaluated and mitigation steps, if possible, taken by the purchaser. Similarly, voluntary reporting of previous transgressions of Code of Integrity elsewhere may be evaluated and barring cases of various grades of debarment, an alert watch may be kept on the bidder's actions in the tender and subsequent contract.

1.3.4 **Punitive Provisions:**

Without prejudice to and in addition to the rights of the Purchaser to other penal provisions as per the bid documents or contract, if the Purchaser comes to a conclusion that a (prospective) bidder/supplier, directly or through an agent, has violated this code of integrity in competing for the contract or in executing a contract, the purchaser may take appropriate measures including one or more of the following:

i) **If his bids are under consideration in any procurement:**

a) Forfeiture or encashment of bid security;

b) Calling off of any pre-contract negotiations; and

c) Rejection and exclusion of the bidder from the procurement process.

ii) **If a contract has already been awarded**

a) Cancellation of the relevant contract and recovery of compensation for loss incurred by the purchaser;

b) Forfeiture or encashment of any other security or bond relating to the procurement;

c) Recovery of payments including advance payments, if any, made by the purchaser along with interest thereon at the prevailing rate.

iii) **Provisions in addition to above:**

a) Removal from the list of registered suppliers and banning/debarment of the bidder from participation in future procurements of the purchaser for a period not less than one year;

b) In case of anti-competitive practices, information for further processing may be filed under a signature of the Joint Secretary level officer, with the Competition Commission of India;

c) Initiation of suitable disciplinary or criminal proceedings against any individual or staff found responsible.

B THE BIDDING DOCUMENTS

1.4 Cost of Tender Documents

1.4.1 The bidding documents can be downloaded from our website: https://serc.res.in as indicated in the Invitation for Bids/NIT free of cost as also from www.etenders.gov.in under the relevant Tender-ID.

1.5 Content of Tender Documents

1.5.1 The goods required, bidding procedures and contract terms are prescribed in the bidding documents which should be read in conjunction. The bidding documents, apart from the invitation for bids have been divided into 8 chapters as under:

Chapter 1 : Instructions to Bidder (ITB)
Chapter 2: General Conditions of Contract (GCC) and Special Conditions of Contract (SCC)
Chapter 3 : Schedule of Requirements
Chapter 4: Specifications and Allied Technical Details
Chapter 5 : Price Schedule Forms
Chapter 6 : Contract Form
Chapter 7 : Other Standard Forms

1.5.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid.

1.6 Clarification of Tender Documents

1.6.1 A prospective Bidder requiring any clarification of the Bidding Documents shall contact the Purchaser in writing at the Purchaser's address specified in the Special Conditions of Contract (SCC), sufficient (before 7 days) prior to the due date for the submission of bid on www.etenders.gov.in. No request for clarification or query shall normally be entertained after the deadline/pre-bid conference if any. Should the Purchaser deem it necessary to amend the Tender Documents as a result of a clarification, it shall do so following the procedure under Clause relating to amendment of Tender Documents and Clause relating to Deadline for Submission of Bids.

The queries, clarifications and amendments issued would also be hosted on the website of the Purchaser and as corrigendum on www.etenders.gov.in for the benefit of the other prospective bidders and also shall be sent to all bidders who have purchased the tender documents.

1.7 Amendment of Tender Documents

1..7.1 At any time (within 7 days) prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the tender documents by amendment. The same would also be hosted on the website of the Purchaser and all prospective bidders are expected to surf the website before submitting their bids to take cognizance of the amendments. The modified tender document would also be available at www.etenders.gov.in as a corrigendum.

1.7.2 In order to allow prospective bidders' reasonable time in which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids and host the changes on the website of the Purchaser and on www.etenders.gov.in

C. PREPARATION OF BIDS

1.8. Language of Bid

1.8.1 The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser shall be written in English language only.

1.8.2 The Supplier shall bear all costs of translation, if any, to the English language and bear all risks of the accuracy of such translation, for documents provided by the Supplier.

1.9. Purchase Preference Policies

1.9.1 The purchaser intends to give product reservation/purchase preference/price preference in line with current Govt. of India procurement policies to help inclusive national economic growth by providing long term support to small and medium enterprises and disadvantaged sections of the society and to address environmental concerns along with preferential market access in govt. procurements under Preference to Make in India Order 2017. Bidders desirous of submitting of their bids in accordance with the Make in India Policy of GOI must submit an Affidavit of self-certification regarding minimum local content as per the format enclosed with the bidding documents.

1.9.2 Purchase preference would also be given to Micro and Small enterprises as per MSMED Act 2006 and subsequent amendments.

1.9.3 Preference would be given to Micro and Small Enterprises over class I Local suppliers in case such a decision arises.

1.9.4 Traders are outside the ambit of MSMED Act and no purchase preference will be given to such bidders.

1.10. Documents Comprising the Bid

1.10.1 The bid prepared by the Bidder shall include documents as under:

1. Technical details Cover – Techno-Commercial Details of Supply, Installation, Commissioning & Training of 2500kN Servo-Hydraulic Universal Testing Machine) (Document Type .pdf)

1. **Bidder Information Form – Annexure – I**; and if applicable Documentary evidence about the status of the bidder **i.e whether MSE or not, owned by SC/ST or not and whether the MSE is owned by a women entrepreneur or not**. (.pdf)
2. **Format for declaration by the Bidder for Code of Integrity & conflict of interest (Annexure II) (.pdf)**
3. Manufacturer's Authorization Form–Annexure – III; (.pdf)
4. Bid security as specified in the Invitation to Bid – Annexure IV / Bid Securing Declaration – Annexure V (.pdf)
5. Deviation Statement Form / Technical Compliance Statement Form – Annexure – VII (.pdf)
6. **Format for Affidavit of Self Certification regarding Local Content in letter head (Annexure - XIII) (.pdf)**
7. Certificate with regard to the bidder not having a land border with India (Annexure - XV) or Certificate with regard to the bidder having a land border with India (Annexure - XVI) (.pdf)
8. Undertaking for technical demonstration. (Annexure - XVII) (.pdf)
9. Catalogue / Brochure of the Model Quoted (.pdf)
10. Schedule of Requirement – Chapter – 3 (.pdf)
11. Performance Statement Form – Annexure – VI (.pdf)
12. Service Support Details Form – Annexure – IX (.pdf)
13. Pre – Installation Requirement – VIII (.pdf)
14. Integrity Pact – Annexure – XIV (.pdf)
15. Terms & Conditions - Annexure – XIX (.pdf)
16. Tender Acceptance Letter - Annexure – XX (.pdf)

2. Finance cover (Price bid)

1. BoQ (.xls)
2. Bid form (Annexure - X) (.pdf)

1.11. Bid form and price schedule

1.11.1 The bidder shall complete the Bid Form and the appropriate price schedule form furnished in the bidding documents. These forms must be completed without any alterations to its format and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested. The Bid Form and the appropriate Price Schedule form shall be submitted in accordance with Clause 1.18.3 of the bidding documents.

1.11.2 The bidder in addition to the above shall complete the Bid Form (Annexure-X) which shall have the Non-Comprehensive Annual Maintenance Cost. It is mandatory to furnish the Non- Comprehensive AMC charges in the Bid form.

1.12. Bid Prices

1.12.1 The Bidder shall indicate on the appropriate price schedule form, the unit prices and total bid prices of the goods it proposes to supply under the contract.

1.12.2 **Prices indicated on the price-schedule form shall be entered separately in the following manner:**

The price of the goods quoted FOR destination CSIR – SERC, Stores Section including all taxes already paid.

1.12.3 **Packing, forwarding, freight, insurance charges, AMC charges, taxes etc. are to be included along with the quote. No separate claim for the above will be entertained after submission of the quote.**

1.12.4 **The price quoted shall remain fixed during the contract period and shall not vary on any account**

1.12.5 All lots and items must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. Lots or items not listed in the Price Schedule shall be assumed to be not included in the bid.

1.12.7 ~~**The Purchaser is registered with Dept. of Scientific & Industrial Research, Govt. of India and concessional GST & IGST are payable vide notification No.47/2017-Integrated Tax (Rate) and Notification No. 45/2017-Central Tax (Rate) both dated 14th November, 2017**~~

1.12.8 Please state specifically in your offer that the duties and taxes are included in the price quoted failing which it will be presumed that the prices are inclusive of taxes and duties and no claim would be entertained for statutory variations at a later date.

1.12.9 Stipulations like "GST is presently not applicable but the same will be charged if it becomes leviable later on" is not acceptable unless in such cases it is clearly stated that GST will not be charged if the same becomes applicable later on due to increase in turn over etc. If a bidder fails to comply with this requirement, his quoted price shall be loaded with the quantum of duty which is normally applicable on the item in question for the purpose of comparison with the prices of other tenderers.

Note: All payments due under the contract shall be paid after deduction of statutory levies at source (like TDS etc.), wherever applicable.

1.13. Bid Currencies

1.13.1 Prices shall be quoted in Indian Rupees.

1.14. Documents Establishing Bidder's Eligibility and qualifications

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

1.14.2 The documentary evidence of the bidder's qualification to perform the contract if the bid is accepted shall establish to the purchaser's satisfaction that;

(a) The bidder meets the qualification criteria listed in bidding documents if any.

(b) Bidder who doesn't manufacture the goods it offers to supply shall submit Manufacturers' Authorization Form (MAF) using the form specified in the bidding document to demonstrate that it has been duly authorized by the manufacturer of the goods to quote and/or supply the goods.

(c) Bidder shall furnish the certificate to the effect that the bidder is or will be represented by an agent equipped and able to carry out the supply, maintenance, repair obligations etc. during the warranty and post warranty period or ensure a mechanism at place for carrying out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period.

1.14.3 **Conditional tenders shall not be accepted.**

1.15. Documents Establishing Goods' Eligibility and Conformity to Bidding Documents

1.15.1 To establish the goods' eligibility, the documentary evidence of the goods and services eligibility shall consist of a statement on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment.

1.15.2 To establish the conformity of the goods and services to the specifications and schedule of requirements of the bidding document, the documentary evidence of conformity of the goods and services to the bidding documents may be in the form of literature, drawings and data, and shall consist of:

(a) A detailed description of the essential technical and performance characteristics of the goods;

(b) A list giving full particulars, including available sources and current prices, of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods during the warranty period following commencement of the use of the goods by the Purchaser in the Priced-bid;

(c) An item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications.

1.15.3 For purposes of the commentary to be furnished pursuant to above, the Bidder shall note that standards for workmanship, material and equipment, designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute these in its bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

1.16. Bid Security

1.16.1 The Bidder shall furnish, as part of its bid, a bid security (BS) for an amount as specified in the Tender Document.

The copy of Bank Guarantee details should be uploaded on the CPP portal and the physical instrument should be available at the time of tender opening. Details of UTR No. should be uploaded on CPP portal in case of RTGS/NEFT and the remarks column should indicate Tender No. while remitting the amount.

1.16.2 The bid security is required to protect the Purchaser against the risk of Bidder's conduct, which would warrant the invocation of bid securing declaration.

1.16.3 The bid security shall be in the following form:

(a) A bank guarantee issued by a Nationalized/Scheduled bank operating in India in the form provided in the bidding documents and valid for 45 days beyond the validity of the bid. In case a bidder desires to submit a BG issued from a foreign bank, then the same should be confirmed by a Nationalized /Scheduled Indian bank; or

(b) RTGS / NEFT to account of Director, CSIR – SERC

(c) Bid Securing Declaration – Annexure - V

1.16.4 The bid security shall be payable promptly upon written demand by the purchaser in case the conditions listed in the ITB clause 1.16.10 are invoked.

1.16.5 The bid security should be submitted in its original form. Copies shall not be accepted.

1.16.6 The bid security of unsuccessful bidder will be discharged /returned as promptly as possible positively within a period of 30 days after the expiration of the period of bid validity or placement of order whichever is later, without any interest.

1.16.7 The successful Bidder's bid security will be discharged upon the Bidder furnishing the performance security, without any interest.

1.16.8 Bidders that are currently registered with the purchaser, registered as MSEs will continue to remain registered during the tender validity period also and are exempted from payment of EMD. In case the tenderer falls in these categories, the bidder should furnish a certified copy of its valid registration details. Except for MSEs, this exemption is valid for the trade group and monetary value of registration only. The MSEs are provided tender document free of cost and are exempted from the payment of Bid Security provided the goods are produced and the services are rendered by them and not for any trading activities undertaken by them. Further firms who are having Udyog Aadhar Memorandum are entitled to all benefits available for MSEs under the Public Procurement Policies for MSEs and can get registered with any of the following agencies:

a) District Industries Centre

b) Khadi and Village Industries Commission

c) Khadi and Village Industries Board

d) Coir Board

e) National Small Industries Corporation

f) Directorate of Handicraft and handloom and

g) Any other body specified by the Ministry of MSME

1.16.9 Where any aggregator has been appointed by the Ministry of MSME, themselves quote on behalf of some MSE units, such offers will be considered as offer from MSE units and all such facilities would be extended to these aggregators also.

1.16.10 The bid security may be forfeited:

(a) If a Bidder withdraws or amends or modifies or impairs or derogates its bid during the period of bid validity specified by the Bidder on the Bid Form; or

(b) In case of a successful Bidder, if the Bidder fails to furnish order acceptance within 14 days of the order or fails to sign the contract and/or fails to furnish Performance Security within 21 days from the date of contract/ order.

1.16.11 Whenever the bidder chooses to submit the Bid Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Speed Post. An unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

1.17. Period of Validity of Bids

1.17.1 Bids shall remain valid for minimum of **180 days** after the date of bid opening prescribed by the Purchaser. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.

1.17.2 In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (or by cable, telex, fax or e-mail). The bid security provided shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.

1.17.3 Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

1.18. Format and Signing of Bid

1.18.1 The bids may be submitted in single bid or in two parts as specified in the Invitation for Bids / NIT.

1.18.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. All pages of the bid, except for un-amended printed literature, shall be initialed by the person or persons signing the bid detailing his/her name and contact details.

1.18.3 Any interlineations, erasures or overwriting shall be valid only if they are initialed by the persons or persons signing the bid.

D SUBMISSION AND SEALING OF BIDS

1.19. Submission, Sealing and Marking of Bids

1.19.1 The bidders should submit their duly encrypted bids on the www.etenders.gov.in before the due date and time. You are requested to go through the uploading process well in advance so as to avoid last minute hitches.

(Bids received by FAX/E-mail would not be considered for evaluation.)

1.20. Deadline for Submission of Bids

1.20.1 Bids must be uploaded on www.etenders.gov.in against the relevant Tender-ID before the due date and time.

1.20.2 The Purchaser may, at its discretion, extend the deadline for submission of bids by amending the bid documents in accordance with Clause relating to Amendment of Bidding Documents in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended. Such amendments would appear as a corrigendum on www.etenders.gov.in against the applicable Tender - ID.

1.21. Withdrawal, substitution and Modification of Bids.

1.21.1 It would be governed by the standard operating procedure of the CPP portal.

E. OPENING AND EVALUATION OF BIDS

1.22 Opening of Bids by the Purchaser

1.22.1 The decryption of the bids would be done at the time enumerated on the CPP portal. In the event of the specified date of Bid opening being declared a holiday for the Purchaser, the Bids shall be opened at the appointed time and location on the next working day. In two-part bidding, the financial bid shall be opened only after technical evaluation.

1.23. Confidentiality

1.23.1 Information relating to the examination, evaluation, comparison, and post qualification of bids, and recommendation of contract award, shall not be disclosed to other persons not officially concerned with such process until publication of the Contract Award.

1.23.2 Any effort by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post qualification of the bids or contract award decisions may result in the rejection of its Bid.

1.24. Clarification of Bids

1.24.1 To assist in the examination, evaluation, comparison and post qualification of the bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its bid. No change in prices or substance of the bid shall be sought, offered or permitted. However, no negotiation shall be held except with the lowest bidder, at the discretion of the purchaser. Any clarification submitted by a bidder in respect to its bid which is not in response to a request by the purchaser shall not be considered.

1.25. Preliminary Examination

1.25.1 The Purchaser shall examine the bids to confirm that all documents and technical documentation requested in ITB Clause 1.10 have been provided, and to determine the completeness of each document submitted.

1.25.2 The Purchaser shall confirm that the following documents and information have been provided in the Bid. If any of these documents or information is missing, the offer shall be rejected.

(a) Bid Form and Price Schedule, in accordance with ITB Clause 1.10;

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

(i) The Bid is unsigned (Not applicable in case of Online bidding).
(ii) The Bidder is not eligible.
(iii) The Bid validity is shorter than the required period.
(iv) The Bidder has quoted for goods manufactured by a different firm without the required authority letter from the proposed manufacturer.
(v) Bidder has not agreed to give the required performance security or has not furnished the bid security.
(vi) The goods quoted are sub-standard, not meeting the required specification, etc.
(vii) Against the schedule of Requirement (incorporated in the tender enquiry), the tenderer has not quoted for the entire requirement as specified in that schedule.
(viii) The tenderer has not agreed to some essential condition(s) incorporated in the tender enquiry.

1.26 Bidder's right to question rejection.

1.26.1 A Bidder shall have the right to be heard in case he feels that a proper procurement process is not being followed and/or his tender has been rejected wrongly. Only a directly affected bidder can represent in this regard as under:

i) Only a bidder who has participated in the concerned procurement process i.e pre-qualification, bidder registration or bidding, as the case may be, can make such representation;

ii) In case pre-qualification bid has been evaluated before the bidding of technical bids, an application for review in relation to the technical bid may be filed only by a bidder who has qualified in pre-qualification bid;

iii) In case technical bid has been evaluated before the opening of the financial bid, an application for review in relation to the financial bid may be filed only by a bidder whose technical bid is found to be acceptable.

iv) Following decisions of the purchaser in accordance with the provision of internal guidelines shall not be subject to review:

a) Determination of the need for procurement;
b) Selection of the mode of procurement or bidding system;
c) Choice of selection procedure;
d) Provisions limiting participation of bidders in the procurement process;
e) The decision to enter into negotiations with the L1 bidder;
f) Cancellation of the procurement process except where it is intended to subsequently re-tender the same requirements;
g) Issues related to ambiguity in contract terms may not be taken up after a contract has been signed, all such issues should be highlighted before consummation of the contract by the vendor/contractor; and
h) Complaints against specifications except under the premise that they are either vague or too specific so as to limit competition may be permissible.

1.26.2 In case a Bidder feels aggrieved by the decision of the purchaser, he may then send his representation in writing to the Purchaser's address as indicated in special conditions of contract (SCC) within 05 working days from the date of communication of the purchaser intimating the rejection for reconsideration of the decision by the purchaser.

1.27 Responsiveness of Bids

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

(a) Affects in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or

(b) Limits in any substantial way, inconsistent with the Bidding Documents, the Purchaser's rights or the Bidder's obligations under the Contract; or

(b) If rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids.

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

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

1.28 Non-Conformity, Error and Omission

1.28.1 Provided that a Bid is substantially responsive, the Purchaser may waive any nonconformities or omissions in the Bid that do not constitute a material deviation.

1.28.2 Provided that a bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the bid related to documentation

requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

1.28.3 Provided that the Bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:

(a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;

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

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

1.28.4 Provided that a bid is substantially responsive, the purchaser may request that a bidder may confirm the correctness of arithmetic errors as done by the purchaser within a target date. In case, no reply is received then the bid submitted shall be ignored and its Bid Security may be forfeited.

1.29 Examination of Terms & Conditions, Technical Evaluation

1.29.1 The Purchaser shall examine the Bid to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the Bidder without any material deviation or reservation.

1.29.2 The Purchaser shall evaluate the technical aspects of the Bid submitted in accordance with ITB Clause 1.15, to confirm that all requirements specified in Schedule of Requirements of the Bidding Documents have been met without any material deviation or reservation.

1.29.3 **The bidder shall give a technical demo of the product quoted after submission of bid for technical evaluation.**

1.29.4 In the course of evaluation CSIR-SERC would request for submission of samples for evaluation purpose keeping in mind the special nature of this tender.

1.29.5 If, after the examination of the terms and conditions and the technical evaluation, the Purchaser determines that the Bid is not substantially responsive in accordance with ITB Clause 1.27, it shall reject the Bid.

1.30 Evaluation and comparison of bids

1.30.1 The Purchaser shall evaluate each bid that has been determined, up to this stage of the evaluation, to be substantially responsive.

1.30.2 To evaluate a Bid, the Purchaser shall only use all the factors, methodologies and criteria defined below. No other criteria or methodology shall be permitted.

1.30.3 Purchase preference shall be given to all 'Class-I local suppliers' in all procurements undertaken by the purchaser in the following manner:

(i) In the procurements of goods which are divisible in nature the Class-I local supplier shall get purchase preference over 'Class-II local supplier' as per following procedure:

~~(a) Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a 'Class-I local supplier', the contract for full quantity will be awarded to L1.~~

~~(b) If L1 bid is not a 'Class-I local supplier, 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher~~

~~'Class-I local supplier' within the margin of purchase preference shall be awarded accordingly. In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.~~

(ii) In the procurements of goods which are not divisible in nature the Class-I local supplier shall get purchase preference over 'Class-II local supplier' as per following procedure:

a) Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a Class-I local supplier, the contract will be awarded to L1.

b) If L1 is not from a 'Class-I local supplier', the lowest bidder among the 'Class-I local suppliers, will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.

c) In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the Class-I local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local suppliers' within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder 'Class-II local supplier'.

d) 'Class-II local supplier' will not get purchase preference in any procurement undertaken by the procuring entity.

1.30.4 ~~Further, In tender, where the items are divisible, the participating Micro and Small Enterprises (MSE) quoting price within price band of L1+15 (fifteen) per cent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a MSE and such MSE shall be allowed to supply up to 25 (twenty five) per cent of total tendered value. The 25 (twenty five) per cent quantity is to be distributed proportionately among these bidders, in case there are more than one MSMEs within such price band.~~

1.30.5 ~~Within this 25% (Twenty five Percent) quantity, a purchase preference of 25 (twenty five) per cent out of 25 (twenty five per cent) is reserved for MSEs owned by Scheduled Caste (SC)/Scheduled Tribe (ST) entrepreneurs (if they participate in the tender process and match the L1 price). Further, out of the total annual procurement from the MSEs, (3%) three~~

~~percent from within the 25% target shall be earmarked for procurement from MSEs owned by women. Provided that, in the event of failure of such SC/ST MSE to participate in tender process or meet tender requirements and L1 price, four per cent sub-target shall be met from other MSE.~~

1.30.6 In case the items are not divisible, then the MSE quoting price within price band L1 + 15% may be awarded for full/complete supply of total tendered quantity to MSE, considering the spirit of the policy for enhancing the Government procurement from MSEs.

A MSE firm will be preferred over a non-MSE Class 1 Local supplier and Class 2 Local supplier. The preference is subject to meeting the technical specification, being in the preference range as indicated above and matching the price of L1.

1.30.7 **Manufacture under license / technology collaboration if agreements with phase indigenization:**

While notifying the minimum local content, if nodal ministries and have made special provisions for exempting suppliers from meeting the stipulated local content if the product is being manufactured in India under a license from a foreign manufacturer who holds intellectual property rights and where there is a technology collaboration agreement / transfer of technology agreement for indigenous manufacture of a product developed abroad with clear phasing of increase in local content, the firm may submit such exemption and participate.

1.30.8 The bids shall be evaluated on the basis of final landing cost which shall be arrived as under:

The price of the goods quoted including warranty **(for 1 year)** if any FOR destination CSIR – SERC stores including all taxes already paid, Packing & Forwarding, Insurance and Transportation charges, Installation, training charges and AMC charges.

1.30.9 The invitation to bid shall specify the mode of transport i.e., whether by air/road/rail.

1.30.10 There is no provision to purchase optional items. The specifications embodied in the tender documents would be the basis of evaluating the responsiveness of bids received.

1.30.11 The Purchaser shall compare all substantially responsive bids to determine the lowest evaluated bid, in accordance with ITB Clause 1.31.

1.30.12 The **bidder shall give a technical demo of the product quoted after submission of bid for technical evaluation.**

1.30.13 Please Note: In case of considering overall price as L1, then the bidder will be asked to match the price of each line item of the other bidder which is lowest as compared to the line item.

1.31 Contacting the Purchaser

1.31.1 Subject to ITB Clause 1.24, no Bidder shall contact the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded.

1.31.2 Any effort by a Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid.

1.32 Post qualification

1.32.1 In the absence of pre-qualification, the Purchaser will determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB Clause 1.14.

1.32.2 The determination will take into account the eligibility criteria listed in the bidding documents and will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, as well as such other information as the Purchaser deems necessary and appropriate.

1.32.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid.

G. AWARD OF CONTRACT

1.33 Negotiations

1.33.1 Normally, there shall not be any negotiation. Negotiations, if at all, shall be an exception and only in the case of items with limited source of supply. Negotiations shall be held with the lowest evaluated responsive bidder. Counter offers tantamount to negotiations and shall be treated at par with negotiations in the case of one time purchases.

1.34 Award Criteria

1.34.1 Subject to ITB Clause 1.38, the Purchaser will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily. The details of the award would be hosted on the website of the Purchaser.

1.35 Purchaser's right to vary Quantities at Time of Award

1.35.1 The Purchaser reserves the right at the time of Contract award to increase or decrease the quantity of goods and services originally specified in the Schedule of Requirements to the extent of 25% without any change in unit price or other terms and conditions.

1.36 Option Clause

1.36.1 The Purchaser reserves the right to increase or decrease the quantity of the required goods up to 25% (Twenty-Five) per cent at any time, till final delivery date (or the extended delivery date of the contract), by giving reasonable notice even though the quantity ordered initially has been supplied in full before the last date of the delivery period (or the extended delivery period)

1.37 Purchaser's right to accept Any Bid and to reject any or All Bids

1.37.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders.

1.38 Notification of Award

1.38.1 Prior to the expiration of the period of bid validity, the Purchaser will notify the successful bidder in writing by registered letter or by cable or telex or fax or e mail that the bid has been accepted and a separate purchase order shall follow through post.

1.38.2 Until a formal contract is prepared and executed, the notification of award should constitute a binding contract.

1.38.3 Upon the successful Bidder's furnishing of the signed Contract Form and performance security pursuant to ITB Clause 1.42, the Purchaser will promptly notify each unsuccessful Bidder and will discharge its bid security.

1.39 Signing of Contract

1.39.1 Promptly after notification, the Purchaser shall send the successful Bidder the Agreement/Purchase Order.

1.39.2 Within twenty-one (21) days of date of the Agreement, the successful Bidder shall sign, date, and return it to the Purchaser.

1.40 Order Acceptance

1.40.1 The successful bidder should submit Order acceptance within 21 days from the date of issue, failing which it shall be presumed that the vendor is not interested and his bid security is liable to be forfeited pursuant to clause 1.16.9 of ITB.

1.40.2 The order confirmation must be received within 14 days. However, the Purchaser has the powers to extend the time frame for submission of order confirmation beyond the original date. Even after extension of time, if the order confirmation is not received, the contract is liable to be cancelled provided that the purchaser, on being satisfied that it is not a case of cartelization and the integrity of the procurement process has been maintained, may, for cogent reasons, offer the next successful bidder an opportunity to match the financial bid of the first successful bidder, and if the offer is accepted, award the contract to the next successful bidder at the price bid of the first successful bidder.

1.41 Performance Security

1.41.1 Within 21 days of receipt of the notification of award/PO, the Supplier shall furnish performance security (PS) in the amount specified in SCC, valid till 60 days after the warranty period.

1.41.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

1.41.3 The Performance Security shall be denominated in Indian Rupees for the offers received for supplies within India and denominated in the currency of the contract in the case of offers received for supply from foreign countries or in equivalent Indian rupees in case the performance security is submitted by the Indian Agent.

1.41.4 ~~In the case of imports, the PS may be submitted either by the principal or by the Indian agent and, in the case of purchases from indigenous sources, the PS may be submitted by either the manufacturer or their authorized dealer/bidder~~.

1.41.5 The Performance security shall be in one of the following forms:

(a) A Bank guarantee or stand-by Letter of Credit issued by a Nationalized/ Scheduled bank located in India in the form provided in the bidding documents.

Or

(b) RTGS / NEFT in favour of Director, CSIR-SERC

1.41.6 The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, unless specified otherwise in SCC, without levy of any interest.

1.41.7 In the event of any contract amendment, the supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the performance security, rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter.

1.41.8 The performance security must be received within 21 days. However, the Purchaser has the powers to extend the time frame for submission of Performance Security (PS). Even after extension of time, if the PS is not received, the contract is liable to be cancelled provided that the purchaser, on being satisfied that it is not a case of cartelization and the integrity of the procurement process has been maintained, may, for cogent reasons, offer the next successful bidder an opportunity to match the financial bid of the first successful bidder, and if the offer is accepted, award the contract to the next successful bidder at the price bid of the first successful bidder.

1.41.9 Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Speed Post. An unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.,

1.42 Pre-Bid Conference (PBC)

1.42.1 A Pre-bid Conference shall be held as indicated in invitation to bid. All prospective bidders are requested to kindly attend the Pre-bid Conference. In order to facilitate the purchaser the proper conduct of the Pre-bid Conference, all prospective bidders are requested to kindly submit their queries so as to reach the purchaser before the pre-bid conference as indicated in invitation to bid. The purchaser shall answer the queries during the pre-bid conference, which would become a part of the proceedings of the Pre-bid Conference.

The proceeding of the Pre-Bid Conference would be hosted on the website of the purchaser and on www.etenders.gov.in under the relevant tender. Before formulating and submitting their bids, all prospective bidders are advised to surf through the purchaser's website and www.etenders.gov.in after the Pre-bid Conference, in order to enable them take cognizance of the revised tender conditions.

1.43 Integrity Pact

1.43.1 Integrity Pact binds both buyers and sellers to ethical conduct and transparency in all activities from pre-selection of bidders, bidding and contracting, implementation, completion and operation related to the contract.

1.43.2 The Integrity pact essentially envisages an agreement between the prospective vendors/bidders and the buyer, committing the persons/officials of both sides, not to resort to any corrupt practices in any aspect/stage of the contract. Only those vendors/bidders, who commit themselves to such a Pact with the buyer, would be considered competent to participate in the

bidding process. In other words, entering into this Pact would be a preliminary qualification. The essential ingredients of the Pact include:

i) Promise on the part of the Purchaser to treat all bidders with equity and reason and not to seek or accept any benefit, which is not legally available;

ii) Promise on the part of bidders not to offer any benefit to the employees of the Purchaser not available legally and also not to commit any offence under Prevention of Corruption Act, 1988 or Indian Penal Code 1860;

iii) Promise on the part of bidders not to enter into any undisclosed agreement or understanding with other bidders with respect to prices, specifications, certifications, subsidiary contracts; etc.

iv) Undertaking (as part of Fall Clause) by the bidders that they have not and will not sell the same material/equipment at prices lower than the bid price;

iv) Foreign bidders to disclose the name and address of agents and representatives in India and Indian Bidders to disclose their foreign principals or associates;

v) Bidders to disclose the payments to be made by them to agents/brokers or any other intermediary;

vi) Bidders to disclose any past transgressions committed over the specified period with any other company in India or Abroad that may impinge on the anti-corruption principle;

vii) Integrity Pact lays down the punitive actions for any violation.

1.43.3 Each page of such Integrity pact proforma would be duly signed by Purchaser's competent signatory. All pages of the Integrity Pact are to be returned by the bidder (along with the technical bid) duly signed by the same signatory who signed the bid, i.e. who is duly authorized to sign the bid and to make binding commitments on behalf of his company. Any bid not accompanied by Integrity Pact duly signed by the bidder shall be considered to be a non-responsive bid and shall be rejected straightway.

1.43.4 The SCC shall specify whether there is a need to enter into a separate Integrity pact or not.

1.43.5 The Integrity Pact would be effective from the date of invitation of bids till complete execution of the contract.

1.43.6 The names and contact details of the Independent External Monitors (IEM) on the event of the need of IP is as detailed in the SCC.

1.43.7 The modal format of IP is at Chapter-7 (Annexure- XIV)

CHAPTER - 2

CONDITIONS OF CONTRACT

A GENERAL CONDITIONS OF CONTRACT (GCC)

Contents of Chapter 2

2.1 Definitions

2.1.1 The following words and expressions shall have the meanings hereby assigned to them:

(a) "Contract" means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.

(b) "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto.

(c) "Contract Price" means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.

(d) "Day" means calendar day.

(e) "Completion" means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.

(f) "GCC" means the General Conditions of Contract.

(g) "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 under the Contract.

(h) "Related Services" means the services incidental to the supply of the goods, such as transportation, insurance, installation, training and initial maintenance and other such obligations of the Supplier under the Contract.

(i) "SCC" means the Special Conditions of Contract.

(j) "Subcontractor" means any natural person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.

(k) "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 Contract Agreement.

(l) "Local content" means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

(m) "Local supplier" means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed under this order or by the competent Ministries / Departments in pursuance of this order.

(n) "Margin of purchase preference" means the maximum extent to which the price quoted by a local supplier may be above the L1 for the purpose of purchase preference.

(o) The "Council" means the Council of Scientific & Industrial Research (CSIR), registered under the Societies Registration Act, 1860 of the Govt. of India having its registered office at 2, Rafi Marg, New Delhi-110001, India and the "Purchaser" means Controller of Stores & Purchase, on behalf of the Director, CSIR- SERC, Taramani, Chennai – 600113, INDIA as specified in SCC.

(p) "The final destination," where applicable, means the place named in the SCC.

(q) For definitions regarding terms in Make in India please refer to order no. P-45021/2/2017-PP (BE-II) dated 16.09.2020 by Ministry of Commerce and Industry, Government of India and any amendment / revisions thereof.

(r) For definitions regarding terms in MSE refer MSE order 2012 and amendments and revisions thereof.

(s) For registration of bidders quoting for products from countries that share land border with India refer to Order No.P-45021/112/2020-PP(BE-II)(E-43780) dated 24.08.2020 of Ministry of Commerce and Industry, Department for Promotion of Industry and Internal Trade and any amendments thereon.

2.2 Contract Documents

2.2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

2.3 Code of Integrity

2.3.1 Without prejudice to and in addition to the rights of the Purchaser to other penal provisions as per the bids documents or contract, if the purchaser comes to a conclusion that a (prospective) bidder/supplier, directly or through an agent, has violated this code of integrity in competing for the contract or in executing a contract, the Purchaser may take appropriate measures including one or more of the following:

a) Cancellation of the relevant contract and recovery of compensation for loss incurred by the purchaser;

b) Forfeiture or encashment of any other security or bond relating to the procurement;

c) Recovery of payments including advance payments, if any, made by the Purchaser along with interest thereon at the prevailing rate.

d) Provisions in addition to above:

1) Removal from the list of registered suppliers and banning/debarment of the bidder from participation in future procurements of the purchaser for a period not less than one year;

2) In case of anti-competitive practices, information for further processing may be filed under a signature of the Joint Secretary level officer, with the Competition Commission of India;

3) Initiation of suitable disciplinary or criminal proceedings against any individual or staff found responsible.

2.4 Joint Venture, Consortium or Association

2.4.1 If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser.

2.5 Scope of Supply

2.5.1 The Goods and Related Services to be supplied shall be as specified in Chapter 4 i.e. Specifications and allied technical details.

2.6 Suppliers' Responsibilities

2.6.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with Scope of Supply Clause of the GCC, and the Delivery and Completion Schedule, as per GCC Clause relating to delivery and document.

2.7 Contract price

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

2.8 Copy Right

2.8.1 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.

2.9 Application

2.9.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

2.10 Standards

2.10.1 The Goods supplied and services rendered under this Contract shall conform to the standards mentioned in the Technical Specifications and, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

2.11 Use of Contract Documents and Information

2.11.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.

2.11.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated above except for purposes of performing the Contract.

2.11.3 Any document, other than the Contract itself, enumerated above shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

2.12 Patent Indemnity

2.12.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 2.12.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

(a) The installation of the Goods by the Supplier or the use of the Goods in India; and
(b) The sale in any country of the products produced by the Goods.

2.12.2 If any proceedings are brought or any claim is made against the Purchaser, the Purchaser shall promptly give the Supplier a notice thereof and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claims.

2.13 Performance Security

2.13.1 Within 21 days of receipt of the notification of award/PO, the Supplier shall furnish performance security in the amount specified in SCC, valid till 60 days after the warranty period.

2.13.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

2.13.3 The Performance Security shall be denominated in Indian Rupees for the offers received for supplies within India and denominated in the currency of the contract in the case of offers received for supply from foreign countries or in equivalent Indian Rupees in case the Performance Security is submitted by the Indian Agent.

2.13.4 In the case of imports, the PS may be submitted either by the principal or by the Indian agent and, in the case of purchases from indigenous sources, the PS may be submitted by either the manufacturer or their authorized dealer/bidder.

2.13.5 The Performance security shall be in one of the following forms:

(a) A Bank guarantee or stand-by Letter of Credit issued by a Nationalized/Scheduled bank located in India in the form provided in the bidding documents.

(Or)

(b) NEFT / RTGS to the account of The Director, CSIR-SERC.

2.13.6 The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, unless specified otherwise in SCC, without levy of any interest.

2.13.7 In the event of any contract amendment, the supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the performance security, rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter.

2.13.8 The order confirmation must be received within 14 days. However, the Purchaser has the powers to extend the time frame for submission of order confirmation and submission of Performance Security (PS). Even after extension of time, if the order confirmation /PS are not received, the contract shall be cancelled provided that the purchaser, on being satisfied that it is not a case of cartelization and the integrity of the procurement process has been maintained, may, for cogent reasons, offer the next successful bidder an opportunity to match the financial bid of the first successful bidder, and if the offer is accepted, award the contract to the next successful bidder at the price bid of the first successful bidder.

2.13.9 Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, and then he should advise the banker issuing the Bank Guarantee to immediately send by Speed Post. An unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

2.14 Inspections and Tests

2.14.1 The inspections & test, training required would be as detailed in Chapter-4 of the Bidding Document relating to Specification and Allied Technical details.

2.15 Packing

2.15.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. 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.

2.15.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in SCC and in any subsequent instructions ordered by the Purchaser.

2.16 Delivery and Documents

2.16.1 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 contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

2.16.2 The mode of transportation shall be as specified in SCC. In case the purchaser elects to have the transportation done through Air, then air lifting needs to be done through Air India only. In case Air India does not operate in the Airport of despatch, then the bidder is free to engage the services of any other reputed Airlines.

2.17 Insurance

2.17.1 Should the purchaser elect to buy on FOR destination basis, the Goods supplied under the Contract shall be fully insured against any loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in SCC.

2.17.2 Where delivery of the goods is required by the purchaser on FOR destination basis the supplier shall arrange and pay for Cargo Insurance, naming the purchaser as beneficiary and initiate & pursue claims till settlement, on the event of any loss or damage.

2.17.3 Where delivery is on ex-works basis, responsibility of insurance would be mutually decided depending on the tender terms.

2.17.4 With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.

2.18 Transportation

2.18.1 ~~Where the Supplier is required under the Contract to deliver the Goods FOB, transport of the Goods, up to and including the point of putting the Goods on board the vessel at the specified port of loading, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract price. Where the Supplier is required under the Contract to deliver the Goods FCA, transport of the Goods and delivery into the custody of the carrier at the place named by the Purchaser or other agreed point shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract price.~~

2.18.2 ~~Where the Supplier is required under the Contract to deliver the Goods CIF or CIP, transport of the Goods to the port of destination or such other named place of destination in the Purchaser's country, as shall be specified in the Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.~~

2.18.3 The Supplier is required under the Contract to transport the Goods to a specified destination in India, defined as the Final Destination, transport to such destination, including insurance and storage, as specified in the Contract, shall be arranged by the Supplier, and the related costs shall be included in the Contract Price.

2.19 Incidental Services

2.19.1 The supplier may be required to provide any or all of the services, including training, if any, specified in Chapter 4.

2.20 Spare Parts

2.20.1 The Supplier shall be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

(a) Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and

(b) In the event of termination of production of the spare parts:

(i) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and

(ii) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

2.21 Warranty

2.21.1 The Supplier warrants 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.

2.21.2 The Supplier further warrants 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.

2.21.3 Unless otherwise specified in; the SCC the warranty shall remain valid for Twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the SCC, or for eighteen (18) months after the date of shipment from the port of place of loading in the country of origin, whichever period concludes earlier.

2.21.4 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 for the Supplier to inspect such defects.

2.21.5 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.

2.21.6 If having been notified, the Supplier fails to remedy the defect within 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.

2.21.7 Goods requiring warranty replacements must be replaced on free of cost basis to the purchaser if the warranty replacement are to be imported it should be supplied on DDP basis.

2.22 Terms of Payment

2.22.1 The method and conditions of payment to be made to the Supplier under this Contract shall be as specified in the SCC.

2.22.2 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to Delivery and document Clause of the GCC and upon fulfillment of other obligations stipulated in the contract.

2.22.3 Payments shall be made promptly by the Purchaser but in no case later than thirty (30) days after submission of the invoice or claim by the Supplier. While claiming the payment,

2.22.4 Payment shall be made in currency as indicated in the contract.

2.23 Change Orders and Contract Amendments

2.23.1 The Purchaser may at any time, by written order given to the Supplier pursuant to Clause on Notices of the GCC make changes within the general scope of the Contract in any one or more of the following:

(a) Increase or decrease in the quantity required, exercise of quantity opinion clause;
(b) Changes in schedule of deliveries and terms of delivery;
(c) The changes in inspection arrangements;
(d) Changes in terms of payments and statutory levies;
(e) Changes due to any other situation not anticipated;

2.23.2 No changes in the price quoted shall be permitted after the purchase order has been issued except on account of statutory variations.

2.23.3 No variation or modification in the terms of the contract shall be made except by written amendment signed by the parties.

2.24 Assignment

2.24.1 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.

2.25 Subcontracts

2.25.1 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 the original bid or later, shall not relieve the Supplier from any liability or duties or obligation under the Contract. The sub-contracts should also be in consonance with the land border regulations as specified in the tender.

2.26 Extension of time.

2.26.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser.

2.26.2 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.

2.26.3 Except as provided under the Force Majeure clause of the GCC, 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 of the GCC unless an extension of time is agreed upon pursuant to above clause without the application of penalty clause.

2.27 Liquidated Damages

2.27.1 Subject to GCC 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 Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services or contract value for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the Percentage specified in SCC. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause on Termination for Default.

2.28 Termination for Default

2.28.1 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 pursuant to GCC Clause on Extension of Time; or

(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 as defined in GCC Clause and ITB clause on code of integrity in competing for or in executing the Contract.

2.28.2 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 action:

(a) The Performance Security is to be forfeited;

(b) 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.

(c) However, the supplier shall continue to perform the contract to the extent not terminated.

2.29 Force Majeure

2.29.1 Notwithstanding the provisions of GCC Clauses relating to extension of time, penalty and Termination for Default the Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

2.29.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

2.29.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof within 21 days of its occurrence. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

2.29.4 If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of Force Majeure for a period exceeding 60 days, either party may at its option terminate the contract without any financial repercussions on either side.

2.30 Termination for Insolvency

2.30.1 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.

2.31 Termination for Convenience

2.31.1 The Purchaser, by written notice sent to the Supplier, may terminate the contract, in whole or in part, at any time. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

2.31.2 The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:

(a) To have any portion completed and delivered at the Contract terms and prices; and/or

(b) To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

2.32 Settlement of Disputes

2.32.1 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.

2.32.2 If, after Twenty-One (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.

2.32.3 The dispute settlement mechanism/arbitration proceedings shall be concluded as under:

(a) In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Delhi International Arbitration Centre (DIAC), Delhi High Court, New Delhi. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.

(b) In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration In accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.

2.32.4 The venue of the arbitration shall be the place from where the purchase order or contract is issued.

2.32.5 notwithstanding any reference to arbitration herein,

(a) The parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and

(b) The Purchaser shall pay the Supplier any monies due the Supplier.

2.33 Governing Language

2.33.1 The contract shall be written in English language which shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the English language only.

2.34 Applicable Law

2.34.1 The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction as specified in SCC.

2.35 Notice

2.35.1 Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX, e-mail or and confirmed in writing to the other party's address specified in the SCC.

2.35.2 A notice shall be effective when delivered or on the notice's effective date, which ever is later.

2.36 Taxes and Duties

2.36.1 For goods manufactured outside India, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed.

2.36.2 The Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred till its final manufacture/production.

2.36.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in India, the Purchaser shall make its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

2.36.4 **All payments due under the contract shall be paid after deduction of statutory levies (at source) (like ESIC, IT, etc.) (TDS on GST & IT-TDS) wherever applicable.**

2.36.5 ~~**GST** – If the supply is within India, this institute is eligible for concessional GST as per Notification No.45/2017 & 47/2017 dt 14.11.2017 by Ministry of Finance.~~

2.37 Right to use Defective Goods

2.37.1 If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.

2.38 Protection against Damage

2.38.1 The system shall not be prone to damage during power failures and trip outs. The normal voltage and frequency conditions available at site as under:

Three Phase 400 V+/- 6%, 50 Hz

2.39 Site preparation and installation

2.39.1 The Purchaser is solely responsible for the construction of the equipment sites in compliance with the technical and environmental specifications defined by the Supplier. 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 notification of award/contract.

2.40 Import and Export Licenses

2.40.1 ~~If the ordered materials are covered under restricted category of EXIM policy in India the Vendor / Agent may intimate such information for obtaining a necessary license in India.~~

2.40.2 ~~If the ordered equipment is subject to Vendor procuring an export license from the designated government agency / country from where the goods are shipped /sold, the vendor has to mention the name, address of the government agency / authority. The vendor must also mention the time period within which the license will be granted in normal course.~~

2.41 Risk Purchase Clause

2.41.1 If the supplier fails to deliver the goods within the maximum delivery period specified in the Purchase Order, CSIR-SERC may procure, upon such terms and in such a manner as it deems appropriate, Goods or Services similar to those undelivered and the Supplier be liable to CSIR-SERC for any excess costs incurred for such similar goods or services.

2.42 Option Clause

2.42.1 The Purchaser reserves the right to increase or decrease the quantity of the required goods up to 25% (Twenty-Five) per cent at any time, till final delivery date (or the extended delivery date of the contract), by giving reasonable notice even though the quantity ordered initially has been supplied in full before the last date of the delivery period (or the extended delivery period)

2.43 Integrity Pact

2.43.1 The SCC shall specify whether there is a need to enter into a separate Integrity pact or not.

2.43.2 The names and contact details of the Independent External Monitors (IEM) on the event of the need of IP is as detailed in the SCC.

2.44 Order Acceptance

2.44.1 The successful bidder should submit Order acceptance within 14 days from the date of issue of order/signing of contract, failing which it shall be presumed that the vendor is not interested and his bid security is liable to be forfeited pursuant to clause 1.16.9 of ITB.

2.45 Purchase Preference

2.45.1 The purchaser intends to give product reservation/purchase preference/price preference in line with current Govt. of India procurement policies to help inclusive national economic growth by providing long term support to small and medium enterprises and disadvantaged sections of the society and to address environmental concerns along with preferential market access in govt. procurements under Preference to Make in India Order 2017. Bidders desirous of submitting of their bids in accordance with the Make in India Policy of GOI must submit an Affidavit of self-certification regarding minimum local content as per the format enclosed with the bidding documents.

B. SPECIAL CONDITIONS OF CONTRACT

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SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC 2.1.1(l)	The Purchaser is: The Director, CSIR-Structural Engineering Research Centre, Taramani, Chennai - 600 113, INDIA,
GCC 2.1.1(m)	**The Final Destination is:** **The Final Destination is:** **STORES SECTION** CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE, CSIR Road, Taramani Chennai – 600 113 Tamil Nadu, INDIA Tel: 91 - 44 – 22549108 / 22544777 Email : puroff.serc@csir.res.in
GCC 2.13.1	The amount of the Performance Security (PS) shall be 5 % of the Contract / PO value + Applicable statutory taxes (GST) for a period of specified warranty + 60 days.
GCC 2.15.2	The marking and documentation within and outside the packages shall be: (a) Each package should have a packing list within it detailing the part No.(s), description, quantity etc. (b) Outside each package, the contract No., the name and address of the purchaser and the final destination should be indicated on all sides and top. (c) Each package should be marked as 1/x, 2/x, 3/x……x/x, where "x" is the total No. of packages contained in the consignment. (d) All the sides and top of each package should carry an appropriate indication / label / stickers indicating the precautions to be taken while handling/storage.
GCC 2.16.1	Details of Shipping and other Documents to be furnished by the Supplier are : Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by registered post / speed post and copies thereof by E-mail. a) Two copies of Supplier's Invoice indicating, *inter-alia* description and specification of the goods, quantity, unit price, total value; b) Packing list; c) Certificate of country of origin; d) Insurance certificate, if required under the contract; e) Railway receipt/Consignment note; f) Manufacturer's guarantee certificate and in-house inspection certificate; g) Inspection certificate issued by purchaser's inspector, if any; and h) Any other document(s) as and when required in terms of the contract. **Note:** 01. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc., should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s). 02. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses
GCC 2.16.3	The mode of transportation shall be by Road/Rail/Air/Multimodal.
GCC 2.17.1	The Insurance shall be for an amount equal to 110% of the F.O.R Destination, CSIR - SERC, Chennai value of the contract from within "warehouse to warehouse (final destination)" on "all risk basis" including strikes, riots and civil commotion.

GCC 2.21.3	The period of validity of the Warranty shall be **One Year** from the date of final acceptance.
GCC 2.22.1	The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:
GCC 2.22.1	The payment shall be made in Indian Rupees, as follows: **Payment Terms:** **100% Payment will be released after receipt of material in good condition, Installation, Commissiong & Training and our final acceptance & submission of 5% PBG valid for 14 months (warranty 12 months plus 2 months)** **Note:** **1. For payment, ACCEPTANCE CERTIFICATE FORM as per ANNEXURE XII should be submitted.** **2. All payments due under the Contract shall be paid after deduction of all statutory levies at source (like ESIC, Income Tax, etc.), wherever applicable.**
GCC 2.27.1	The penalty shall be 0.5% per week or part of a week towards late delivery and towards delay in installation and commissioning.
GCC 2.27.1	The maximum amount of penalty shall be 10%. The liquidated damages shall be levied on the delivered price of the delayed Goods or unperformed Services or contract value.
GCC 2.34.1	The place of jurisdiction is Chennai, India.
GCC 2.35.1	For notices, the Purchaser's address Kind Attention: The Director Location: CSIR – Structural Engineering Research Centre, CSIR Road, Taramani Chennai - 600 113, INDIA Telephone: 0091-44-22549108, 22544777 **Email address:** puroff.serc@csir.res.in
GCC 2.39.1	Site preparation and Installation to be done for the project at the following addresses: CSIR – Structural Engineering Research Centre, CSIR Road, Taramani Chennai - 600 113, INDIA Telephone: 044-22549108, 22544777 Email address: puroff.csir@csir.res.in
GCC 2.43.1	The Integrity Pact - Applicable
GCC 2.43.2	The Name and Contact details of the IEMs are as under: – 1. SHRI JAGADIP NARAYAN SINGH, IAS (Retd), E-Mail: jagadipsingh@yahoo.com 2. SHRI ARUN KUMAR GUPTA, Ex-CMD, SCI, E-Mail: guptaarun55@rediffmail.com
GCC 2.45	Purchase Preference Make in India – Applicable – reserved for Class I and Class II local suppliers
GCC 2.45	Purchase Preference MSE – Applicable

CHAPTER 3

SCHEDULE OF REQUIREMENT (To be filled by the bidder and enclosed with the Technical Bid.)

Sl. No.	Brief Description of goods / software and services	Quantity	Physical Unit	Final destination/ Place	Delivery Schedule (to be filled by the bidder)

Term of delivery: FOR Destination : ……

Period of delivery shall count from : ……
(to be filled by the bidder)

Scope of Supply : ……

Standards : ……

Date : ……
Place : ……

Signature of the Bidder

PS: Authorization standards that ensure at least a equivalent quality than the standard mentioned in the Technical Specification, will also be acceptable.

CHAPTER - 4

ELIGIBILITY CONDITIONS, SPECIFICATIONS AND ALLIED TECHNICAL DETAILS

CHAPTER - 4

ELIGIBILITY CONDITIONS, SPECIFICATIONS AND ALLIED TECHNICAL DETAILS

4.1 Minimum Eligibility Criteria for Participation in Tender

1. Format for Declaration by the Bidder for Code of Integrity & Conflict of Interest (Annexure - II)

2. Format for Affidavit of Self Certification regarding Local Content (Annexure - XIII).
   (The Class-I Local Supplier & Class-II Local Suppliers are required to provide the "Local Content Certificate" from a Statutory Auditor (or) Cost Auditor of the company (in case of company) or from a practicing Cost Accountant (or) practicing Charted Accountant in respect of suppliers other than companies)

3. Integrity Pact should be signed in the Letter Head of the Firm (Annexure – XIV)

4. Self-certification regarding Land Border (Annexure - XV (or) XVI) as applicable

5 Minimum two (2) Purchase Orders (PO) copies of similar equipment should be submitted. The PO copies shall be from the CSIR Laboratories or other Govt. Institutes/ Organizations or Private Organizations.

(Note: Firms not meeting the minimum eligibility conditions will not be considered for technical evaluation.)

4.2 SPECIFICATIONS AND ALLIED TECHNICAL DETAILS

Technical specifications for ± 2500 kN fatigue-rated servo-hydraulic Computer-controlled universal testing machine with controller and hydraulic power pack

Description of technical details	
1. Dynamic Force Capacity and Stroke length	1.1 Dynamic force rating of ±2500 kN (Tension/compression). 1.2 Static force rating should be more than 110% of dynamic force rating. 1.3 Actuator stroke should be ±150 mm, total stroke shall be 300mm.
2. Actuator type	2.1 Double-ended, double-acting, equal area, cross-head mounted actuator. 2.2 Piston rod – one-piece, high tensile material with heavy chrome finish or better. 2.3 Low-friction and anti-rotating long-life bearings. 2.4 Fatigue life $\geq 10^9$ cycles or higher under fully reversed cycles. 2.5 The actuator should have safe normal and low flow velocity options. 2.6 The actuator/hydraulic manifold should have a safety mechanism to hold its position in the event of power loss.
3. Load Frame	3.1 Sturdy self-straining, floor-standing and four-column-type frame with solid monolithically integrated T-slotted base plate at the floor of minimum size 800 mm x 1000 mm with minimum of 4 T-slots. 3.2 The maximum vertical test space without hydraulic grips should be ≥ 3000 mm. 3.3 Minimum clearance between side columns shall be 450 mm (side) x 700 mm (front) (i.e. clear width for test space). 3.4 The total height of the test system should not exceed 7000 mm. 3.5 The nominal stiffness of the load frame should be 3×10^9 N/m at 2m from the base of the frame. 3.6 Fatigue life of load frame - $\geq 10^9$ cycles. 3.7 The resonant frequency of the frame should be more than 20Hz. 3.8 Vibration isolation pads should be placed at the base of the load frame to minimise the vibrations during fatigue testing. 3.9 Moveable crosshead with hydraulic lift and lock control shall be provided. 3.10 Upper crosshead safety interlocks has to be integrated with the control system.
4. Servo valves	4.1 Two separate servo valves of low and high flow capacity are to be provided with a manual shut-off valve. 4.2 The low-flow servo valve should have a maximum flow rating of 100 lpm or less. 4.3 The high flow servo valve should have a maximum flow rating of 300 lpm or more. 4.4 Suitable current-driven servo valves are to be provided to meet the following performance requirements. 4.5 **Low flow performance:** 2250 kN load, 0.5 Hz frequency, ± 1.5 mm amplitude and 2250 kN, 1 Hz frequency, ± 0.15 mm amplitude. 4.6 **High flow performance:** 2250 kN load, 0.5 Hz frequency, ± 9 mm amplitude and 2250 kN, 1 Hz frequency, ± 5 mm amplitude. 4.7 Suitable hydraulic service manifold has to be provided. **Performance curves, actuator, power pack and servo valve has to be provided for the stated amplitude and**

	frequencies.
5. Force transducer (load cell) of capacity: **i) 2500 kN – 01 No.** **ii) 250 kN – 01 No.**	**i) Fatigue-rated force transducer (Tension/compression**) of **capacity ± 2500kN** 5.1 Hermetically sealed fatigue-rated load cell ± 2500kN capacity for both measurement and control. 5.2 The force transducer should be calibrated for 10%, 20%, 50% and 100% ranges of full scale (FS). 5.3 Accuracy class I - 0.5% 5.4 Linearity better than ±0.2% of full scale. 5.5 Hysteresis ≤ ± 0.2% of full scale. 5.6 Nominal output sensitivity at full scale load - 2 mV/V or better. 5.7 Safe overload ± 150% of full scale or better. 5.8 Fatigue life of load cell $\geq 10^9$ under fully reversed cycles.
	ii) Fatigue-rated force transducer (Tension/compression) of **capacity ± 250kN** 5.9 Hermetically sealed fatigue-rated load cell ± 250kN capacity for both measurement and control. 5.10 Accuracy class I - 0.5% 5.11 Linearity better than ±0.15% of full scale. 5.12 Hysteresis ≤ ± 0.15% of full scale. 5.13 Nominal output sensitivity at full scale load - 2 mV/V or better. 5.14 Safe overload ± 150% of full scale or better. 5.15 Fatigue life load cell $\geq 10^9$ under fully reversed cycles.
	5.16 Both the dynamic load cells should meet the requirements of IS 1828 Part (1), IS 4166 and IS 1608 (ISO 75001/1 Class 0.5, ASTM E4, EN10002 Part 2, JIS (B7721, B7733) and ISO 10002 Part 2). 5.17 Dynamic systems using wedge grips should include ASTM E467-based dynamic calibration for the complete system with grips 5.18 The load output shall be processed through a signal conditioner within the controller to enable closed-loop control and data logging. The conditioned output shall be provided in the range of ±10 V. 5.19 The transducer shall be supplied with a traceable calibration certificate issued by a reputed, accredited laboratory from the country of origin.
6. Displacement measurement	6.1 Actuator stroke to be measured using coaxially mounted internal LVDT. 6.2 An integral displacement transducer (AC-LVDT) of ±150 mm stroke is to be provided. 6.3 Accuracy better than ±0.5% of FS as per ASTM E2309. 6.4 Linearity better than 0.5% of FS displacement. 6.5 Transducer outputs has to be conditioned at the controller for closed-loop control and data logging purpose. The conditioned output should be ± 10 V. 6.6 The transducer shall be supplied with a traceable calibration certificate issued by a reputed, accredited laboratory from the country of origin.
7. Extensometers	7.1 **Axial strain measurement for steel -01 No.** Extensometer travel ± 5 mm. Varying gauge length options- 12.5 mm, 25 mm and 50mm. Suitable for flat and round steel specimens. 7.2 **Axial Strain Measurement for concrete-02 Nos.** Dual Averaging Axial Extensometer for axial strain

	measurement. Two strains shall be averaged for a more accurate measurement. Extensometer travel is ± 4.00 mm. Strain calibrations for dual averaging measurement: 10% 20%, 50% and 100% of full scale. Varying gauge lengths of 100mm, 150mm, and 200mm shall be provided. 7.3 **Circumferential Strain Measurement for Concrete-1 No.** Circumferential Extensometer of chordal travel length +12.5/-2.5mm for measurement of poisons ratio and to control the testing. This extensometer is typically used with an axial extensometer package to determine Poisson's ratio and to control testing. Minimum diameter of specimen to be measured is 50mm. Circumferential Chain suitable for 100mm and 150mm diameter specimens. Cable length 20 m to be provided from the controller to the load frame and 2 m from the load frame to the specimen for the extensometers. The transducer output shall be conditioned within the controller to facilitate closed-loop control and data logging. The conditioned output shall be provided in the range of ±10 V.
8. Hydraulic Grips	8.1 Hydraulic grips for tension testing of circular rods and flat specimens with a dynamic capacity of +/-1000kN and static capacity of 1200kN or higher, capable of fully reversed fatigue loading. 8.2 The hydraulic grip should be controlled through a stand-alone hydraulic grip control and supply. 8.3 The grip controller should have an adjustable pressure control system to grip and un-grip the test specimen. An independent grip pressure control has to be provided for both upper and lower grip with a separate pressure gage/indicator for both the upper and lower grips. 8.4 Pressure stability variation during gripping should not exceed ± 0.07 MPa. 8.5 The grip unit should contain pressure gauge to monitor the gripping and un-gripping operations. 8.6 Suitable set of spiral washers should be provided to ensure backlash-free and offset-free pre-loading for fatigue loading. 8.7 Hydraulic grip should accommodate flat inserts and Vee wedge inserts. 8.8 Wedge inserts should be provided for round specimens with diameters ranging from 10 mm to 40 mm. 8.9 Wedges should be provided for flat specimens with thicknesses ranging from 0mm to 40mm. 8.10 Rebar wedges to be provided for bar diameters ranging from 10mm to 40mm. 8.11 The firm should have supplied at least 4 units of similar capacity dynamically rated hydraulic grip supply units in India. Details of the clients to whom such hydraulic grip and wedge inserts have been supplied, along with their addresses, contact person, email and telephone numbers, should be submitted with the technical bid. Both the hydraulic grip and wedge inserts should be covered under warranty.
9. Compression platen	9.1 Upper and bottom platens of 300 mm diameter for uniform loading of test specimens. 9.2 Spherical seat for upper platen for proper axial loading of the test specimen. 9.3 Compression platen to be made up of hardened alloy steel of hardness R_c 58 or higher. 9.4 Bottom platen to be etched smoothly with concentric rings for

	centering specimens. 9.5 Suitable mating connectors (studs) should be provided with the system to connect with and without hydraulic grips.
10. Computer-controlled Digital Controller	10.1 The controller must allow tests in load, stroke, and strain control (via internal LVDT or external extensometers). The system should support two independent strain control channels. 10.2 Controller shall support Proportional, Integral, Derivative, and Feed-forward (PIDF) control. 10.3 High-precision digital signal conditioners and valve drivers should be provided for the control signals. 10.4 Controller must allow for any inputs (minimum of four) to be assigned to any control channel by the user without requiring re-arranging controller hardware. 10.5 Control software shall have the ability to automatically recognize added controller hardware (TEDS). 10.6 Controller must have minimum 8 digital input and output (DIO) and 8 analog output of ±10 V should be provided for external data logging and external control mode. 10.7 Controller must have option to control or acquire data up to 5 kHz for at least 8 external analog signals. 10.8 Continuous synchronous data acquisition at user-selectable sampling rate with a maximum of 5 kHz on all internal and external channels. 10.9 Controller shall support channel control mode with the second feedback signal for controlling the actuator for safe specimen installation and removal during testing. It should prevent the actuator from exceeding user-defined limits on either the active or limiting channel. 10.10 Controller shall support Dual Mode control with two feedback signals to provide better control stability. 10.11 The controller must allow for any output channels and input channels to be configured by the user via software, without requiring any controller hardware to be rearranged. 10.12 Controller must be expandable to at least two independent test stations with additional hardware in the same controller. 10.13 Controller must support either 2 or 3 stage valve drivers 10.14 Bumpless switch-over from one control mode to another control mode with and without hydraulics. 10.15 Controller should have adaptive Control System, allowing continuous update of PID terms for specimen stiffness and automatically compensating at a minimum frequency of 1 kHz with auto and manual tuning facility. 10.16 The Controller should adapt for Peak/Valley control, Amplitude/Mean control, Amplitude and Phase control. Control loop update should be 5 kHz or faster. Loop closure rate should not be affected by number of control channels. 10.17 Auto Loop Shaping: Position, Load, and Strain. Multi term control, including PID, lag, feed forward and compensation, with serial, parallel and cascade control. High speed computer interface, using the industry-standard Ethernet/USB. 10.18 Transducer signal conditioners for load, stroke, extensometer, COD (crack opening displacement) and external strain sensors to provide high accuracy, low drift and low noise transducer signal with user-selectable standard filters. 10.19 Digital sensor conditioners providing minimum 16 bit data resolution across the complete span of the sensor. Interlocks and indicators are to be provided for transducer excitation failure and conditioner saturation. 10.20 Automatic transducer recognition and calibration to be provided.

	10.21 All adjustments on the signal conditioners are to be made by software. 10.22 Programmable limit/event detection for providing rapid intelligent actions or test interruptions. 10.23 User selectable limit/event detector actions such as hydraulic off, indicate, hold, change mode and hold, reset, unload, and no action has to be provided. 10.24 Programmable display meters for providing the user flexibility of programming and the parameters to be displayed on the meters. 10.25 All test templates that support testing against standards can be modified by the user, using the graphic interface (no requirement to change source code). 10.26 All variable definitions and calculations as well as the test flow/sequence and logic are visible and can be changed by the user. 10.27 The user should be able to select any of the following parameters for display cyclic/ramp signal track, mean, amplitude, min., max., peak, valley, current cycle count, total cycle count, segments etc., 10.28 The user should be able to generate as many number of display meters as required to display the above parameters based on the requirement. 10.29 Programmable display scopes for providing the user the flexibility of programming the parameter to be displayed on X and Y axis. The user should be able to select any of the following parameters for the Y axis: load, stroke, COD, extensometer output, external LVDT output, command, servo drive, error etc. The user should be able to select any of the following parameters for the X axis: time, load, stroke, COD and extensometer outputs. User should be able to adjust the scaling and trace time based on the requirement. The scope should have user selectable and auto scaling features. The scope should be able to plot one channel versus another channel. 10.30 Programmable automatic dynamic mode changing to any transducer connected to the machine, which has been selected for control, including load-limited displacement during specimen loading. 10.31 Waveform command generation with 32-bit resolution up to 500 Hz for each sensor, with, sine, triangle, square, haversine, havertriangle, haversquare, ramp, dual ramp, trapezoid in relative and absolute modes and support for digital drive data or an analog input of ±10 V. 10.32 The controller with necessary software should be able to run static and fatigue tests and data acquisition should have the following features: ✓ Selection of wave form type, timed sample, peak / valley, max / min, level-crossing, cyclic / logarithmic and mean/amplitude with ability to tie data channels to a master signal. Starting quadrant, and number of cycles to stop, action to be taken at the end of the defined test. ✓ Run, hold, continue, and stop buttons for controlling the test. ✓ Online instantaneous adjustment of frequency, amplitude, and mean of the cyclic waveform tests. ✓ Online visual indication of limit settings and status. ✓ Data acquisition and storage of external and internal signals with a user-adjustable sampling rate. The data acquisition mode in the form of maximum and minimum, level crossing, peak valley, continuous and high speed. ✓ The user should be able to switch on / off hydraulics from the controller. The user should start, pause and stop the test program.

	✓ An emergency switch-off button should be provided in the load frame, hydraulic power pack and near the controller. 10.33 The controller shall comply with the requirements of IS/IEC 61010 – Safety requirements for electrical equipment for measurement, control, and laboratory use.
11. Application software package	11.1 The software should be able to carry out the waveform profiles such as sine, triangle, haversine, square, ramp, trapezoid, etc., for conducting basic static and fatigue tests. 11.2 The software must support the following tests: • Random/block profile playback, • High-cycle and crack growth testing • Resume from power failure, • Custom command logic, • Parallel branching and event-based data logging. 11.3 The software packages should have real-time graphic options, formula calculations, and data in the form of ASCII and Excel formats. The software shall be used for generating and executing tests. The software should have the ability to control or capture the data from the internal and external transducers. 11.4 Random\field data\profile playback software for playback of field data obtained from components undergoing service conditions/constant amplitude fatigue. The software should be able to read the profile data file created using a spreadsheet or a text editor. 11.5 The block loading software should be able to continue the block segment when the test system stops due to a power failure or user-defined test termination, and it should resume from the block segment where it was stopped when the user restarts the test system. 11.6 The software should have the capability to change, view, create, edit and create loops in the process variables as per the user commands with ease. 11.7 Software test design to support parallel branches for test execution and logical operators (if/then, while). 11.8 The software should have a feature to allow data to be collected and stored to disk during any simple or complex testing. 11.9 The data acquisition routines shall include time data collection, peak valley, maximum/minimum and level crossing data acquisition and the additional slave channels to be collected simultaneously. All internal conditioned channels can be used as the master or as the slave channel. 11.10 The software shall allow the operator to directly interact with the progress of the test through user-defined software buttons. 11.11 The user should be able to define customised software buttons with names and descriptions that, when clicked with the mouse, cause the test program to sequence to the next desired test sequence. 11.12 The software shall allow the user to set up command segment end levels that are from a different transducer channel than the channel being used for test control. The end level or data limit can be set up to terminate the current segment when the data limit is approached from below, above or either direction. The data limit can also be used to trigger data acquisitions and other definable test system processes. Data limits can be set up to cause the test system to go to any definable state upon detection. 11.13 The software shall have an event detector watching for changes in peak-valley readings. The process can be used to trigger data collection or other definable test system processes.

	11.14 The various display on the computer monitor during testing should be legible, easy to read, including the font size. 11.15 During testing, when the power supply stops suddenly and unexpectedly, the test should stop at the stage of the testing without any damage to the test specimen or test setup. The hydraulics should immediately disengage completely without any application of load to the test system. 11.16 Further, it should be able to resume the same test from that point onwards, where it had stopped. 11.17 Test software to provide standard templates for running tensile tests on rebar specimens. 11.18 Software to have a freely configurable run time view (show an unlimited number of variables, meters, charts and tables). Should show the test flow while the test is proceeding, indicate active vs. finished actions. 11.19 The system should be usable under local conditions, and must be installed and commissioned with no additional costs.
12. Computer	12.1 The supply shall have latest hardware and operating system for interfacing with the digital controller. 12.2 **Computer specifications:** Processor and speed: Intel Core i9, 12th generation Ram:32GB Hard disk (SSD): 1TB OS: Windows-11 or latest at the time of supply. Monitor: 30-inch LED dual monitor 12.3 For technical reasons, if the supplier wishes to offer a computer system with different specifications, then the same should be justified and detailed specifications of the computer system shall be given. It is the responsibility of the quoting firm to ensure complete compatibility between the testing system, test software and the computer system.
13. Hydraulic power pack	13.1 **Total flow capacity of the hydraulic power pack** The minimum total flow capacity of the power pack should be 300 litres per minute. Minimum reservoir capacity shall be 1200 litres, and it should be enough to operate continuously for at least 16 hours under the performance stated in Sl. No.4, considering the capacity of cooling unit. Pumps should be able to support 2 or more test systems.
	13.2 **Operating pressure of the power packs**: 210 bar (3000 psi).
	13.3 **Rated pressure of the power pack component**: Minimum 280 bar (4000 psi)
	13.4 **Type of hydraulic pump for power packs:** The pump and motor should be of a submerged pressure-compensated variable-displacement and variable flow type.
	13.5 **High-pressure and low-pressure oil filtration:** Three-micron high-pressure filter to be provided for system filtration at the outlet of the pump. Ten-micron low-pressure filter shall be provided for system filtration at the inlet of the power pack reservoir
	13.6 **Accumulators:** High-pressure accumulators of suitable capacity are to be provided at the outlets of the pumps to manage surges in flow demand.
	13.7 **Sensors to monitor vital parameters:** Suitable sensors to be provided to monitor rate of oil flow, oil pressure, oil temperature, oil level in the tank, filter block condition, cooling water temperature etc.,
	13.8 **Hydraulic oil:** The first oil fill of the power pack should be filled by the vendor. Mineral-based equivalent to DTE25, servo 46, or

	Shell Tellus 46 AW (to be supplied), oil required for initial flushing also to be included in the supply.
	13.9 **Operating features:** Touch screen-based Programmable Logic Controller (PLC) of size 6" or above to be provided with the following features for the operation of the power pack: **Remote and Local control of the power pack** • The power pack should be provided with an integral front panel PLC control, and it should be operated remotely through the controller of the UTM located in the control room. **Normal mode operation** • Power pack has to be started in low-pressure mode and then the system pressure needs to be raised to the nominal operating pressure (3000 psi) smoothly **Cooling mode operation** • When the oil temperature exceeds the prescribed limit due to unforeseen circumstances, it should be possible to operate the cooling pump alone and circulate the oil in the heat exchanger at low pressure to bring down the oil temperature. **Flushing mode operation** • In flush mode operation, the power pack should circulate the hydraulic oil at low pressure in the hydraulic circuit for flushing. • The PLC operator control panel should indicate the status of the power pack, such as mode of operation, rate of oil flow, oil pressure, oil temperature, oil level in the tank, oil filter condition, safety interlock conditions, etc., • Manual override option has to be provided for the interlocks, for operating the power pack in normal mode for a short duration.
	13.10 **Safety and interlock features:** The power pack should shut down in the following circumstances • If the oil temperature exceeds, or falls below, the pre-set values • If the oil level in the reservoir tank drops below a minimum level • If the pressure in the system exceeds or falls below the pre-set value • If the motor current or temperature exceeds the pre-set value • Pressure Relief Valve has to be provided as a safety mechanism for preventing the power packs operating at more than the normal operating pressure
	13.11 Electrical supply available for the operation of the power packs: Three phase 400 V ± 6 %, 50 Hz
	13.12 **Acoustic attenuation:** The power packs has to be provided with acoustic attenuation to reduce the noise output from the power pack to less than 70 dB at a distance of 1m.
14. Hydraulic service manifold (HSM)	Independent hydraulic service manifold with on/off low- and high-pressure control shall be provided with the following functions: 14.1 HSM should have smooth, controlled transitions of oil flow to enhance system safety. 14.2 HSM should have a provision to minimise the rapid application and removal of high pressure during abnormal operation. 14.3 HSM to be provided with rapid dump hydraulic pressure unloading features in the event of any abnormal operation or

	potentially hazardous conditions. 14.4 Suitable pressure accumulators to be provided in the pressure and return line to minimise the effect of pressure fluctuations. 14.5 Slow pre-filling to 75% of nominal pressure for smooth start-up. 14.6 Maximum operating pressure of HSM is 3000 psi. 14.7 Ability to set variable low pressure from about 1 to 20 MPa is required. 14.8 Hydraulic manifold with on/off low- and high-pressure control; software selectable. 14.9 Accumulators of a minimum 4-litre capacity are to be provided for smoothing out pressure fluctuations. 14.10 Pressure line and return line filters of the required size are to be provided for removing any contamination in the oil. Filter interlock should be provided.
15. Flexible hydraulic hoses	15.1 Flexible hoses (pressure, return, and drain/pilot) of required length from the HSM to the hydraulic power pack (to suit the site conditions). 15.2 Flexible hoses (pressure, return, drain/pilot) of required length from HSM to load frame (to suit the site condition).
16. System cables	16.1 System cables of required length (to suit the site condition) from the controller to the UTM. 16.2 System cables of required length (to suit the site condition) from the controller to the HSM.
17. Warranty	17.1 One-year warranty followed by three years AMC. The bid should include three years of AMC after one year of warranty. The AMC charges will be taken for evaluating the bid. 17.2 The commercial quote should include the charges for the above.
18. Installation and commissioning	18.1 The firm should take full responsibility for the supply, installation and commissioning of the equipment. Installation and commissioning should be carried out in CSIR-SERC, and performance of the system should be demonstrated to the satisfaction of the users in CSIR-SERC.
19. Acceptance test	19.1 Acceptance tests shall be conducted on the supplied equipment in India. The vendor's technical bid will be evaluated based on the performance of these tests. Failure to meet any of the acceptance test criteria will result in outright rejection of the technical bid. CSIR-All the tests mentioned below must be successfully demonstrated by the vendor: 19.2 **Concrete Cylinder Testing (Stress-strain):** Demonstration of compression test on concrete cylindrical specimens mounted with a dual averaging extensometer and circumferential extensometer. The test should be strain-controlled, showcasing its ability to capture the full stress-strain behaviour of concrete cylinders, including post-peak response. 19.3 **Notched Flexural Beam Testing:** Demonstration of flexure test on notched concrete beam using external LVDT and CMOD gauge for control at loading rate of 0.05 mm/min, to evaluate flexural performance and crack propagation characteristics. 19.4 **Steel Rebar Testing:** Demonstration of cyclic strain-controlled tests on steel reinforcement bars (rebars) using extensometer.
20. Operation and maintenance training.	20.1 Installation and Commissioning The system shall be installed and commissioned at CSIR-SERC by the manufacturer, using trained and experienced service engineers.

	20.2 Training Program Upon successful installation, the manufacturer shall provide a 5-day training program at CSIR-SERC. The training shall cover routine operation and maintenance of the UTM, hydraulic power pack, sub-systems, and cooling system. Training materials shall be supplied by the manufacturer. This training shall focus on the procured software, safety features and include demonstrations using actual test specimens During the warranty period, the vendor shall provide training free of cost, as and when required.
21. Maintenance and service support of the equipment during and after the warranty period.	21.1 The vendor should have a competent and reliable service network in India for quick and necessary repair and maintenance of the equipment. Details of the nature of service support the firm can provide should be given along with the bid. The firm should commit to provide maintenance service and supply necessary spares for the equipment for at least 10 years after successful installation and commissioning. 21.2 The details submitted by the vendor regarding service and maintenance support shall be subject to evaluation by CSIR-SERC. If the service support offered is found to be inadequate, the bid will not be considered.
22. Software, operating system and related hardware	22.1 The vendor should agree to give technical and service support to the test software, operating system and related hardware for a minimum period of 10 years from the date of completion of installation and commissioning.
23. Technical documents and catalogues	23.1 The vendor should enclose all the relevant technical documents and catalogues for all the components included in the quotation. Quotations without proper technical documents and catalogues will be rejected.
24. Compliance statement	24.1 Compliance statement, clearly mentioning point-wise compliance, should accompany the main technical offer without fail.
25 Operation and maintenance manuals	25.1 Two sets of operation and maintenance manuals along with all necessary drawings should be supplied along with the testing system. 25.2 Backup pen drive for total firmware, background software and the application software packages should be supplied.

Note: The bidder requested for technical demo of the product quoted after submission of bid for technical evaluation.

4.2.2 General criteria: -

1. List of installations of similar work with contact details should be provided. Performance Statement Form (Annexure VI)
2. The bidder shall furnish documentary evidence to demonstrate that the bidder satisfies the bidders' eligibility criteria.
3. Bidders shall invariably furnish documentary evidence (client's certificate) in support of the satisfactory operation of the similar systems executed by him.
4. Spares and service support for the instrument for the period of 10 years from the date of installation.

5. Details of make, model, service support for the outsourced items/ supporting accessories (Technical details in Technical bid)

6. Details of Service Centre and information on service support facilities that would be provided after the warranty period (in the Service Support Form-Annexure IX).

4.3 Scope of Supply

Supply, Installation, Commissioning & Training of 2500kN Servo-Hydraulic Universal Testing Machine

4.4 Inspection & Tests

4.4.1 General

1. 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 as are specified here.

2. 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.

3. Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.

4. Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods/software or make alterations necessary to meet specification requirements free of cost to the Purchaser.

5. The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at final destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.

6. The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.

7. Before the goods and equipment's are taken over by the Purchaser, the Supplier shall supply operation and maintenance Manuals together with Drawings of the goods and equipment's built. These shall be in such details as will enable the Purchase to operate, maintain, adjust and repair all parts of the works as stated in the specifications.

8. The Manuals, Drawings and Guides shall be in the ruling language (English) and in such form and numbers as stated in the Contract.

9. Unless and otherwise agreed, the goods and equipment shall not be considered to be completed for the purposes of taking over until such Manuals, Drawing and Guides have been supplied to the Purchaser.

10. On successful completion of acceptability test, receipt of deliverables, etc., and after the Purchaser is satisfied with the working of the equipment, the acceptance certificate signed

by the Supplier and the representative of the Purchaser will be issued. The date on which such certificate is signed shall be deemed to be the date of successful commissioning of the equipment.

ACCEPTANCE TERMS

11. Specifications should be strictly adhered to without compromise. At the time of supply, all the parts supplied should be the latest one i.e. should there be a new and improved version of the part(s) developed after the quote was furnished the improved versions should only be supplied and without any additional cost to the buyer.

12. A simple step-by-step operating procedure which will be kept near the equipment indicating the precautions for eg. Safe pressures, dos and don'ts for safe and correct use of the entire equipment including software should be provided to help extend the life of the system.

13. The service manual to be given.

4.4.2 Pre-dispatch Inspection by CSIR-SERC

Not Applicable

4.4.3 Manufacturer's Inspection Certificate

After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier, prior to shipment to check whether the goods are in conformity with the technical specifications. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. The purchaser reserves the options to be present at the supplier's premises during such inspection and testing.

4.4.4 Third Party Inspection

Not Applicable

4.4.5 Acceptance Test

The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the item is installed at Purchaser's site in the presence of supplier's representatives. The acceptance will involve trouble free operation. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the item is expected to occur.

The Supplier shall maintain necessary log in respect of result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified. In the event of the ordered item failing to pass the acceptance test, a period not exceeding two weeks will be given to rectify the defects and clear the acceptance test, failing which, the Purchaser reserve the right to get the item replaced by the Supplier at no extra cost to the Purchaser.

Successful conduct and conclusion of the acceptance test for the installed goods and items shall also be the responsibility and at the cost of the Supplier.

4.5 Training

Upon successful installation, the manufacturer shall provide a 5-day training program at CSIR-SERC.
The training shall cover routine operation and maintenance of the UTM, hydraulic power pack, sub-systems, and cooling system.

Training materials shall be supplied by the manufacturer.

This training shall focus on the procured software, safety features and include demonstrations using actual test specimens.

During the warranty period, the vendor shall provide Training free of cost, as and when required.

4.6 Warranty

The warranty of the equipment should be for a period of **One year (12 Months)** from the date of final acceptance by CSIR-SERC.

4.7 Annual Maintenance contract (AMC)

4.8.1 The supplier has to quote for non-comprehensive AMC after the expiry of the warranty period, detailing the number of breakdown and preventive maintenance visit, exclusions if any and other terms and conditions.

4.8.2 The AMC cost will be consider for price evaluation of L1.

4.8.3 The bidder who emerges as L1 in the product will be asked to match the AMC cost of other bidders which is lowest as compared to his AMC cost.

4.8.4 In case AMC is freezed along with Purchase Order then payment of AMC will be released at the end of the each AMC period for the services provided terms and conditions have been adhered.

4.9 Incidental Services

Not Applicable

CHAPTER 5

PRICE SCHEDULE FORM

Please upload the prices in the .xls sheet uploaded in cover 2 – Price Bid.

Kindly follow instructions hereunder to fill Bill of Quantities (BoQ). Any discrepancy infollowing instructions would lead to rejection of the bid.

Instructions: -

- On Opening the BOQ (Bill of Quantity) "Please Enable Macros to View BOQ

  Information". Please go to **enable editing** just below the task bar.
- As macros have to be enabled, please click on **enable content**.
- **BoQ1**

  Bidders are requested to fill columns marked in blue only i.e. **i) BASIC RATE in Figures tobe entered by the Bidder Rs. P (Column M), ii) Make / Model (Column AJ)**

CHAPTER 6

CONTRACT FORM

Contract No. _____ Date:_____

THIS CONTRACT AGREEMENT is made

the *[insert: number]* day of *[insert: month]*, *[insert: year]*.

BETWEEN

(1) The Director, CSIR-Structural Engineering Research Centre, Taramani, Chennai- 600 113., a constituent Laboratory of Council of Scientific and Industrial Research registered under the Societies Registration Act 1860 of the Government of India having its registered office at 2, Rafi Marg, New Delhi-110001, India represented by Controller of Stores and Purchase, CSIR-SERC, Taramani, Chennai- 600 113, INDIA, (hereinafter called "the Purchaser"), and

(2) *[insert name of Supplier]*, a corporation incorporated under the laws of *[insert: country of Supplier]* and having its principal place of business at *[insert: address of Supplier]* (hereinafter called "the Supplier").

WHEREAS the Purchaser invited bids for certain Goods / software and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of *[insert Contract Price in words and figures, expressed in the Contract currency(ies)]* (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

01. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

02. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:

(a) This Contract Agreement

(b) Special Conditions of Contract

(c) General Conditions of Contract

(d) Technical Requirements (including Schedule of Requirements and Technical Specifications)

(e) The Supplier's Bid and original Price Schedules

(f) The Purchaser's Notification of Award

(g) *[Add here any other document(s)]*

03. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

04. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

05. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Union of India on the day, month and year indicated above.

For and on behalf of the Council of Scientific & Industrial Research

Signed: *[insert signature]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

Signed: *[insert signature]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

For and on behalf of the Supplier

Signed: *[insert signature of authorized representative(s) of the Supplier]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

CHAPTER - 7

Annexures to be enclosed with Techno - Commercial Bid

Table of Contents

ANNEXURE I

BIDDER INFORMATION FORM

(a) *[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted. This should be done of the letter head of the firm]*

Date: *[insert date (as day, month and year) of Bid Submission*]

Tender No.: *[insert number from Invitation for bids]*

01.	Bidder's Legal Name *[insert Bidder's legal name]*
02.	In case of JV, legal name of each party: *[insert legal name of each party in JV]*
03.	Bidder's actual or intended Country of Registration: *[insert actual or intended Country of Registration]*
04.	Bidder's Year of Registration: *[insert Bidder's year of registration]*
05.	Bidder's Legal Address in Country of Registration: *[insert Bidder's legal address in country of registration]*
06	NAME AND ADDRESS OF BANK: BANK ACCOUNT NUMBER: TYPE OF ACCOUNT: IFSC CODE:
07.	Bidder's Authorized Representative Information Name: *[insert Authorized Representative's name]* Address: *[insert Authorized Representative's Address]* Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]* Email Address: *[insert Authorized Representative's email address]*
08	COUNTRY OF ORIGIN OF PRODUCT (S):
09	ADDRESS OF THE PLACE MANUFACTURE / FACTORY / PLACE WHERE LOCAL CONTENT VALUE ADDITION IS DONE BY MANUFACTURER:OF
10	If item is imported and is from a country sharing land border with India, then Registration certificate details like number, date and validity date:

11	Are you a MSE registered for the Item under procurement: if Yes then furnish details of the certificate, date and validity along with copy of the same.
12	Are you Class I Vendor or Class II Vendor as defined by Make In India circular. It is mandatory to attach the certificate from the OEM for Local content percentage and place of value addition.
13	Attached are copies of original documents of: *[check the box(es) of the attached original documents]* Articles of Incorporation or Registration of firm named in 1, above.

Signature of Bidder _____

Name _____

Business Address _____

ANNEXURE – II

Format for declaration by the Bidder for Code of Integrity & conflict of interest
(On the Letter Head of the Bidder)

Ref. No: _____ Date: _____

To,

_____

_____

(Name & address of the Purchaser)

Sir,

With reference to your Tender No._____ dated _____I/We hereby declare that we shall abide by the Code of Integrity for Public Procurement as mentioned under Para 1.3.0 of ITB of your Tender document and have no conflict of interest.

The details of any previous transgressions of the code of integrity with any entity in any country during the last three years or of being debarred by any other Procuring Entity are as under:

a.

b.

c.

We undertake that we shall be liable for any punitive action in case of transgression/ contravention of this code.

Thanking you,

Yours sincerely,

Signature
(Name of the Authorized Signatory
Company)

ANNEXURE III

MANUFACTURERS' AUTHORIZATION FORM

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.

Date: *[insert date (as day, month and year) of Bid Submission]*

Tender No.: *[insert number from Invitation For Bids]*

To: *[insert complete name and address of Purchaser]*

WHEREAS

We *[insert complete name of Manufacturer],* who are official manufacturers of *[insert type of goods manufactured],* having factories at [insert full address of Manufacturer's factories], do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods],* and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 2.21 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Duly authorized to sign this Authorization on behalf of: *[insert complete name of Bidder]*

Dated on _____ day of _____, _____ *[insert date of signing]*

ANNEXURE - IV

BID SECURITY FORM

Whereas _____ (hereinafter called the tender") has submitted their offer dated _____ for the supply of _____ (hereinafter called the tenderer")
Against the purchaser's tender enquiry No._____

KNOW ALL MEN by these presents that WE _____of _____ having our registered office at_____are bound unto _____ (hereinafter called the "Purchaser")

In the sum of _____
For which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this_____day of _____20____.

THE CONDITIONS OF THIS OBLIGATION ARE:

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

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

This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

_____
(Signature of the authorized officer of the Bank)
Name and designation of the officer
Seal, name & address of the Bank and address of the Branch

Note: Whenever the bidder chooses to submit the Bid Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Speed Post. An unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

ANNEXURE - V

BID-SECURING DECLARATION FORM

Date:_____
Bid No. _____

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown) in the capacity of (insert legal capacity of person signing the Bid Securing Declaration).

Name: (insert complete name of person signing he Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of : (insert complete name of Bidder)

Dated on _____ day of _____(insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

ANNEXURE VI

PERFORMANCE STATEMENT FORM

Name of the Firm.....

Order Placed by (full address of Purchaser)	Order No. and date	Descrip-tion and quantity of ordered software	Value of order	Date of comple-tion of delivery as per Contract	Date of actual completi on of delivery	Remarks indicating reasons for late delivery, if any	Has the software been installed satisfactory ? (Attach a certificate from the purchaser/ Consignee)	Contact person along with Telephone No., and e-mail address

Signature and Seal of the manufacturer/Bidder .....

Place :
Date :

ANNEXURE VII

DEVIATION STATEMENT FORM/ TECHNICAL COMPLIANCE STATEMENT FORM

TECHNICAL COMPLIANCE STATEMENT FORM / DEVIATION STATEMENT FORM

Parameters		SERC requirements	Offered Specification	Compliance (Yes/No)	Reference in the technical document
1. Dynamic Force Capacity and Stroke length	1.1	**Dynamic force rating of ±2500 kN (Tension/compression).**			
	1.2	Static force rating should be more than 110% of dynamic force rating.			
	1.3	Actuator stroke should be ±150 mm, total stroke shall be 300mm.			
2. Actuator type	2.1	Double-ended, double-acting, equal area, cross-head mounted actuator.			
	2.2	Piston rod – one-piece, high tensile material with heavy chrome finish or better.			
	2.3	Low-friction and anti-rotating long-life bearings.			
	2.4	Fatigue life $\geq 10^9$ cycles or higher under fully reversed cycles.			
	2.5	The actuator should have safe normal and low flow velocity options.			
	2.6	The actuator/hydraulic manifold should have a safety mechanism to hold its position in the event of power loss.			
3. Load Frame	3.1	Sturdy self-straining, floor-standing and four-column-type frame with solid monolithically integrated T-slotted base plate at the floor of minimum size 800 mm x 1000 mm with minimum of 4 T-slots.			
	3.2	The maximum vertical test space without hydraulic grips should be ≥ 3000 mm.			
	3.3	Minimum clearance between side columns shall be 450 mm (side) x 700 mm (front) (i.e. clear width for test space).			
	3.4	The total height of the test system should not exceed 7000 mm.			
	3.5	The nominal stiffness of the load frame should be 3×10^9 N/m at 2m from the base of the frame.			
	3.6	Fatigue life of load frame - $\geq 10^9$ cycles.			
	3.7	The resonant frequency of the frame should be more than 20Hz.			
	3.8	Vibration isolation pads should be placed at the base of the load frame to minimise the vibrations during fatigue testing.			
	3.9	Moveable crosshead with hydraulic lift and lock control shall be provided.			
	3.10	Upper crosshead safety interlocks has to be integrated with the control system.			
4. Servo valves	4.1	Two separate servo valves of low and high flow capacity are to be provided with a manual shut-off valve.			

	4.2 The low-flow servo valve should have a maximum flow rating of 100 lpm or less.			
	4.3 The high flow servo valve should have a maximum flow rating of 300 lpm or more.			
	4.4 Suitable current-driven servo valves are to be provided to meet the following performance requirements.			
	4.5 **Low flow performance:** 2250 kN load, 0.5 Hz frequency, ± 1.5 mm amplitude and 2250 kN, 1 Hz frequency, ± 0.15 mm amplitude.			
	4.6 **High flow performance:** 2250 kN load, 0.5 Hz frequency, ± 9 mm amplitude and 2250 kN, 1 Hz frequency, ± 5 mm amplitude.			
	4.7 Suitable hydraulic service manifold has to be provided. **Performance curves, actuator, power pack and servo valve has to be provided for the stated amplitude and frequencies.**			
5. Force transducer (load cell) of capacity: **iii) 2500 kN – 01 No.** **iv) 250 kN – 01 No.**	**iii) Fatigue-rated force transducer (Tension/compression) of capacity ± 2500kN**			
	5.1 Hermetically sealed fatigue-rated load cell ± 2500kN capacity for both measurement and control.			
	5.2 The force transducer should be calibrated for 10%, 20%, 50% and 100% ranges of full scale (FS).			
	5.3 Accuracy class I - 0.5%			
	5.4 Linearity better than ±0.2% of full scale.			
	5.5 Hysteresis ≤ ± 0.2% of full scale.			
	5.6 Nominal output sensitivity at full scale load - 2 mV/V or better.			
	5.7 Safe overload ± 150% of full scaleor better.			
	5.8 Fatigue life of load cell $\geq 10^9$ under fully reversed cycles.			
	iv) **Fatigue-rated force transducer (Tension/compression) of capacity ± 250kN**			
	5.9 Hermetically sealed fatigue-rated load cell ± 250kN capacity for both measurement and control.			
	5.10 Accuracy class I - 0.5%			
	5.11 Linearity better than ±0.15% of full scale.			
	5.12 Hysteresis ≤ ± 0.15% of full scale.			
	5.13 Nominal output sensitivity at full scale load - 2 mV/V or better.			
	5.14 Safe overload ± 150% of full scale or better.			
	5.15 Fatigue life load cell $\geq 10^9$ under fully reversed cycles.			
	5.16 Both the dynamic load cells should meet the requirements of IS 1828 Part (1), IS 4166 and IS 1608 (ISO 75001/1 Class 0.5, ASTM E4, EN10002 Part 2, JIS (B7721, B7733) and ISO 10002 Part 2).			
	5.17 Dynamic systems using wedge grips should include ASTM E467-based dynamic calibration for the complete system with grips			

	5.18	The load output shall be processed through a signal conditioner within the controller to enable closed-loop control and data logging. The conditioned output shall be provided in the range of ±10 V.			
	5.19	The transducer shall be supplied with a traceable calibration certificate issued by a reputed, accredited laboratory from the country of origin.			
6. Displacement measurement	6.1	Actuator stroke to be measured using coaxially mounted internal LVDT.			
	6.2	An integral displacement transducer (AC-LVDT) of ±150 mm stroke is to be provided.			
	6.3	Accuracy better than ±0.5% of FS as per ASTM E2309.			
	6.4 6.5	Linearity better than 0.5% of FS displacement. Transducer outputs has to be conditioned at the controller for closed-loop control and data logging purpose. The conditioned output should be ± 10 V.			
	6.6	The transducer shall be supplied with a traceable calibration certificate issued by a reputed, accredited laboratory from the country of origin.			
7. Extensometers	7.1	**Axial strain measurement for steel -01 No.** Extensometer travel ± 5 mm. Varying gauge length options- 12.5 mm, 25 mm and 50mm. Suitable for flat and round steel specimens.			
	7.2	**Axial Strain Measurement for concrete-02 Nos.** Dual Averaging Axial Extensometer for axial strain measurement. Two strains shall be averaged for a more accurate measurement. Extensometer travel is ± 4.00 mm. Strain calibrations for dual averaging measurement: 10% 20%, 50% and 100% of full scale. Varying gauge lengths of 100mm, 150mm, and 200mm shall be provided.			
	7.3	**Circumferential Strain Measurement for Concrete-1 No.** Circumferential Extensometer of chordal travel length +12.5/-2.5mm for measurement of poisons ratio and to control the testing. This extensometer is typically used with an axial extensometer package to determine Poisson's ratio and to control testing. Minimum diameter of specimen to be measured is 50mm. Circumferential Chain suitable for 100mm and 150mm diameter specimens.			
		Cable length 20 m to be provided from the controller to the load frame and 2 m from the load frame to the specimen for the extensometers.			
		The transducer output shall be conditioned within the controller to facilitate closed-loop control and data logging. The conditioned output shall be provided in the range of ±10 V.			

8. Hydraulic Grips	8.1 Hydraulic grips for tension testing of circular rods and flat specimens with a dynamic capacity of +/-1000kN and static capacity of 1200kN or higher, capable of fully reversed fatigue loading. 8.2 The hydraulic grip should be controlled through a stand-alone hydraulic grip control and supply.			
	8.3 The grip controller should have an adjustable pressure control system to grip and un-grip the test specimen. An independent grip pressure control has to be provided for both upper and lower grip with a separate pressure gage/indicator for both the upper and lower grips.			
	8.4 Pressure stability variation during gripping should not exceed ± 0.07 MPa.			
	8.5 The grip unit should contain pressure gauge to monitor the gripping and un-gripping operations.			
	8.6 Suitable set of spiral washers should be provided to ensure backlash-free and offset-free pre-loading for fatigue loading.			
	8.7 Hydraulic grip should accommodate flat inserts and Vee wedge inserts.			
	8.8 Wedge inserts should be provided for round specimens with diameters ranging from 10 mm to 40 mm.			
	8.9 Wedges should be provided for flat specimens with thicknesses ranging from 0mm to 40mm.			
	8.10 Rebar wedges to be provided for bar diameters ranging from 10mm to 40mm.			
	8.11 The firm should have supplied at least 4 units of similar capacity dynamically rated hydraulic grip supply units in India. Details of the clients to whom such hydraulic grip and wedge inserts have been supplied, along with their addresses, contact person, email and telephone numbers, should be submitted with the technical bid. Both the hydraulic grip and wedge inserts should be covered under warranty.			
9. Compression platen	9.1 Upper and bottom platens of 300 mm diameter for uniform loading of test specimens.			
	9.2 Spherical seat for upper platen for proper axial loading of the test specimen.			
	9.3 Compression platen to be made up of hardened alloy steel of hardness R_c 58 or higher.			
	9.4 Bottom platen to be etched smoothly with concentric rings for centering specimens.			
	9.5 Suitable mating connectors (studs) should be provided with the system to connect with and without hydraulic grips.			
10. Computer-controlled Digital Controller	10.1 The controller must allow tests in load, stroke, and strain control (via internal LVDT or external extensometers). The system should support two independent strain control channels.			

	10.2 Controller shall support Proportional, Integral, Derivative, and Feed-forward (PIDF) control.			
	10.3 High-precision digital signal conditioners and valve drivers should be provided for the control signals.			
	10.4 Controller must allow for any inputs (minimum of four) to be assigned to any control channel by the user without requiring re-arranging controller hardware.			
	10.5 Control software shall have the ability to automatically recognize added controller hardware (TEDS).			
	10.6 Controller must have minimum 8 digital input and output (DIO) and 8 analog output of ±10 V should be provided for external data logging and external control mode.			
	10.7 Controller must have option to control or acquire data up to 5 kHz for at least 8 external analog signals.			
	10.8 Continuous synchronous data acquisition at user-selectable sampling rate with a maximum of 5 kHz on all internal and external channels.			
	10.9 Controller shall support channel control mode with the second feedback signal for controlling the actuator for safe specimen installation and removal during testing. It should prevent the actuator from exceeding user-defined limits on either the active or limiting channel.			
	10.10 Controller shall support Dual Mode control with two feedback signals to provide better control stability.			
	10.11 The controller must allow for any output channels and input channels to be configured by the user via software, without requiring any controller hardware to be rearranged.			
	10.12 Controller must be expandable to at least two independent test stations with additional hardware in the same controller.			
	10.13 Controller must support either 2 or 3 stage valve drivers			
	10.14 Bumpless switch-over from one control mode to another control mode with and without hydraulics.			
	10.15 Controller should have adaptive Control System, allowing continuous update of PID terms for specimen stiffness and automatically compensating at a minimum frequency of 1 kHz with auto and manual tuning facility.			
	10.16 The Controller should adapt for Peak/Valley control, Amplitude/Mean control, Amplitude and Phase control. Control loop update should be 5 kHz or faster. Loop closure rate should not be affected by number of control channels.			
	10.17 Auto Loop Shaping: Position, Load, and Strain. Multi term control, including PID, lag, feed forward and compensation, with serial, parallel and cascade control. High speed computer interface, using the industry-standard Ethernet/USB.			
	10.18 Transducer signal conditioners for load, stroke, extensometer, COD (crack opening displacement) and external strain sensors to provide high accuracy, low drift and low noise transducer signal with user-selectable standard filters.			

	10.19 Digital sensor conditioners providing minimum 16 bit data resolution across the complete span of the sensor. Interlocks and indicators are to be provided for transducer excitation failure and conditioner saturation			
	10.20 Automatic transducer recognition and calibration to be provided.			
	10.21 All adjustments on the signal conditioners are to be made by software.			
	10.22 Programmable limit/event detection for providing rapid intelligent actions or test interruptions.			
	10.23 User selectable limit/event detector actions such as hydraulic off, indicate, hold, change mode and hold, reset, unload, and no action has to be provided.			
	10.24 Programmable display meters for providing the user flexibility of programming and the parameters to be displayed on the meters.			
	10.25 All test templates that support testing against standards can be modified by the user, using the graphic interface (no requirement to change source code).			
	10.26 All variable definitions and calculations as well as the test flow/sequence and logic are visible and can be changed by the user.			
	10.27 The user should be able to select any of the following parameters for display cyclic/ramp signal track, mean, amplitude, min., max., peak, valley, current cycle count, total cycle count, segments etc.,			
	10.28 The user should be able to generate as many number of display meters as required to display the above parameters based on the requirement.			
	10.29 Programmable display scopes for providing the user the flexibility of programming the parameter to be displayed on X and Y axis. The user should be able to select any of the following parameters for the Y axis: load, stroke, COD, extensometer output, external LVDT output, command, servo drive, error etc. The user should be able to select any of the following parameters for the X axis: time, load, stroke, COD and extensometer outputs. User should be able to adjust the scaling and trace time based on the requirement. The scope should have user selectable and auto scaling features. The scope should be able to plot one channel versus another channel.			
	10.30 Programmable automatic dynamic mode changing to any transducer connected to the machine, which has been selected for control, including load-limited displacement during specimen loading.			
	10.31 Waveform command generation with 32 bit resolution up to 500 Hz for each sensor, with, sine, triangle, square, haversine, havertriangle, haversquare, ramp, dual ramp, trapezoid in relative and absolute modes and support for digital drive data or an analog input of ±10 V.			
	10.32 The controller with necessary software should be able to run static and fatigue tests and data acquisition should have the following features: ✓ Selection of wave form type, timed			

	sample, peak / valley, max / min, level-crossing, cyclic / logarithmic and mean/amplitude with ability to tie data channels to a master signal. Starting quadrant, and number of cycles to stop, action to be taken at the end of the defined test. ✓ Run, hold, continue, and stop buttons for controlling the test. ✓ Online instantaneous adjustment of frequency, amplitude, and mean of the cyclic waveform tests. ✓ Online visual indication of limit settings and status. ✓ Data acquisition and storage of external and internal signals with a user-adjustable sampling rate. The data acquisition mode in the form of maximum and minimum, level crossing, peak valley, continuous and high speed. ✓ The user should be able to switch on / off hydraulics from the controller. The user should start, pause and stop the test program. ✓ An emergency switch-off button should be provided in the load frame, hydraulic power pack and near the controller.			
	10.33 The controller shall comply with the requirements of IS/IEC 61010 – Safety requirements for electrical equipment for measurement, control, and laboratory use.			
11. Application software package	11.1 The software should be able to carry out the waveform profiles such as sine, triangle, haversine, square, ramp, trapezoid, etc., for conducting basic static and fatigue tests.			
	11.2 The software must support the following tests: • Random/block profile playback, • High-cycle and crack growth testing • Resume from power failure, • Custom command logic, • Parallel branching and event-based data logging.			
	11.3 The software packages should have real-time graphic options, formula calculations, and data in the form of ASCII and Excel formats. The software shall be used for generating and executing tests. The software should have the ability to control or capture the data from the internal and external transducers.			
	11.4 Random\field data\profile playback software for playback of field data obtained from components undergoing service conditions/constant amplitude fatigue. The software should be able to read the profile data file created using a spreadsheet or a text editor.			
	11.5 The block loading software should be able to continue the block segment when the test system stops due to a power failure or user-defined test termination, and it should resume from the block segment where it was stopped when the user restarts the test system.			
	11.6 The software should have the capability to change, view, create, edit and create loops in the process variables as per the user commands with ease.			

	11.7	Software test design to support parallel branches for test execution and logical operators (if/then, while).			
	11.8	The software should have a feature to allow data to be collected and stored to disk during any simple or complex testing.			
	11.9	The data acquisition routines shall include time data collection, peak valley, maximum/minimum and level crossing data acquisition and the additional slave channels to be collected simultaneously. All internal conditioned channels can be used as the master or as the slave channel.			
	11.10	The software shall allow the operator to directly interact with the progress of the test through user-defined software buttons.			
	11.11	The user should be able to define customised software buttons with names and descriptions that, when clicked with the mouse, cause the test program to sequence to the next desired test sequence.			
	11.12	The software shall allow the user to set up command segment end levels that are from a different transducer channel than the channel being used for test control. The end level or data limit can be set up to terminate the current segment when the data limit is approached from below, above or either direction. The data limit can also be used to trigger data acquisitions and other definable test system processes. Data limits can be set up to cause the test system to go to any definable state upon detection.			
	11.13	The software shall have an event detector watching for changes in peak-valley readings. The process can be used to trigger data collection or other definable test system processes.			
	11.14	The various display on the computer monitor during testing should be legible, easy to read, including the font size.			
	11.15	During testing, when the power supply stops suddenly and unexpectedly, the test should stop at the stage of the testing without any damage to the test specimen or test setup. The hydraulics should immediately disengage completely without any application of load to the test system.			
	11.16	Further, it should be able to resume the same test from that point onwards, where it had stopped.			
	11.17	Test software to provide standard templates for running tensile tests on rebar specimens.			
	11.18	Software to have a freely configurable run time view (show an unlimited number of variables, meters, charts and tables). Should show the test flow while the test is proceeding, indicate active vs. finished actions.			
	11.19	The system should be usable under local conditions, and must be installed and commissioned with no additional costs.			

12. Computer	12.1 The supply shall have latest hardware and operating system for interfacing with the digital controller.			
	12.2 **Computer specifications:** Processor and speed: Intel Core i9, 12th generation Ram:32GB Hard disk (SSD): 1TB OS: Windows-11 or latest at the time of supply. Monitor: 30-inch LED dual monitor.			
	12.3 For technical reasons, if the supplier wishes to offer a computer system with different specifications, then the same should be justified and detailed specifications of the computer system shall be given. It is the responsibility of the quoting firm to ensure complete compatibility between the testing system, test software and the computer system.			
13. Hydraulic power pack	13.1 **Total flow capacity of the hydraulic power pack** The minimum total flow capacity of the power pack should be 300 litres per minute.			
	Minimum reservoir capacity shall be 1200 litres, and it should be enough to operate continuously for at least 16 hours under the performance stated in Sl. No.4, considering the capacity of cooling unit.			
	Pumps should be able to support 2 or more test systems.			
	13.2 **Operating pressure of the power packs**: 210 bar (3000 psi).			
	13.3 **Rated pressure of the power pack component**: Minimum 280 bar (4000 psi)			
	13.4 **Type of hydraulic pump for power packs:** The pump and motor should be of a submerged pressure-compensated variable-displacement and variable flow type.			
	13.5 **High-pressure and low-pressure oil filtration:** Three-micron high-pressure filter to be provided for system filtration at the outlet of the pump.			
	Ten-micron low-pressure filter shall be provided for system filtration at the inlet of the power pack reservoir			
	13.6 **Accumulators:** High-pressure accumulators of suitable capacity are to be provided at the outlets of the pumps to manage surges in flow demand.			
	13.7 **Sensors to monitor vital parameters:** Suitable sensors to be provided to monitor rate of oil flow, oil pressure, oil temperature, oil level in the tank, filter block condition, cooling water temperature etc.,			
	13.8 **Hydraulic oil:** The first oil fill of the power pack should be filled by the vendor. Mineral-based equivalent to DTE25, servo 46, or Shell Tellus 46 AW (to be supplied), oil required for initial flushing also to be included in the supply.			
	13.9 **Operating features:** Touch screen-based Programmable Logic Controller (PLC) of size 6" or above to be provided with the following			

	features for the operation of the power pack: +			
	Remote and Local control of the power pack The power pack should be provided with an integral front panel PLC control, and it should be operated remotely through the controller of the UTM located in the control room**.**			
	Normal mode operation Power pack has to be started in low-pressure mode and then the system pressure needs to be raised to the nominal operating pressure (3000 psi) smoothly			
	Cooling mode operation When the oil temperature exceeds the prescribed limit due to unforeseen circumstances, it should be possible to operate the cooling pump alone and circulate the oil in the heat exchanger at low pressure to bring down the oil temperature.			
	Flushing mode operation • In flush mode operation, the power pack should circulate the hydraulic oil at low pressure in the hydraulic circuit for flushing. • The PLC operator control panel should indicate the status of the power pack, such as mode of operation, rate of oil flow, oil pressure, oil temperature, oil level in the tank, oil filter condition, safety interlock conditions, etc., • Manual override option has to be provided for the interlocks, for operating the power pack in normal mode for a short duration.			
	13.10 **Safety and interlock features:** The power pack should shut down in the following circumstances • If the oil temperature exceeds, or falls below, the pre-set values • If the oil level in the reservoir tank drops below a minimum level • If the pressure in the system exceeds or falls below the pre-set value • If the motor current or temperature exceeds the pre-set value • Pressure Relief Valve has to be provided as a safety mechanism for preventing the power packs operating at more than the normal operating pressure			
	13.11 Electrical supply available for the operation of the power packs: Three phase 400 V ± 6 %, 50 Hz			
	13.12 **Acoustic attenuation:** The power packs has to be provided with acoustic attenuation to reduce the noise output from the power pack to less than 70 dB at a distance of 1m.			
14. Hydraulic service manifold (HSM)	Independent hydraulic service manifold with on/off low- and high-pressure control shall be provided with the following functions: 14.1 HSM should have smooth, controlled transitions of oil flow to enhance system safety.			
	14.2 HSM should have a provision to minimise the rapid application and removal of high pressure during abnormal operation.			
	14.3 HSM to be provided with rapid dump hydraulic pressure unloading features in the event of any abnormal operation or potentially hazardous conditions			

	14.4 Suitable pressure accumulators to be provided in the pressure and return line to minimise the effect of pressure fluctuations.			
	14.5 Slow pre-filling to 75% of nominal pressure for smooth start-up.			
	14.6 Maximum operating pressure of HSM is 3000 psi.			
	14.7 Ability to set variable low pressure from about 1 to 20 MPa is required.			
	14.8 Hydraulic manifold with on/off low- and high-pressure control; software selectable.			
	14.9 Accumulators of a minimum 4-litre capacity are to be provided for smoothing out pressure fluctuations.			
	14.10 Pressure line and return line filters of the required size are to be provided for removing any contamination in the oil. Filter interlock should be provided.			
15. Flexible hydraulic hoses	15.1 Flexible hoses (pressure, return, and drain/pilot) of required length from the HSM to the hydraulic power pack (to suit the site conditions).			
	15.2 Flexible hoses (pressure, return, drain/pilot) of required length from HSM to load frame (to suit the site condition).			
16. System cables	16.1 System cables of required length (to suit the site condition) from the controller to the UTM.			
	16.2 System cables of required length (to suit the site condition) from the controller to the HSM.			
17. Warranty	17.1 One-year warranty followed by three years AMC. The bid should include three years of AMC after one year of warranty. The AMC charges will be taken for evaluating the bid.			
	17.2 The commercial quote should include the charges for the above.			
18. Installation and commissioning	18.1 The firm should take full responsibility for the supply, installation and commissioning of the equipment. Installation and commissioning should be carried out in CSIR-SERC, and performance of the system should be demonstrated to the satisfaction of the users in CSIR-SERC.			
19. Acceptance test	19.1 Acceptance tests shall be conducted on the supplied equipment in India. The vendor's technical bid will be evaluated based on the performance of these tests. Failure to meet any of the acceptance test criteria will result in outright rejection of the technical bid. CSIR-All the tests mentioned below must be successfully demonstrated by the vendor: 19.2 **Concrete Cylinder Testing (Stress-strain):** Demonstration of compression test on concrete cylindrical specimens mounted with a dual averaging extensometer and circumferential extensometer. The test should be strain-controlled, showcasing its ability to capture the full stress-strain behaviour of concrete cylinders, including post-peak response.			
	19.3 Notched Flexural Beam Testing: Demonstration of flexure test on notched concrete beam using external LVDT and CMOD gauge for control at loading rate of 0.05 mm/min, to evaluate flexural performance and crack propagation characteristics.			

		19.4 Steel Rebar Testing: Demonstration of cyclic strain-controlled tests on steel reinforcement bars (rebars) using extensometer.			
20	**Operation and maintenance training.**	20.1 Installation and Commissioning The system shall be installed and commissioned at CSIR-SERC by the manufacturer, using trained and experienced service engineers.			
		20.2 Training Program Upon successful installation, the manufacturer shall provide a 5-day training program at CSIR-SERC.			
		The training shall cover routine operation and maintenance of the UTM, hydraulic power pack, sub-systems, and cooling system.			
		Training materials shall be supplied by the manufacturer.			
		This training shall focus on the procured software, safety features and include demonstrations using actual test specimens			
		During the warranty period, the vendor shall provide training free of cost, as and when required.			
21	**Maintenance and service support of the equipment during and after the warranty period.**	21.1 The vendor should have a competent and reliable service network in India for quick and necessary repair and maintenance of the equipment. Details of the nature of service support the firm can provide should be given along with the bid. The firm should commit to provide maintenance service and supply necessary spares for the equipment for at least 10 years after successful installation and commissioning.			
		21.2 The details submitted by the vendor regarding service and maintenance support shall be subject to evaluation by CSIR-SERC. If the service support offered is found to be inadequate, the bid will not be considered.			
22	**Software, operating system and related hardware**	22.1 The vendor should agree to give technical and service support to the test software, operating system and related hardware for a minimum period of 10 years from the date of completion of installation and commissioning.			
23	**Technical documents and catalogues**	23.1 The vendor should enclose all the relevant technical documents and catalogues for all the components included in the quotation. Quotations without proper technical documents and catalogues will be rejected.			
24	**Compliance statement**	24.1 Compliance statement, clearly mentioning point-wise compliance, should accompany the main technical offer without fail.			
25	**Operation and maintenance manuals**	25.1 Two sets of operation and maintenance manuals along with all necessary drawings should be supplied along with the testing system.			
		25.2 Backup pen drive for total firmware, background software and the application software packages should be supplied.			

Signature of Bidder

- ✓ The technical and commercial deviations should be indicated separately.
- ✓ If the bidder fails to enclose the compliance statement, his bid is likely to be rejected.

Place:
Date:

Signature and seal of the
Manufacturer/Bidder

ANNEXURE VIII

PRE-INSTALLATION REQUIREMENT

Name of Firm…… File No…….

Sl. No.	Name of Requirement	Supplier Response
1.	Nature of Flooring	
2.	Room Size / Space	
3.	Air-conditioning Yes / No	
4.	Water Yes / No	
5.	Industrial Gases with Purity	
6.	Power Single Phase / Three Phase 230V / 440 V	
7.	Stabilized Power Supply Yes / No If Yes rating	
8.	UPS online / offline, rating, backup	
9.	Drainage / Treatment of Waste	
10.	Protective Garments / Clothing	
11.	Fume Hood / Exhaust for Gases	
12.	Chemicals / Standards	
13.	Distilled Water / Chilled Water	
14.	Any furniture like lab table etc.	
15.	Any other	

ANNEXURE IX

SERVICE SUPPORT DETAIL FORM

Sl. No.	Nature of training imparted	List of similar type of service in the past 3 years	Address, Telephone Nos., Mobile Nos and e-mail address

Signature and Seal of the manufacturer/Bidder…….

Place :

Date :

ANNEXURE X

Bid Form

[The Bidder shall fill in this Form in accordance with the instructions indicated No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: [insert date (as day, month and year) of Bid Submission]

Tender No.: [insert number from Invitation for Bids]

To:

Director, CSIR – SERC, Taramani, Chennai - 600113

We, the undersigned, declare that:

(a)	We have examined and have no reservations to the Bidding Documents, including Addenda No.: *[insert the number and issuing date of each Addenda];*
(b)	We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods and Related Services [insert a brief description of the Goods and Related Services]
(c)	The total price of our Bid, excluding any discounts offered in item (d) below, is: [insert the total bid price in words and figures, indicating the various amounts and the respective currencies]
(d)	The discounts offered and the methodologies for their application are: Discounts. If our bid is accepted, the following discounts shall apply. [Specify in detail each discount offered and the specific item of the Schedule of Requirements to which it applies.]
(e)	Our Non-comprehensive AMC cost is Rs. _____ + GST amount for 1st year. Our Non-comprehensive AMC cost is Rs. _____ + GST amount for 2nd year. Our Non-comprehensive AMC cost is Rs. _____ + GST amount for 3rd year. This amount includes for labour charges only and excludes spare parts.
(f)	Our bid shall be valid for the period of time specified in ITB Clause 1.17.1, from the date fixed for the bid submission due date in accordance with ITB Clause 1.19 and it shall remain binding upon us and may be accepted at any time before the expiration of that period
(g)	If our bid is accepted, we commit to obtain a performance security in accordance with ITB Clause 1.41 and GCC Clause 2.13 for the due performance of the Contract and also submit order acceptance within 14 days from the date of contract in accordance with ITB Clause 1.42 and GCC Clause 2.44;
(h)	The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract: [insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]

Name of Recipient	Address	Reason	Amount
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(If none has been paid or is to be paid, indicate “none.”)

(i)	We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
(j)	We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Signed: [insert signature of person whose name and capacity are shown]

In the capacity of [insert legal capacity of person signing the Bid Submission Form]

Name: [insert complete name of person signing the Bid Submission Form]

Duly authorized to sign the bid for and on behalf of: [insert complete name of Bidder]

Dated on _____ day of _____, _____ [insert date of signing]

ANNEXURE XI

PERFORMANCE SECURITY FORM

MODEL BANK GUARANTEE FORMAT FOR PERFORMANCE SECURITY

To,

……..

WHEREAS ……. (name and address of the supplier) (hereinafter called "the supplier") has undertaken, in pursuance of contract No. ……. dated …….to supply (description of goods and services) (herein after called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of …… (amount of the guarantee in words and figures), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the …….. day of ……, 20……..

(Signature of the authorized officer of the Bank)

…….
Name and designation of the officer

…….
Seal, Name & Address of the Issuing Branch of the Bank

Note: Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Speed Post . An unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

ANNEXURE XII

ACCEPTANCE CERTIFICATE FORM

No._____ Dated: _____

M/s. _____
_____
_____

Sub: Certificate of commissioning of equipment / software

---

01. This is to certify that the equipment / software as detailed below has/have been received in good condition along with all the standard and special accessories / latest updates (subject to remarks in Para 2). The same has been installed and commissioned / activated.

(a) Contract No. _____ Date_____

(b) Description of the equipment_____

(c) Name of the consignee_____

(d) Scheduled date of delivery of the consignment to the Lab./Instts._____

(e) Actual date of receipt of consignment by the Lab./Instts._____

(f) Scheduled date for completion of installation/commissioning / activation _____

(g) Training Starting Date _____

(h) Training Completion Date _____

(i) Names of People Trained _____

(j) Actual date of completion of installation/commissioning / activation_____

(k) Penalty for late delivery (at Lab./Instts. level) Rs. _____

(l) Penalty for late installation (at Lab./Instts. level Rs. _____

Details of accessories/items not yet supplied and recoveries to be made on that account:

Sl. No.	Description	Amount to be recovered

02. The acceptance test has been done to our entire satisfaction. The supplier has fulfilled his contractual obligations satisfactorily

Or

The supplier has failed to fulfil his contractual obligations with regard to the following:

(a) ……

(b) …….

(c) ……

(d) ……..

The amount of recovery on account of failure of the supplier to meet his contractual obligations is as indicated at Sr. No. 1.

For Supplier	For Purchaser
Signature ……..	Signature……..
Name ……..	Name……...
Designation ……..	Designation…….
Name of the firm…….	Name of the Lab/Instt……..
Date ……	Date…….

ANNEXURE – XIII

Tender No.:

Certificate of Local Content

*Tender No.*_____ Date: _____

I_____S/o, D/o, W/o_____,
Resident of_____do herebysolemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the policy of Government of India issued vide Notification – Public procurement (preference to Make in India) Order 2017 dt 16th September 2020 & 19th July 2024.

That the information furnished hereinafter is correct to be of my knowledge and belief and I undertake to produce relevant records before the procuring entity or any authority so nominated for the purpose of assessing the local content.

That the local content for all inputs which constitute the said R&D equipment as per the enclosed list has been verified by me and I am responsible for the correctness of the claims made therein.

That in the event of the domestic value addition of the product mentioned herein is found to be incorrect and not meeting the prescribed value-addition norms, based on the assessment ofan authority so nominated for the purpose of assessing the local content, action will be taken against me as per Order No. P-45021/2/2017/-PP (BE-II) dated 16.09.2020.

I agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority: (Kindly fill up the below mentioned particulars)

i. Name and details of the Domestic Manufacturer (Registered Office, Manufacturing Unit location, nature of legal entity)

ii. Date on which this certificate is issued

iii. R &D consumable for which the certificate is produced

iv. Procuring entity to whom the certificate is furnished – CSIR – SERC

v. Details of domestic value addition in terms of Minimum Local content

1.
2.
3.

vi. Details of Location where the Local Value additions are added/done

1
2
3

vii. Name and contact details of the unit of the manufacturer

VII. Percentage of Local Content: %

Sale Price of the product, Ex-Factory Price of the product, Freight, insurance and handling, Total Bill of Material, List and total cost value of inputs used for manufacture of the R &D equipment, List and total cost of inputs which are domestically sourced, value addition certificates from suppliers, if the input is not in-house to be attached, List and cost of inputs which are imported, directly or indirectly which go into calculation of Local content and like records shall be produced in case of any verification. (Note: The "Class of Supplier (Class-I / Class-II)", Local Content %, Details of Domestic value addition in terms of Minimum Local Content and Details of Location where the Local value additions are added / done etc., should be provided by the bidder).

Note:

1. The bidder offering imported products will fall under the category of Non-Local Suppliers and they can't claim themselves as Class-I Local Supplier /Class –II Local Supplier by Claiming Profit, Warehousing, Marketing, Logistics, Freight etc. as Local value addition.

2. False declaration will be in breach of the Code of integrity under Rule 175(1)(1)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to Two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

3. A bidder/supplier who has been debarred by any Procuring Entity for violation of this shall not be eligible for preference for procurement by any other Procuring Entity for the duration of the debarment as per the DPIIT Order dt. 16th September 2020.

(Name & Signature of Authorized Signatory)
To be duly authorized by the Board of Director

(The Class-I Local Supplier & Class-II Local Suppliers are required to provide the "Local Content Certificate" from a Statutory Auditor (or) Cost Auditor of the company (in case of company) or from a practicing Cost Accountant (or) practicing Charted Accountant in respect of suppliers other than companies)

ANNEXURE –XIV

Format of Integrity Pact

INTEGRITY PACT

Between
Council of Scientific & Industrial Research (CSIR) a Society registered under the Indian Societies Act 1860 represented by _____ hereinafter referred to as "The Principal".

And ……herein referred to as "The Bidder/ Contractor."

Preamble
The Principal intends to award, under laid down organizational procedures, contract/s for ……The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s) and/or Contractor(s).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

(a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

(b) The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

(c) The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary action.

Section 2 – Commitments of the Bidder(s)/Contractor(s)

(1) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

(a) The Bidder(s)/Contractor(s) will not, directly or through any other Person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

(b) The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, Certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

(c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

(d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)//Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is annexed and marked as Annexure.

(e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

(2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future Contracts

(1) If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". Copy of the "Guidelines on Banning of business dealings" is annexed and marked as Annex -"B".

Section 4 – Compensation for Damages

(1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.

(2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 – Previous transgression

(1) The Bidder declares that no previous transgressions occurred in the last 3 Years with any other Company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings."

Section 6 – Equal treatment of all Bidders / Contractors/ Sub-contractors

(1) The Bidder(s)/Contractor(s) undertake(s) to demand from all Subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.

(2) The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.

(3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidders / Contractors/ Subcontractors

(1) If the Principal obtains knowledge of conduct of a bidder, Contractor or Subcontractor or of an employee or a representative or an associate of a bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 - Independent External Monitors

(1) The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the JS (A), CSIR.

(3) The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Subcontractor(s) with confidentiality.

(4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

(5) As soon as the Monitor notice, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

(6) The Monitor will submit a written report to the JS(A), CSIR within 8 to 10 weeks from the date of reference or intimation to him by the Principal and should the occasion arise, submit proposals for correcting problematic situations.

(7) Monitor shall be entitled to compensation on the same terms as being extended to/provided to Independent Directors on the CSIR.

(8) If the Monitor has reported to the JS(A), CSIR, a substantiated suspicion of an offence under relevant IPC/PC Act, and the JS(A), CSIR has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

(9) The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

This Pact begins when both parties have legally singed it. It expires for the Contractor 10 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/determined by JS(A), CSIR.

Section 10 – Other provisions

(1) This agreement is subject to Indian Law. Place of performance and Jurisdiction is the Registered Office of the Principal, i.e. New Delhi

(2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

(3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

(4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

_____	_____
(For & On behalf of the Principal)	(For & On behalf of Bidder/Contractor)
(Office Seal)	(Office Seal)
Place……	Place……
Date……..	Date……..

Witness 1:(Name & Address): _____

Witness 2::(Name & Address): _____

ANNEXURE - XV

Certificate with regard to the bidder not having a land border with India

(Ref.- Govt. of India, Ministry of Finance, Dept. of Expenditure Order No. F.No.6/18/2019-PPD dated 23.07.2020 {Public Procurement No.1} and subsequent orders on the subject)

Tender No: _____ Date _____

To,
The Director,
CSIR-SERC
CSIR Road, Taramani
Chennai - 600113

Sir,

I hereby certify that, Bidder M/s._____ or OEM M/s. _____ do not share any land border as per Govt. of India, Ministry of Finance, Dept. of Expenditure Order No. F.No.6/18/2019-PPD dated 23.07.2020 {Public Procurement No.1} and subsequent orders on the subject.

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that bidder M/s. _____ or OEM M/s. _____ is not from such a country.

For and on behalf of **(Name of firm/entity)**
Authorized signatory (To be duly authorized by the Board of Director)

ANNEXURE -XVI

Certificate with regard to the bidder having a land border with India

(Ref.- Govt. of India, Ministry of Finance, Dept. of Expenditure Order No. F.No.6/18/2019-PPD dated 23.07.2020 {Public Procurement No.1} and subsequent orders on the subject)

Tender No: _____ Date _____

To,
The Director,
CSIR-SERC
CSIR Road, Taramani
Chennai - 600113

Sir,

I hereby certify that, Bidder M/s. _____ or OEM M/s. _____ share a land border as per Govt. of India, Ministry of Finance, Dept. of Expenditure Order No. F.No.6/18/2019-PPD dated 23.07.2020 {Public Procurement No.1} and subsequent orders on the subject.

I / We, have registration with the competent authority [Evidence of valid registration by the Competent Authority should be attached.]. Accordingly, I / we fulfills all requirements in this regard and is eligible to be considered.

For and on behalf of (Name of firm/entity)
Authorized signatory (To be duly authorized by the Board of Director)

ANNEXURE -XVII

Undertaking for Technical Demonstration

Tender No: _____ Date _____

To,
The Director,
CSIR-SERC
CSIR Road, Taramani
Chennai - 600113

Sir,

I hereby certify that and agree that I will show a demonstration of the product quoted during the technical evaluation for getting qualified technically.

Acceptance Tests to be carried out:

Concrete Cylinder Testing (Stress-strain):

Demonstration of compression test on concrete cylindrical specimens mounted with a dual averaging extensometer and circumferential extensometer. The test should be strain-controlled, showcasing its ability to capture the full stress-strain behaviour of concrete cylinders, including post-peak response.

Notched Flexural Beam Testing:

Demonstration of flexure test on notched concrete beam using external LVDT and CMOD gauge for control at loading rate of 0.05 mm/min, to evaluate flexural performance and crack propagation characteristics.

Steel Rebar Testing:

Demonstration of cyclic strain-controlled tests on steel reinforcement bars (rebars) using extensometer.

In case of failure to show the demo of my product, my bid can be rejected.

For and on behalf of (Name of firm/entity)
Authorized signatory (To be duly authorized by the Board of Director)

ANNEXURE XVIII

ISO 9001 Organization
सी.एस.आई.आर-संरचनात्मकअभियांत्रिकीअनुसंधानकेन्द्र
CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE
(वैज्ञानिकतथाऔद्योगिकअनुसंधानपरिषद Council of Scientific and Industrial Research)
सी.एस.आई.आरपरिसरCSIR CAMPUS, तरमणिTARAMANI, चेन्नैCHENNAI - 600 113. भारतINDIA
दूरभाषTel: 044-22549108/09, 22541238 फैक्सFax: 044-22542211 ई-मैलE-mail: puroff@serc.res.in

Electronic Fund Transfer Account Details CSIR-SERC, Chennai

01.	Name of the Account Holder	Director CSIR SERC
02.	Address	CSIR Road, CSIR Campus, Taramani, Chennai – 600 113
03.	E-Mail address	finoff@serc.res.in
04.	Phone Number/Mobile Number	044-22549105/06/07
05.	(1) Permanent Account Number (PAN)	AAATC2716R
	(2) GSTIN	33AAATC2716R3ZK
06.	Particulars of Bank Account	
	(i) Name of the Bank	State Bank of India
	(ii) Name of the Branch	Taramani Branch
	(iii) Branch Code	010673
	(iv) Address	State Bank of India, CSIR Campus, Taramani Branch,Chennai 600 113.
	(v) S B I Telephone Number	044 - 2254 4519 / 2254 1848
	(vi) Account Number	30225927924
	(vii) Type of Account	Saving Bank Account
	(viii) IFSC Code (RTGS/NEFT)	SBIN0010673
	(ix) MICR Code	600002130

ANNEXURE- XIX

Terms & Conditions		
Sl. No.	**Description**	**Values**
1.	Approximate weight of the Consignment	
2.	Approximate dimensions of the consignment	
3.	Order to be placed [Full Name, Full address, Tel #, Fax #, Email Id, Contact Person]	
4.	HSN No./ SAC no.	
5.	Country of Origin	
6.	Delivery Term [FOR]	CSIR – Structural Engineering Research Centre, CSIR Campus, Taramani, Chennai – 600 113 (Tamil Nadu) INDIA
7.	Delivery of the Item as per Chapter-4 /BoQ [In weeks / Days / Months] from the date of PO [Mention the appropriate term]	
8.	Installation & Commissioning from the date of delivery of item	
9.	Training from the date of Installation & Commissioning of item	
10.	Statutory Levies [GST/IGST or any other taxes, duties] % of tax to be mentioned	
11.	Bidder GST No.	
12.	Warranty :	
13.	Other Terms & Conditions if any	
14.	Payment Terms:	
15.	Bid validity period:	

ANNEXURE - XX

TENDER ACCEPTANCE LETTER

)To be given on Company Letter Head(

Date:

To,
The Director,
CSIR-SERC, Chennai – 600113

Sub: Acceptance of Terms & Conditions of Tender

Tender Reference No: _____
Name of Tender/Work: _____
Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:
   _____
   _____
   _____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. _____ to _____ (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 your department/ organization too has 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/banned/suspended by any CSIR Labs or its constituent units/Govt. Department/Public sector undertaking.

6. I / We do hereby declare that our Firm has is not a consortium.

7. I / We do hereby declare that the quoted prices are the minimum and we have not quoted the same item on lesser rates than those being offered to CSIR-SERC to any other customer nor they will do so till the validity of offer or execution of the purchase order, whichever is later.

8. I / We do hereby declare that as per the Order No. P45021/2/2017-PP(BE-II) dated: 16thSep 2020 issued by DPIIT, Ministry of Commerce and Industries, Govt. of India and subsequent amendments issued thereon from time to time. We are _____ (Class–I or Class – II) and the Local Content _____(%).

9. Goods and/or services quoted by us are manufactured within India (or) we fulfill the conditions for eligibility criteria as applicable for Land Border Share and has provided certificate as per appropriate Annexure [Strike out which is not applicable] as per Order No. F.No.6/18/2019-PPD dated23.07.2020 [Public Procurement No.1] and subsequent orders on the subject issued by Department of Expenditure, Ministry of India, Govt. of India.

10. I / We do hereby declare that the we will submit the necessary Performance Security Form in the event of award of Contract/PO to our firm.

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

Yours faithfully,
)Signature of the Bidder, with Official Seal(

ANNEXURE - XXI

(On the Letter Head of the Bidder)

We, M/s. _____ authorized representative of M/s._____ are not black listed/debarred bidder with any of the Government/ Autonomous Institutions in the last one (1) year.

)Signature of the Bidder, with Official Seal(

Annexure – XXII

BANK DETAILS OF BIDDER / SUPPLIER

1	खाताधारककानाम/ Name of account holder	
2	पता /Address	
3	ईमेलपता / e-mail address	
4	दूरभाषसंख्या/मोबाईलनंबर /Phone No./Mobile No.	
5	फेक्ससंख्या / Fax No.	
6	स्थायीखातानंबर /PAN No	
7	बैंकखताकाविवरण /Particulars of Bank Account	
	(क)बैंककानाम / A. Name of the Bank	
	(ख).शाखाकानाम / B. Name of the Branch	
	(ग).शाखाकोडनंबर / C. Branch Code	
	(घ). पता /D. Address:	
	(च). दूरभाषसंख्या / E. Telephone No.	
	(छ). खातासंख्या /F. Account No.	
	(ज). प्रकार /G. Type of Account	
	(झ). आईऍफ़एससीकोड (आर.टी.जी.एस/ऍन.इ.ऍफ़.टी) H. IFSC Code) RTGS / NEFT(	
	IBAN No. & Swift Code (if any)	
	(ट). एम.आई.सी.आर. कोड /I. MICR code	

We/ I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or lost because of incomplete or incorrect information, I/ we would not hold SERC responsible.

Signature of the Account holder

बैंकप्रमाणपत्र

यहसत्यापितकियाजाताहैकिमेसर्स_____ काखातासंख्या_____
हमारेबैंक/शाखामैंहैंऔरऊपरदिएगएविवरणहमारेअभिलेखन/रिकार्डकेअनुसारसत्यहै.
दिनांक: / /
स्थान: प्राधिकृतअधिकारीकाहस्ताक्षरएवम्बैंककामुहर

Bank Certificate

It is certified that M/S _____ has an Account No _____ with our Bank and it is confirmed that the details given above are correct as per our record.

Date: / /
Place:

_____
Signature of the Author - Official

Signature Not Verified
Digitally signed by KANNAPPAN SENDIVADIVELU
Date: 2025.10.17 11:40:26 IST
Location: eProcurement System for Central PSUs