Tender No.: AIESL/MMD/EOD/RD07/54/25 **DATE: 28.05.2025**

COVERING LETTER

Subject: **Tender for Calibration of various instruments and equipment's installed at Electronics Overhaul Division (EOD), Hanger 3, 5th Floor, Old Airport Premises, Kalina, Santacruz East, Mumbai, Maharashtra-400029.**

a) AI Engineering Services Limited (AIESL), Old Airport, Santacruz (E) invites on line bids through GeM portal from authorized firms/contractors for Calibration of various instruments and equipment's installed at Electronics Overhaul Division (EOD), Hanger 3, 5th Floor, Old Airport Premises, Kalina, Santacruz East, Mumbai, Maharashtra-400029.

b) **Description:** Tender for Calibration of various instruments and equipment's installed at Electronics Overhaul Division (EOD), Hanger 3, 5th Floor, Old Airport Premises, Kalina, Santacruz East, Mumbai, Maharashtra-400029.

c) **Total approximate Value of the contract:** INR 1.71 Lakhs (All inclusive).

d) **Job/Work Location:**

Electronics Overhaul Division (EOD), Hanger 3, 5th Floor, Old Airport Premises (OAP), Kalina, Santacruz East, Mumbai, Maharashtra-400029.

e) **Earnest Money Deposit:** Not Applicable

❖ DISCLAIMER

- ✓ The information contained in this tender document or / and any information pertaining to the aforesaid subject matter provided subsequently to the applicants / bidders in any form by AIESL, shall be subject to the terms and conditions to which such information is provided contained herein and any other terms and conditions as may be prescribed by AIESL, prior to award of the Tender.

- ✓ The purpose of this tender document is to provide all bidders with the information that may be useful to them in the formulation of their proposals / bids in response to this tender document. The statements and facts contained herein, which reflect various assumptions and assessments arrived at by AIESL, do not purport to contain all / exhaustive information on the aforesaid subject matter that each applicant may require for the purposes of submitting their bids.

- ✓ The assumptions, assessments, statements and information contained in this tender document may not be complete, accurate, adequate or correct. Each bidder should, therefore, conduct its own due diligence, investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, and information contained in this tender document and shall obtain independent advice from appropriate sources at no cost to AIESL.

- ✓ The information provided in this tender document to the applicants is on a wide range of matters, some of which depend upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law.

- ✓ AIESL accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.

- ✓ AIESL also accepts no liability of any nature whether resulting from negligence or otherwise however caused arising from reliance by any applicant / bidder upon the statements contained in this tender document.

- ✓ AIESL may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this tender document, from time to time till close date of tender.

- ✓ The tender document does not imply that AIESL is bound to select a bidder or to appoint the selected bidder, as the case may be, and AIESL, reserves the right to reject all or any of the proposals without assigning any reason whatsoever at any time. The bidder shall bear any and all its costs associated with or relating to the preparation & submission of its proposal / bids including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by AIESL or any other costs incurred in connection with or relating to its proposals. All such costs and expenses shall remain with the bidder and AIESL shall not be liable in any manner whatsoever for the same or any other costs or other expenses incurred by the bidder in preparation for submission of the proposal, regardless of the conduct or outcome of the bid selection process as contained herein.

❖ General Terms and Conditions

✓ 'AIESL' as used in the Tender document means 'AI Engineering Services Limited'.

✓ "Contract" means the agreement entered into between the Purchase and the Contractor, as recorded in the contract form signed by the parties including all annexure thereto and appendices therein.

✓ "Tenderer" or Seller" or "Bidder" means as used in the Tender document, is one who has submitted the quotation in response to our tender document. It also means the individual or firm or company, who are manufacturers and suppliers, on whom the order for work is placed and shall be deemed to include their approved successors, heirs, executors and administrators, holding company/Group/Group Companies, Conglomerate as the case may be.

✓ It is further clarified that any individual signing the tender or other documents in connection with the tender must certify whether he signs as:

i) A "Sole Proprietor" of the firm or constituted attorney of such sole proprietor.
ii) A partner of the firm if it is a partnership must have authority to refer to arbitration and disputes concerning the business of the partnership either by virtue of the partnership agreement or a power of attorney. In the alternative, the tender should be signed by all the Partners.
iii) Constituted attorney of the firm, if it is a Company.
iv) Authorized signatory of the firm.

✓ **ONE BID PER BIDDER:**

A Bidder shall submit only 'one [01] Bid' in the same Bidding Process either as single entity. A Bidder who submits or participates in more than 'one [01] Bid' will cause all the proposals in which the Bidder has participated to be disqualified.

✓ A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices. The bidder found to have a conflict of interest shall be disqualified. A bidder shall be considered to have a conflict of interest with one or more bidders in this bidding process, if:

a) they have controlling partner (s) in common; or
b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or

c) they have the same legal representative/authorized signatory/agent for purposes of this bid; or
d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or

e) Bidder participates in more than one bid in bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from one bidding manufacturer in more than one bid.
f) a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid;
g) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business. Bidders are required to submit a confirmation for no conflict of interest with other bidders. Failure to comply this clause during tendering process will disqualify all such bidders from process of evaluation of bids.

- ✓ Alternative Bids shall not be considered.

- ✓ Bidders are required to provide complete details of all Directors/Partners/Proprietors etc. including Father's name, Residential address, AADHAR, PAN Card details. & DIN Nos. and corresponding documents.

  In case of Partnership / LLP: Bidder must submit copy of Partnership /LLP Deed.

  In case of Public / Limited Company: Bidder must submit copy of Share Holding details of all shareholders.

- ✓ It is the responsibility of the participating Bidder(s) to assess the relationship as mentioned above. In case any undertaking/declaration given by a Bidder(s) in this regard is found to be false, this would be a sufficient ground for rejection of Bid(s) /termination of contract and also initiation of further action as per Corrupt/Fraudulent/ Collusive / Coercive Practice.

❖ Standard Terms & Conditions:

- ✓ AIESL reserves the right to close the tender / reject any / all offers at any stage of tender at its sole discretion.

- ✓ AIESL reserves the right not to consider the bid of any Bidder, blacklist the Bidder for 3 (three) years, if it is determined / noticed at any stage during the tendering process or after release of Contract that the said Bidder has directly or indirectly engaged in any misrepresentation, corrupt, fraudulent, collusive, coercive practice in order to bid / obtain the Contract. This will also have an impact on other Contracts / POs, the Bidder may have with AIESL where AIESL reserves the right to take appropriate action as deemed fit.

- ✓ AIESL reserves the right to reject / not consider at its sole discretion the bids of such bidders who have been involved in any litigation with AIESL in the last 3 years and / or are at present involved in any ongoing litigation or arbitration proceedings against AIESL. Further, those bidders who have records of poor performance during the last 3 (three) years, as on the date of submission of the bid, such as abandoning the work, rescinding of the contract for which the reasons are attributable to the non-performance of the Bidder or its constituents, inordinate delays in completion and/or have a consistent history of litigation / arbitration awarded against the Bidder or any of its constituents or financial failure due to bankruptcy etc. are liable to be disqualified.

- ✓ AIESL reserves the right to reject / not consider at its sole discretion the bids of such bidders have been blacklisted / debarred by any PSU, government bodies in India.

- ✓ Bidders are required to declare if they have any ongoing legal disputes with any government agencies such as Income Tax, EOW etc. Suppression / Misrepresentation of such facts whenever it comes to light would invite disqualification and AIESL reserves the right to take appropriate action as deemed fit including discontinuing business dealings with the party.

❖ **SPECIAL CONDITIONS:**

- ✓ The location of work is Hangar/Apron areas, at Old Airport. The area is highly security sensitive and contractor will be required to obtain entry pass from our Security dept.

- ✓ A qualified and responsible supervisor will always remain present at site, when the work is being carried out. He will ensure compliance of standard safety precautions and use of safety equipment.

- ✓Equipment which are in fit to use and serviceable condition only shall be provided to AIESL. It will be the contractor's soul responsibility to attend break down of equipment, if any, during the operation.

- ✓Safety of the contractor's personnel / equipment shall be responsibility of the contractor.

❖ **TENDER PROCEDURE**

- ✓ This tender is strictly a **Two Bid Tender** i.e. Technical Bid and Price Bid. **Both the bids are to be submitted through GeM portal. No other mode of submission will be acceptable.**

- ✓ The close / due date for submission of bids may be extended at any time, including after the scheduled date of closing, at the sole discretion of AIESL.

- ✓ Amendments or extension of the close / due date, if any, to this tender will be informed via GeM portal.

- ✓ In their own interest, bidders are advised to submit bids, well before the close date / time of tender in order to avoid any last moment glitches. AIESL may not entertain any request for extension of close date and time and reserves the right to accept or reject any such request at its sole discretion.

- ✓ The bidder or their authorized representatives (maximum two) would only be permitted to attend the pre-bid meeting, if any.

❖ **For any clarification, please contact the following official**.

For Technical Query:

Mr. Nitin Revandkar, Dy. GM EOD, Email: revandkar.nitin@aiesl.in,
Mr. Sanjeev Kandalkar, Email: Sanjeev.kandalkar@aiesl.in ; Mobile: 9869778836

For Commercial Query:

Mr. Arghyadeep Bhattacharjee, Executive-MM, Email: arghyadeep.b@aiesl.in, Mobile: 7278757581

❖ **Submission of BIDS:**

Technical Bid:

- ✓ Bidders are advised to study carefully the Terms & Conditions as given in this tender document and submit their **technical bid** accordingly.
- ✓ Bidders are required to download all the documents. Wherever applicable the documents are to be duly filled-in with the required details. The filled-in documents along with supporting documents, if any, need to be uploaded on **GeM portal** for technical evaluation purpose. **Uploading of required Documents is mandatory. The documents should not mention any rates / prices. else bidder will be disqualified during technical evaluation.**
- ✓ Bidders are **required to give their acceptance of the terms and conditions as per Documents.** Any deviation from the terms and conditions must be clearly spelt out in the Technical Bid.
- ✓ Any other deviation in the specifications or tender's terms and conditions must be communicated to the concerned buyer / user for acceptance of the same, prior to submission of the bid depending on the merit of the case. AIESL reserves the right to accept or reject the deviation. In case, the deviation is accepted, the tender document will be amended accordingly. The bidder should submit their bid in line with the tender document only or else the same would be liable for rejection.
- ✓ AIESL reserves the right to change this date of opening at its own discretion.
- ✓ **All the supporting documents, as specified in the tender documents that are required** for compliance of bid must be submitted with the technical bid.
- ✓ AIESL reserves the right to call for the original copies of the attached / submitted documents in the technical bid for verification purpose during the evaluation stage. The Technical Bids would be evaluated for compliance in accordance with the tender document. The User Department of AIESL reserves the right at its sole discretion to seek clarification for shortcomings in information/documents from the bidders as deemed necessary for the purpose of evaluation of the bids.

❖ **Price Bid:**

- ✓ Bidders are required to **quote for the entire tendered quantity**.
- ✓ AIESL will not accept inclusion of any additional costs, if requested for, after closing of the tender.
- ✓ Submission of incorrect or incomplete information or with arithmetical errors in compilation of the data would be at the bidder's sole risk. The decision of AIESL in such cases would be final and binding.

❖ **Validity of Quotation, Prices, Govt. Taxes / GST**

- ✓ The price offered / agreed should remain firm till completion of the contract.
- ✓ No request for increase in price shall be entertained during this period except on account of increase in GST or any other Government levy, if imposed by the Govt. of India. Proof of payment for such increase is to be submitted to AIESL by the successful Bidder.
- ✓ The Bidders should commit to pass on the benefit to AIESL of reduction in statutory taxes, etc. by the Government, during the period of validity of the Contract.

- ✓ During the contract period, if for any reason there is a downward revision in prices, the successful bidder will be responsible for passing on the benefits to AIESL.

- ✓ Increase in Govt. Taxes / GST etc. or any new levies, if imposed by the Govt. of India / State Govt. / Local Bodies, during the contract period will be borne by AIESL, if requested for, by the Successful Bidder/s. However, such request will be considered only if it is substantiated with copies of valid documentary proof of the same and **only if the bidder/s has quoted their rate giving the break-up of Govt. Taxes / GST in their price bid.**

❖ **AMENDMENTS / EXTENSIONS:**

- ✓ AIESL reserves the right to, amend any part / terms and conditions of the tender / extend the due date at its sole discretion.

- ✓ Amendments and clarifications, if any, to this tender will be hosted on the GeM Portal & NIT will be published on website of AI ENGINEERING SERVICES LIMITED. AIESL will not intimate the tenderers individually of the same. The tenderers are, therefore, advised to visit GeM portal / AIESL website regularly till the date of closing of the tender. The last amendment, if any, will be hosted a minimum of seven days before the closing date of the tender.

- ✓ Amendments, corrigendum, if any, and any extensions of the due date of opening of the Bids, as per the requirements of AIESL, will be uploaded in GeM.

❖ **REJECTION OF BIDS**: The submitted Bid will be rejected on the following grounds:

- ✓ Tenders received without required information and relevant documents as per the eligibility criteria, are liable to be rejected. However, AIESL reserves the right at its sole discretion to seek whatever information, documents etc. from the bidders as it may consider necessary for the purpose of the technical evaluation.

- ✓ In case of any variation, in the documents / data declaration submitted by the Bidder in support of the Technical Bid with the original documents, the Bids of such Bidder would be out-rightly rejected and would be disqualified during Technical Bid evaluation of Tender.

- ✓ Conditional Bids are liable for rejection. Decision of AIESL in such case shall be final and binding.

❖ **Benefits / Preference for Micro & Small Enterprises (MSEs)/MII's:** As per GeM policies.

❖ **Earnest Money Deposit (EMD)/Bid Security:** Not Applicable.

❖ **Security Deposit / Performance Bank Guarantee:**

- ✓ The Bidder/s who qualifies for award of Contract will have to deposit with AIESL 5 % (Five percent) of the total value of the Contract, as Security Deposit (SD) within 5 days of notification of notification of acceptance of bid and communication of contract. This SD will be free of interest. In case, the SD is not deposited in time, the bills shall not be processed for payment till the SD is paid.

- ✓ The Applicable Security Deposit / Performance Bank Guarantee must be submitted by means of Cheque/DD/NEFT in favour of AI ENGINEERING SERVICES LIMITED, Account No. – 00600310007523, IFSC Code – HDFC 0000060), payable at MUMBAI.

- ✓ The SD is applicable to all bidders including MSME's.

- ✓ In case of submission of Security Deposit/Performance guarantee is to be paid by way of Account Payee Demand Draft, banker's Cheque, ECS, Bank Guarantee issued from any Commercial Bank, Fixed Deposit Receipt from any Commercial Bank for an equivalent amount in favour of AI Engineering Services Limited and payable at Mumbai.

- ✓ It may please be noted that the original BG has to be forwarded by the Bank directly to AIESL through registered AD as per the detailed procedure which will be advised to the successful bidder. The expenses incurred towards submission of Security Deposit / Bank Guarantee will have to be borne by the successful bidder/s.

- ✓ In case of breach of Contract or violation of any terms of the Contract the Security Deposit shall be forfeited / bank guarantee be invoked.

- ✓ The Security Deposit / Bank Guarantee will be refunded / returned without interest within 60 days of successful completion of services against the Contract after adjusting for penalties, if any, that may be imposed under the terms of the Contract.

- ✓ Validity of the BG would be for an additional period of 60 days after the scheduled completion of all obligations under the Contract.

❖ **EVALUATION CRITERIA:**

✓ **Technical Bids**:

✓ The Technical Bids would be first evaluated for compliance. AIESL reserves the right at its sole discretion to seek whatever information, documents etc. from the bidder as it may consider necessary for the purpose of evaluation of the bids.

✓ **Price Bids:**

✓ The Price Bids of only those bidders who qualify as per the requirements of Technical Bid would be opened.

❖ **Inspection Clause:**

✓ Inspection of bidders' facilities at the time of evaluation of the Technical Bids: AIESL reserves the right to inspect at its cost the production facility / facilities of the bidders in order to assess their infrastructure and capability to produce and deliver in accordance with the work schedule as indicated in this tender. The decision of AIESL in such case shall be final and binding.

✓ Inspection of the facility of the bidder who has been awarded the Contract / Purchase Order: AIESL further reserves the right to inspect the work location/office facility of the bidder, who has been awarded the Contract / Purchase Order, in order to confirm consistency of quality of the items as produced for AIESL.

❖ **Other Terms & Conditions:**

✓ **Force Majeure:**

✓ The Bidder / Successful Bidder /AIESL (herein referred to as Party / Parties) shall not be liable for, nor be in default by reason of any failure or delay in discharge of its obligations under this Tender / Contract, where such failure or delay is caused by any act, including but not limited to any act of God, action or inaction of government authorities, fire, flood, gales, storm, lightning, earthquake, explosions or other catastrophes, accidents, weather, power failure or shortage of power, riot, war (declared or undeclared), warlike operations, act of terrorism, boycott, embargo, rebellions, sabotage, epidemics, quarantines, lock out, restrictions on travel based on travel advisories of any governmental entity, unavailability of the usual means of transportation, hostilities, revolution, civil commotion or public disorder or any other cause beyond its control.

✓ The Party encountering and affected by such causes and event shall inform the other in writing immediately of such an occurrence event and shall use its best reasonable efforts to minimize the economic and other effects and rectify as soon as possible any harm or delay created thereby shall reasonably allocate its available resources, giving priority to their obligations under this Contract.

✓ For the avoidance of any doubt, it is clarified that, payment obligations of AIESL shall be excused due to an event of Force Majeure.

✓ **Interpretation:** In the event of any difference in the interpretation of any of the clauses of the Contract / Purchase Order / Agreement and / or the Tender documents, the clarification given by General Manager (SS), AIESL shall be final and binding.

✓ **Arbitration:** Any dispute arising between the parties in respect of the construction, interpretation, application, meaning, scope, operation or effect of this document or the validity or breach thereof, shall

first be resolved amicably by mutual consultation. If an amicable settlement is not forthcoming and dispute is not resolved within 21(Twenty-One) days, from the date when mutual consultation started, recourse may be taken to settlement of disputes through arbitration as per the Arbitration and Conciliation Act 1996, and the award made in pursuance thereof shall be binding on the parties.

❖ **JURISDICTION:** -The court of Mumbai only will have jurisdiction to deal with and decide upon any legal dispute what so ever arising out of this tender.

❖ **Quality inspection and Rejection after release of contract / Purchase Order:**

QUALITY ASSURANCE – Wherever applicable, successful bidder/s should ensure that Quality of the work/job is as per specifications. Not meeting the specification / parameter / quality and or deficient in any other respect would cause rejection at the time of inspection and material will be returned to the vendor at their cost.

Date: **Bidder Signature:**
Place: **Name &Designation:**
Company Name &Seal:

AI ENGINEERING SERVICES LIMITED

MATERIALS MANAGEMENT DIVISION
OLD AIRPORT, SANTACRUZ (EAST), MUMBAI – 400 029

Tender No.: AIESL/MMD/EOD/RD07/54/25 **DATE: 28.05.2025**

PRE-QUALIFICATION CRITERIA - COMPLIANCE STATEMENT

Bidders who fulfil the following eligibility criteria, requirements, and submit documentary proof thereof along with the Technical Bid, will only be eligible for evaluation of the technical bids. Bidders are required to indicate the compliance status for each of eligibility criteria by stating Yes or No. The documentary evidences as required be attached with this Annexure duly page numbered in sequence of the criteria. "NO" to any one of the criteria will result in disqualification of the bid as these are mandatory eligibility criteria.

Sr. No.	Eligibility Criteria	Compliance (Yes / No)	Remarks
1	Whether Bidder is a Proprietorship/Partnership Firm, LLP Etc./Company registered in India under the Indian Companies ACT 1956 OR Indian Companies Act 2013 for last 3 years as on 31st March, 2024**.** Self-attested copy of Registration Certificate to be enclosed.		
2	The bidder must have successfully completed similar work **over the last three years i.e. the current financial year and the last three financial years: -** • Three similar completed service each costing not less than amount equal to 40% (forty percent) of the estimated cost. **or** • Two similar completed services each costing not less than the amount equal to 50% (fifty percent) of the estimated cost. **or** • One similar completed service costing not less than the amount equal to 80% (eighty percent) of the estimated cost. Supporting document in form of purchase order or commissioning report along with performance certificate to be submitted.		
3	In case of ongoing works to be considered, the bidder must have received payment bills of 80% of the contract sum for the work/works executed last day of month previous to the one in which bids are invited. The statement showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for- each of the works listed should be attached along with certificates duly signed by the Engineer-in Charge, not below the rank of an Executive Engineer or equivalent.		
4	Should be a Firm (Proprietorship or Partnership / Company / Registered Society etc.) and should be a Reputed Manufacturer/Reputed Marketer for the last 3 years. Self-attested copy(s) of proof of above like Current Shop & Establishment License with the name of the owner, date of registration of the Firm / Company / Organisation, complete address, nature of business / items being traded, copies of Purchase Order(s) / Contracts) issued		

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	by any customer or any other valid document as a proof of above should be enclosed.		
5	EMD to be submitted along with Technical Bid (If Applicable).		
6	Minimum Average Annual turnover of the tenderer for last three preceding financial years should be Rs. 1 Lacs or above. Copies of Certified Financial Statement for above mentioned period to be submitted. Proforma statement is not acceptable.		
7	Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have: ▪ Made misleading or false representation in the forms, statements and attachments submitted in proof of the qualification requirements; and/or ▪ Record for poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, or financial failures etc.		
8	Possession of PAN number is a must at the time of application of the tender. Self-attested copy of PAN Number should be enclosed. Additionally, self-attested copy of Income Tax Return of preceding 02 Financial years should also be enclosed.		
9	The bidder must possess GST Registration Number at the time of application of the tender. Self-attested copy of GST Reg. Number should be enclosed. In case, the bidder does not possess the GST Registration Number, they need to give an undertaking that they will apply for and obtain the GST Registration Number, if the subject contract is placed on them by AIESL.		
10	Bidder should have not been black listed by any of Governments Authority or public Sector Undertaking (PSUs) in the last three years.		
11	Besides the above eligibility criteria, a team of AIESL Officials may also visit the Factory premises / production facility of the bidder to assess their infrastructure and capability as per AIESL's request.		
12	Tender document should be duly signed, stamped, and completed in all aspects (pages)		

Date: **Bidder Signature:**
Place: **Name &Designation:**
Company Name &Seal:

AI ENGINEERING SERVICES LIMITED

MATERIALS MANAGEMENT DIVISION
OLD AIRPORT, SANTACRUZ (EAST), MUMBAI – 400 029

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SCOPE & DESCRIPTION OF WORK

1. SCOPE & DESCRIPTION OF WORK IN BRIEF:

i) Scope of work under this contract is Calibration of various instruments and equipment's installed at Electronics Overhaul Division (EOD), Hanger 3, 5th Floor, Old Airport Premises, Kalina, Santacruz East, Mumbai, Maharashtra-400029.

ii) The bidder shall be having lab facilities with valid NABL accreditation for calibration.

iii) The bidder must submit a copy of valid NABL accreditation certificate while bidding.

iv) The bidder shall calibrate the instruments in all respects with calibration reference standards traceable to national/International standards.

v) The calibration certificate shall be duly signed by Lab authorized Instrument Engineer/ Certified by the testing authority.

2. RATES:

i) The unit rates quoted should be kept firm and valid for whole contract period and no escalation shall be permissible for any reasons whatsoever after award of contract.

ii) The quoted rates by the bidder shall include all liabilities such as supervision, wages and all other statutory payments, including providing of tools and tackles, overheads, profits etc. for which no extra payment whatsoever will be made by AIESL.

iii) Bidder shall quote the rates in accordance to BOQ.

3. BIDDER'S OBLIGATIONS:

i) All expenses towards mobilization and demobilization of Master meters, work force, materials if any, to site and clearing the site etc. shall be deemed to be included in the prices quoted.

ii) All entries and exits of materials and equipment should be done with proper gate passes and recorded at security gate.

iii) It shall be entirely the Agency's responsibility to calibrate and maintain all the necessary tools and tackles.

iv) The Agency shall at his own expense arrange for safety provisions / PPEs in respect of all facilities in connection therewith as per the directions of Engineer-in-charge, in case of carrying out of calibration at site.

v) The instruments shall be handled properly during calibration and the agency shall be responsible for any problem created out of negligent handling of the instruments. The agency is required to report the same to AIESL immediately in case of any such occurrence.

vi) The Agency shall make his own arrangement for the transportation/ Boarding/ Lodging etc. if required of his service personnel.

vii) The Agency shall indemnify AI Engineering Services Limited (AIESL) from and against any and all liabilities, claims, demands and expenses (including legal fees and costs) arising out of or related to any noncompliance with labour-related statutory laws and regulations. It is the sole responsibility of the Agency to ensure full compliance with all applicable labour laws, including but not limited to wages, benefits, insurance, safety, and welfare of the workers engaged by the Contractor during the execution of the job. AIESL shall not be held liable for any claims arising from the Agency’s failure to comply with such statutory obligations.

MASTER LIST OF INSTRUMENTS AND TEST RIGS

S/N	CARD NO.	DESC.	P/N MODEL NO	MANUFACTURER	CALBRATION PERIOD	CATEGORY OF CALIBRATI	ACCURACY	LEAST COUNT	RANGE	CALIBRATION AGENCY	CAL DONE DT	CAL DUE DT	CALIBRATION REPORT/ CERTIFICATE NO	TEST RIG NO	REMARK
1	A-20	AUDIO ANALYZER	8903B	HP	YEARLY	A	-	-	-	TRANSCAL	26/08/2024	25/08/2025	TSC/24-25/9435-8	-	-
2	A-21-02	SIGNAL GENERATOR	2023B	IFR	YEARLY	A	-	-	-	TRANSCAL	26/08/2024	25/08/2025	TSC/24-25/9435-9	-	-
3	B-18-02	O'SCOPE 100 MHz	TDS3012B	TEKTRONIX	YEARLY	A	-	-	-	IN HOUSE	06/03/2025	06/03/2026	EOD/MAR2025/15	-	-
4	E-01-02	POWER METER	435B	HP	YEARLY	A	-	-	-	TRANSCAL	26/08/2024	25/08/2025	TSC/24-25/9435-5	-	-
5	I-46	SPECTRUM ANALYZER	8593E	HP	YEARLY	A	-	-	-	TRANSCAL	26/08/2024	25/08/2025	TSC/24-25/9435-2	-	-
6	E-32-07	POWER SENSOR	8481A	HP	YEARLY	A	-	-	-	TRANSCAL	26/08/2024	25/08/2025	TSC/24-25/9435-6	-	-
7	I-67	MODULATION ANALYZER	0856.4509.52	Rohde & Schwarz	YEARLY	A	-	-	-	TRANSCAL	26/08/2024	25/08/2025	TSC/24-25/9435-7	-	-
8	A-19-04	ARBITARY WAVEFORM GEN	HP33120A	HP	YEARLY	A	-	-	-	IN HOUSE	08/10/2024	08/10/2025	EOD/OCT2024/09	-	-
9	D-22-03	DIGITAL MULTIMETER	34401A	AGILENT	YEARLY	A	-	-	-	CCF/AIESL	27/06/2024	27/06/2025	ET-81/2024	-	-
10	C-07-01	MICROWAVE FREQ. COUNTER	CNT-90/151	PENDULU	YEARLY	A	-	-	-	TRANSCAL	26/08/2024	25/08/2025	TSC/24-25/9453-3	-	-
11	E-27-03	SOUND LEVEL METER	886-2	SIMSON	YEARLY	A	-	-	-	IN HOUSE	03/02/2025	03/02/2026	EOD/FEB2025/02	-	-
12	E-28-02	SOUND LEVEKL CALIBRATOR	890-2	SIMSON	YEARLY	A	-	-	-	IN HOUSE	12/09/2024	12/09/2025	EOD/SEP2024/16	-	-
13	A-35	AUDIO ANALYZER	APX515	AUDIO PRECISION	YEARLY	A	-	-	-	IN HOUSE	12/08/2024	12/08/2025	EOD/AUG2024/20	TB 6	-
14	A-36	TV ANALYZER(ETL)	ETL2112.0004K13	Rohde & Schwarz	YEARLY	A	-	-	-	IN HOUSE	24/09/2024	24/09/2025	EOD/SEP2024/19	TB 6	-
15	A-37	TEST TRANSMITTER	SFE 100	Rohde & Schwarz	YEARLY	A	-	-	-	IN HOUSE	30/08/2024	30/08/2025	EOD/AUG2024/26	TB 6	-
16	B-18-06	OSCILLOSCOPE	DPO7054	TEKTRONIX	YEARLY	A	-	-	-	-	-	-	-	-	-

AUDIO ANALYZER PN-8903B

Calibration ranges requirement as follows: -

01	CH 1- Analog Generator Frequency Verification	Frequency 10Hz,50Hz,100Hz,500Hz,1KHz,10KHz,50KHz,80KHz
	CH 1 Analog Generator output Voltage Verification	AC voltage @1KHz 10mV,20mV,50mV,100mV,200mV,500mV,1V,2V,5V,8V
	CH 1 DC offset Verification	Dc offset 100mV,1V,2V,5V,10V
	CH 1 THD/Harmonic Content	Generator frequency 400Hz,1KHz,10KHz,20KHz

02	CH 2- Analog Generator Frequency Verification	Frequency 10Hz,50Hz,100Hz,500Hz,1KHz,10KHz,50KHz,80KHz
	CH 2 Analog Generator output Voltage Verification	AC voltage @1KHz 10mV,20mV,50mV,100mV,200mV,500mV,1V,2V,5V,8V
	CH 2 DC offset Verification	Dc offset 100mV,1V,2V,5V,10V
	CH 2 THD/Harmonic Content	Generator frequency 400Hz,1KHz,10KHz,20KHz

03	CH 1 Analyzer frequency Verification	Frequency 10Hz,50Hz,100Hz,500Hz,1KHz,10KHz,50KHz,96KHz
	CH 1 Analyzer Voltage Verification	AC voltage @1KHz 10mV,20mV,50mV,100mV,200mV,500mV,1V,2V,5V,10V, 50V,100V

04	CH 2 Analyzer frequency Verification	Frequency 10Hz,50Hz,100Hz,500Hz,1KHz,10KHz,50KHz,96KHz
	CH 2 Analyzer Voltage Verification	AC voltage @1KHz 100mV,200mV,500mV,1V,2V,5V,10V,50V,100V

AUDIO ANALYZER P/N- 8903B

Ch1-Analog Generator Frequency Verification						
Sl. No	Frequency	Unit	Measured Readings	Error Allowed ±	Measurement Uncertainty (±)	Remarks
1	10	Hz				
2	50	Hz				
3	100	Hz				
4	500	Hz				
5	1	kHz				
6	10	kHz				
7	50	kHz				
8	80	kHz				
Ch1-Analog Generator Output Voltage Verification						
Sl. No.	AC Voltage @ 1kHz	Unit	STD Reading	Error Allowed ±	Measurement Uncertainty (±)	Remarks
9	10.00	mV				
10	20	mV				
11	50	mV				
12	100	mV				
13	200	mV				
14	500	mV				
15	1	V				
16	2	V				
17	5	V				
18	8	V				
Ch-1 DC offset Verfication						
Sl. No.	DC offset set	Unit	STD Reading	Limit	Measurement Uncertainty (±)	Remarks
19	100	mV				
20	1	V				
21	2	V				
22	5	V				
23	10	V				
Ch-1 THD/ Harmonic Content						
Sl. No.	Generator frequency	Unit	Harmonic level in dBc	Limit in dB	Measurement Uncertainty (±)	Remarks
24	400	Hz				
25	1	kHz				
26	10	kHz				
27	20	kHz				

Ch2-Analog Generator Frequency Verification						
Sl. No	Frequency	Unit	Measured Readings	Error Allowed ±	Measurement Uncertainty (±)	Remarks
28	10	Hz				
29	50	Hz				
30	100	Hz				
31	500	Hz				
32	1	kHz				
33	10	kHz				
34	50	kHz				
35	80	kHz				
Ch2-Analog Generator Output Voltage Verification						
Sl. No.	AC Voltage @ 1kHz	Unit	STD Reading	Error Allowed ±	Measurement Uncertainty (±)	Remarks
36	10.00	mV				
37	20	mV				
38	50	mV				
39	100	mV				
40	200	mV				
41	500	mV				
42	1	V				
43	2	V				
44	5	V				
45	8	V				
Ch-2 DC offset Verfication						
Sl. No.	DC offset set	Unit	STD Reading	Limit	Measurement Uncertainty (±)	Remarks
46	100	mV				
47	1	V				
48	2	V				
49	5	V				
50	10	V				
Ch-2 THD/ Harmonic Content						
Sl. No.	Generator frequency	Unit	Harmonic level in dBc	Limit in dB	Measurement Uncertainty (±)	Remarks
51	400	Hz				
52	1	kHz				
53	10	kHz				
54	20	kHz				

Ch1-Analyzer Frequency Verification						
Sl. No	Frequency	Unit	Measured Readings	Error Allowed ±	Measurement Uncertainty (±)	Remarks
55	10	Hz				
56	50	Hz				
57	100	Hz				
58	500	Hz				
59	1	kHz				
60	10	kHz				
61	50	kHz				
62	96	kHz				

Ch1-Analyzer Voltage Verification				
Sl. No	AC Voltage @ 1kHz	Unit	Readings	Measurement Uncertainty (±)
63	100	mV		
64	200	mV		
65	500	mV		
66	1	V		
67	2	V		
68	5	V		
69	10	V		
70	50	V		
71	100	V		

Ch2-Analyzer Frequency Verification						
Sl. No	Frequency	Unit	Measured Readings	Error Allowed ±	Measurement Uncertainty (±)	Remarks
72	10	Hz				
73	50	Hz				
74	100	Hz				
75	500	Hz				
76	1	kHz				
77	10	kHz				
78	50	kHz				
79	96	kHz				

Ch2 -Analyzer Voltage Verification				
Sl. No	AC Voltage @ 1kHz	Unit	DUC Readings	Measurement Uncertainty (±)
80	100	mV		
81	200	mV		
82	500	mV		
83	1	V		
84	2	V		
85	5	V		
86	10	V		
87	50	V		
88	100	V		

SIGNAL GENERATOR PN-2023B

Calibration ranges requirement as follows:-

Power level Accuracy			
01	Power level 0 dBm	Frequency 100KHz,500KHz,1MHz,10 MHz,50MHz,100MHz,500 MHz, 1GHz,2GHz	
02	Power level 10 dBm	Frequency 100KHz,500KHz,1MHz,10 MHz,50MHz,100 MHz,500MHz, 1GHz,2GHz	
03	Power level 13 dBm	Frequency 100KHz,500KHz,1MHz,10 MHz,50MHz,100 MHz,500MHz, 1GHz,2GHz	
04	Power level -10 dBm	Frequency 100KHz,500KHz,1MHz,10 MHz,50MHz,100 MHz,500 MHz, 1GHz,2GHz	
05	Power level -20 dBm	Frequency 100KHz,500KHz,1MHz,10MHz,50MHz,100MHz,500 MHz, 1GHz,2GHz	
06	Power level -30 dBm	Frequency 100KHz,500KHz,1MHz,10 MHz,50MHz,100 MHz,500 MHz, 1GHz,2GHz	
Frequency Sourcing Accuracy Test @ 0dBm			
07	Output Frequency	10MHz Ref Output 9KHz,10KHz,50KHz,100KHz,500KHz,1MHz,10MHz,100MHz ,500MHz,1GHz,2GHz	
2nd Harmonic Test			
08	Error Allowed ±	Power level	2nd H Freq.
	< -30 dBc	0 dBm@50MHz	100MHz
		100	200
		500	1GHz
		1GHz	2
Modulation Measurements **Amplitude Modulation Measurements @1 GHz, Modulation Rate 1KHz**			
09	**Modulation** (%)	30%, 50%, 70%	
Frequency Modulation Measurements @1 GHz			
10	**Modulation Rate**	1KHz,10KHz,100KHz,400KHz	

SIGNAL GENERATOR P/N: IFR/2023B

Output Power Level Accuracy:						
SI. No	Setting		Error Allowed (dB) (±)	Measured Reading (dBm)	Measurement Uncertainty(±) dB	Remarks
	Frequency	Power Level				
1	100 kHz	0dBm				
2	500 kHz					
3	1 MHz					
4	10 MHz					
5	50 MHz					
6	100 MHz					
7	500 MHz					
8	1GHz					
9	2 GHz					
10	100 kHz	10dBm				
11	500 kHz					
12	1 MHz					
13	10 MHz					
14	50 MHz					
15	100 MHz					
16	500 MHz					
17	1 GHz					
18	2 GHz					
19	100 kHz	13dBm				
20	500 kHz					
21	1MHz					
22	10 MHz					
23	50 MHz					
24	100 MHz					
25	500 MHz					
26	1GHz					
27	2 GHz					
28	100 kHz	-10dBm				
29	500 kHz					
30	1MHz					
31	10 MHz					
32	50 MHz					
33	100 MHz					
34	500 MHz					
35	1 GHz					
36	2 GHz					
37	100 kHz	-20dBm				
38	500kHz					
39	1 MHz					
40	10MHz					
41	50MHz					
42	100MHz					
43	500MHz					
44	1 GHz					
45	2GHz					
46	100 kHz	-30dBn1				
47	500 kHz					
48	1 MHz					
49	10MHz					
50	50 MHz					
51	100 MHz					
52	500 MHz					
53	1 GHz					
54	2GHz					

Frequency Sourcing Accuracy Test @0dBm						
Sl. No	Setting		Units	Measured Reading	Measurement Uncertainty (±)	Remarks
	Output Frequency	Error Limilt (±)				
55	9		kHz			
56	10					
57	50					
58	100					
59	500					
60	1		MHz			
61	10					
62	100					
63	500					
64	1		GHz			
65	2					
66	10MHz Ref Output		MHz			

2nd Harmonic Test :

Sl. No	Setting		Error Allowed (±)	Measured Reading (dBc)	Measuremenl Uncertainty (±) (%)	Remarks
	Power Level	2ndH Freq.				
67	0dBm@50 MHz	100MHz	<-30dBc			
68	0dBm@100 MHz	200MHz				
69	0dBm@500 MHz	1GHz				
70	0dBm@1GHz	2 GHz				

Modulation Measurements					
Amplitude Modulation Measurements @ 1 GHz, Modulation Rate 1kHz					
Sl. No	Setting (%)	Error Limit (±)	Measured Reading (%)	Measuremenl Uncertainty (%) (±)	Remarks
71	30				
72	50				
73	70				
Frequency Modulation Measurements @1GHz, Modulation Rate 1 kHz					
Sl. No.	Settig (kHz)	Error Limit (±)	Measured Reading (kHz)	Measuremenl Uncertainty (%) (±)	Remarks
74	0				
75	100				
76	400				

OSCILLOSCOPE PN- TDS3012B

Calibration ranges requirement as follows :-

PERFORMANCE CHECK		
01	CHANNEL 1 DC MEASUREMENT ACCURACY	1 mv/ div, 2 mv/ div, 5 mv/ div, 50 mv/ div, 50 mv/ div, 50 mv/ div, 90 mv/ div, 200mv/ div, 1V/div
02	CHANNEL 2 DC MEASUREMENT ACCURACY	1 mv/ div, 2 mv/ div, 5 mv/ div, 50 mv/ div, 50 mv/ div, 50 mv/ div, 90 mv/ div, 200mv/ div, 1V/div
03	CHANNEL 3 DC MEASUREMENT ACCURACY	1 mv/ div, 2 mv/ div, 5 mv/ div, 50 mv/ div, 50 mv/ div, 50 mv/ div, 90 mv/ div, 200mv/ div, 1V/div
04	CHANNEL 4 DC MEASUREMENT ACCURACY	1 mv/ div, 2 mv/ div, 5 mv/ div, 50 mv/ div, 50 mv/ div, 50 mv/ div, 90 mv/ div, 200mv/ div, 1V/div
05	CHANNEL 1 BANDWIDTH	425 mV
06	CHANNEL 2 BANDWIDTH	425 mV
07	CHANNEL 3 BANDWIDTH	425 mV
08	CHANNEL 4 BANDWIDTH	425 mV
09	CHANNEL 1 TRIGGER SENSITIVITY	RISING SLOP, FALLING SLOP
10	CHANNEL 2 TRIGGER SENSITIVITY	RISING SLOP, FALLING SLOP
11	CHANNEL 3 TRIGGER SENSITIVITY	RISING SLOP, FALLING SLOP
12	CHANNEL 4 TRIGGER SENSITIVITY	RISING SLOP, FALLING SLOP
13	SAMPLE RATE AND DELAY TIME ACCURACY	-2 DIVISIONS

OSCILLOSCOPE PN- TDS3012B

Calibration ranges requirement as follows :-

Sl.No	PERFORMANCE CHECK		LOW LIMIT	TEST RESULT	HIGH LIMIT
01	CHANNEL 1 DC MEASUREMENT ACCURACY	1 mV/ div	99.5 mV		100.8 mV
		2 mV/ div	-7.540 mV		-6.460 mV
		5 mV/ div	-101.8 mV		-98.24 mV
		50 mV/ div	982.4 mV		1.018 V mV
		50 mV/ div	632.4 mV		667.6 mV
		50 mV/ div	340.5 mV		359.5 mV
		90 mV/ div	-339.3 mV		-290.7 mV
		200mV/ div	9.900 V		10.10V
		1V/div	-10.3 V		-9.698 V
02	CHANNEL 2 DC MEASUREMENT ACCURACY	1 mV/ div	99.5 mV		100.8 mV
		2 mV/ div	-7.540 mV		-6.460 mV
		5 mV/ div	-101.8 mV		-98.24 mV
		50 mV/ div	982.4 mV		1.018 V mV
		50 mV/ div	632.4 mV		667.6 mV
		50 mV/ div	340.5 mV		359.5 mV
		90 mV/ div	-339.3 mV		-290.7 mV
		200mV/ div	9.900 V		10.10V
		1V/div	-10.3 V		-9.698 V
03	CHANNEL 3 DC MEASUREMENT ACCURACY	1 mV/ div	99.5 mV		100.8 mV
		2 mV/ div	-7.540 mV		-6.460 mV
		5 mV/ div	-101.8 mV		-98.24 mV
		50 mV/ div	982.4 mV		1.018 V mV
		50 mV/ div	632.4 mV		667.6 mV
		50 mV/ div	340.5 mV		359.5 mV
		90 mV/ div	-339.3 mV		-290.7 mV
		200mV/ div	9.900 V		10.10V
		1V/div	-10.3 V		-9.698 V

04	CHANNEL 4 DC MEASUREMENT ACCURACY	1 mV/ div	99.5 mV		100.8 mV
		2 mV/ div	-7.540 mV		-6.460 mV
		5 mV/ div	-101.8 mV		-98.24 mV
		50 mV/ div	982.4 mV		1.018 V mV
		50 mV/ div	632.4 mV		667.6 mV
		50 mV/ div	340.5 mV		359.5 mV
		90 mV/ div	-339.3 mV		-290.7 mV
		200mV/ div	9.900 V		10.10V
		1V/div	-10.3 V		-9.698 V
05	CHANNEL 1 BANDWIDTH		425 mV		----
06	CHANNEL 2 BANDWIDTH		425 mV		----
07	CHANNEL 3 BANDWIDTH		425 mV		----
08	CHANNEL 4 BANDWIDTH		425 mV		----
09	CHANNEL 1 TRIGGER SENSITIVITY	RISING SLOPE	STABLE TRIGGER		----
		FALLING SLOPE	STABLE TRIGGER		----
10	CHANNEL 2 TRIGGER SENSITIVITY	RISING SLOPE	STABLE TRIGGER		----
		FALLING SLOPE	STABLE TRIGGER		----
11	CHANNEL 3 TRIGGER SENSITIVITY	RISING SLOPE	STABLE TRIGGER		----
		FALLING SLOPE	STABLE TRIGGER		----
12	CHANNEL 4 TRIGGER SENSITIVITY	RISING SLOPE	STABLE TRIGGER		----
		FALLING SLOPE	STABLE TRIGGER		----
13	SAMPLE RATE AND DELAY TIME ACCURACY		-2 DIVISIONS		----

POWER METER PN-435B

Calibration ranges requirement as follows: -

RATIO MEASUREMENTS		
S/N	Nominal Value	DMM Reading (V)
01	100 mW	
02	30 mW	
03	10 mW	
04	3 mW	
05	1 mW	
06	300 µW	

POWER METER PN-435B

Calibration ranges requirement as follows: -

RATIO MEASUREMENTS				
S/N	Nominal Value	DMM Reading (V)	Ratio (Actual)	Measurement uncertainty (±) (%)
01	100 mW			
02	30 mW			
03	10 mW			
04	3 mW			
05	1 mW			
06	300 µW			

SPECTRUM ANALYZER P/N: HP/8593E

Calibration ranges requirement as follows :-

FREQUENCY READOUT AND MARKER COUNT ACCURACY TEST	
FREQUENCY READOUT ACCURACY TEST	
CENTER FREQUENCY	**SPAN**
1.5 GHz	20 MHz, 10 MHz, 1 MHz
4.0 GHz	20 MHz, 10 MHz, 1 MHz
9 GHz	20 MHz, 10 MHz, 1 MHz
16 GHz	20 MHz, 10 MHz, 1 MHz
21 GHz	20 MHz, 10 MHz, 1 MHz
MARKER COUNT ACCURACY TEST	
FREQUENCY = 1.5 GHz	
CNT RES	SPAN
100Hz	20 MHz
10 Hz	1 MHz
FREQUENCY = 4.0 GHz	
CNT RES	SPAN
100Hz	20 MHz
10 Hz	1 MHz
FREQUENCY = 4.0 GHz	
CNT RES	SPAN
100Hz	20 MHz
10 Hz	1 MHz
FREQUENCY = 16.0 GHz	
CNT RES	SPAN
100Hz	20 MHz
10 Hz	1 MHz
FREQUENCY = 21.0 GHz	
CNT RES	SPAN
100Hz	20 MHz
10 Hz	1 MHz
FREQUENCY SPAN READOUT ACCURACY TEST	
SPAN	1800 MHz, 10.10MHz, 10.00MHz, 100.00 kHz, 99.00 kHz, 10.00 kHz
SCALE FIDELITY	
ATTENUATION dB	Ref Level, -4 dB, -8dB, -12dB,-16dB, -20dB, -24dB, -28dB, -32dB, -36dB, -40dB, -44dB, -48dB, -52dB, -56dB, -60dB
ATTENUATION IN dB	Ref Level, -4dB, -8dB, -12dB,-16dB, -20dB, -24dB, -28dB, -32dB, -36dB, -40dB, -44dB, -48dB, -52dB, -56dB, -60dB
RESOLUTION BANDWIDTH SWITCHING UNCERTAINTY	
RESOLUTION BANDWIDTH	3 KHz, 1KHz, 9KHz, 10KHz, 30KHz, 100KHz, 120KHz, 300KHz, 1MHz, 3MHz
RESOLUTION BANDWIDTH ACCURACY	
3 dB RESOLUTION BANDWIDTH	3 MHz, 1MHz, 300 KHz, 100 KHz, 30KHz, 10KHz, 3KHz, 1KHz

SPECTRUM ANALYZER P/N: HP/8593E

Calibration ranges requirement as follows :-

S/N	Test Description		Results				
	10 MHz Reference Accuracy Stability		**Minimum**	**Maximum**	**Measured Reading**	**Measurement Uncertainty (±)**	**Remarks**
1							
FREQUENCY READOUT AND MARKER COUNT ACCURACY TEST							
FREQUENCY READOUT ACCURACY TEST							
S/N	**CENTER FREQUENCY**	**SPAN**	**Minimum in GHz**	**Maximum in GHz**	**Measured Reading**	**Measurement Uncertainty (±)**	**Remarks**
2	1.5 GHz	20 MHz					
3		10 MHz					
4		1 MHz					
5	4.0 GHz	20 MHz					
6		10 MHz					
7		1 MHz					
8	9 GHz	20 MHz					
9		10 MHz					
10		1 MHz					
11	16 GHz	20 MHz					
12		10 MHz					
13		1 MHz					
14	21 GHz	20 MHz					
15		10 MHz					
16		1 MHz					
MARKER COUNT ACCURACY TEST							
FREQUENCY = 1.5 GHz							
17	CNT RES= 100 Hz	20 MHz					
18	CNT RES= 10 Hz	1 MHz					
FREQUENCY = 4.0 GHz							
19	CNT RES=100Hz	20 MHz					
20	CNT RES=10 Hz	1 MHz					
FREQUENCY = 9.0 GHz							
21	CNT RES=100Hz	20 MHz					
22	CNT RES=10 Hz	1 MHz					

MARKER COUNT ACCURACY TEST

S/N	CENTER FREQUENCY	SPAN	Minimum in GHz	Maximum in GHz	Measured Reading	Measurement Uncertainty (±)	Remarks
FREQUENCY = 16.0 GHz							
23	CNT RES=100Hz	20 MHz					
24	CNT RES=10 Hz	1 MHz					
FREQUENCY = 21.0 GHz							
25	CNT RES=100Hz	20 MHz					
26	CNT RES=10Hz	1 MHz					

FREQUENCY SPAN READOUT ACCURACY TEST

S/N	SPAN	Minimum	Maximum	Measured Reading	Measurement Uncertainty (±)	Remarks
27	1800 MHz					
28	10.10MHz					
39	10.00MHz					
30	100.00 kHz					
31	99.00 kHz					
32	10.00 kHz					

SCALE FIDELITY

S/N	ATTENUATION	Minimum indB	Maximum in dB	Measured Reading	Measurement Uncertainty (+)	Remarks
	Ref Level	**0 (Ref)**	**0 (Ref)**	**0 (Ref)**	**----**	**---**
34	-4 dB					
35	-8dB					
36	-12dB					
37	-16dB					
38	-20dB					
39	-24dB					
40	-28dB					
41	-32 dB					
42	-36 dB					
43	-40 dB					
44	-44 dB					
45	-48 dB					
46	-52 dB					
47	-56 dB					
48	-60 dB					

S/N	ATTENUATION IN dB	**Minimum in dB**	**Maximum in dB**	**Measured Reading**	**Measurement Uncertainty (±)**	**Remarks**
	Ref Level	**0 (Ref)**	**0 (Ref)**	**0 (Ref)**	**----**	**---**
50	-4 dB					
51	-8dB					
52	-12dB					
53	-16dB					
54	-20dB					
55	-24dB					
56	-28dB					
57	-32 dB					
58	-36 dB					
59	-40 dB					
60	-44 dB					
61	-48 dB					
62	-52 dB					
63	-56 dB					
64	-60 dB					

RESOLUTION BANDWIDTH SWITCHING UNCERTAINTY

S/N	RESOLUTION BANDWIDTH	**Minimum in dB**	**Maximum in dB**	**Measured Reading**	**Measurement Uncertainty (±)**	**Remarks**
		0 (Ref)	**0 (Ref)**	**0 (Ref)**	**-----**	**----**
65	3 KHz					
66	1KHz					
67	9KHz					
68	10KHz					
69	30KHz					
70	100KHz					
71	120KHz					
72	300KHz					
73	1MHz					
74	3MHz					

RESOLUTION BANDWIDTH ACCURACY

S/N	3 dB RESOLUTION BANDWIDTH	**Minimum**	**Maximum**	**Measured Reading**	**Measurement Uncertainty (±)**	**Remarks**
75	3 MHz					
76	1MHz					
77	300 KHz					
78	100 KHz					
79	30KHz					
80	10KHz					
81	3KHz					
82	1KHz					

POWER SENSOR PN-8481A

Calibration ranges requirement as follows :-

STANDARD INPUT		
01	Power Level (dBm) 0	Frequency 10MHz,50 MHz,100 MHz,500 MHz,1GHz, 2GHz, 4GHz, 6GHz 8GHz,10GHz,12GHz,14GHz,16GHz,18GHz
02	Power Level (dBm) 10	Frequency 10MHz,50 MHz,100 MHz,500 MHz,1GHz, 2GHz, 4GHz, 6GHz 8GHz,10GHz,12GHz,14GHz,16GHz,18GHz
03	Power Level (dBm) 13	Frequency 10MHz,50 MHz,100 MHz,500 MHz,1GHz, 2GHz, 4GHz, 6GHz 8GHz,10GHz,12GHz,14GHz,16GHz,18GHz
04	Power Level (dBm) -10	Frequency 10MHz,50 MHz,100 MHz,500 MHz,1GHz, 2GHz, 4GHz, 6GHz 8GHz,10GHz,12GHz,14GHz,16GHz,18GHz
05	Power Level (dBm) -20	Frequency 10MHz,50 MHz,100 MHz,500 MHz,1GHz, 2GHz, 4GHz, 6GHz 8GHz,10GHz,12GHz,14GHz,16GHz,18GHz
06	Power Level (dBm) -30	Frequency 10MHz,50 MHz,100 MHz,500 MHz,1GHz, 2GHz, 4GHz, 6GHz 8GHz,10GHz,12GHz,14GHz,16GHz,18GHz

POWER SENSOR PN-8481A

Calibration ranges requirement as follows :-

	STANDARD INPUT		Measured Reading	Measurement uncertainty (±) (%)
Sl.No	Frequency	Power Level (dBm)		
01	10MHz	0 (dBm)		
02	50 MHz			
03	100 MHz			
04	500 MHz			
05	1GHz			
06	2GHz			
07	4GHz			
08	6GHz			
09	8GHz			
10	10GHz			
11	12GHz			
12	14GHz			
13	16GHz			
14	18GHz			
15	10MHz	10 (dBm)		
16	50 MHz			
17	100 MHz			
18	500 MHz			
19	1GHz			
20	2GHz			
21	4GHz			
22	6GHz			
23	8GHz			
24	10GHz			
25	12GHz			
26	14GHz			
27	16GHz			
28	18GHz			
29	10MHz	13 (dBm)		
30	50 MHz			
31	100 MHz			
32	500 MHz			
33	1GHz			
34	2GHz			
35	4GHz			
36	6GHz			
37	8GHz			
38	10GHz			
39	12GHz			
40	14GHz			
41	16GHz			
42	18GHz			

43	10MHz	-10 (dBm)		
44	50 MHz			
45	100 MHz			
46	500 MHz			
47	1GHz			
48	2GHz			
49	4GHz			
50	6GHz			
51	8GHz			
52	10GHz			
53	12GHz			
54	14GHz			
55	16GHz			
56	18GHz			
57	10MHz	-20 (dBm)		
58	50 MHz			
59	100 MHz			
60	500 MHz			
61	1GHz			
62	2GHz			
63	4GHz			
64	6GHz			
65	8GHz			
66	10GHz			
67	12GHz			
68	14GHz			
69	16GHz			
70	18GHz			
71	10MHz	-30 (dBm)		
72	50 MHz			
73	100 MHz			
74	500 MHz			
75	1GHz			
76	2GHz			
77	4GHz			
78	6GHz			
79	8GHz			
80	10GHz			
81	12GHz			
82	14GHz			
83	16GHz			
84	18GHz			

MODULATION ANALYZER PN- 0856.4509.52

Calibration ranges requirement as follows :-

Amplitude Modulation Check		
1	Carrier Frequency	10MHz,100MHz,500MHz,1GHz
Frequency Modulation check		
2	Carrier Frequency	10MHz,100MHz,500MHz,1GHz

MODULATION ANALYZER PN- 0856.4509.52

Calibration ranges requirement as follows: -

Amplitude Modulation Check					
Sl. No	Carrier Frequency (MHz)	Modulation rate (KHz)	Setting Depth (%)	Measured reading (%)	Measurement uncertainty (±) (%)
1	10	1			
2		1			
3		1			
4	100	1			
5		1			
6		1			
7	500	1			
8		1			
9		1			
Sl. No	Carrier Frequency (GHz)	Modulation rate (KHz)	Setting Depth (%)	Measured reading (%)	Measurement uncertainty (±) (%)
10	1	1			
11		1			
12		1			
Frequency Modulation check					
Sl. No	Carrier Frequency (MHz)	Modulation rate (KHz)	Setting Deviation (KHz)	Measured reading (KHz)	Measurement uncertainty (±) (%)
13	10	1			
14		1			
15		1			
16	100	1			
17		1			
18		1			

19	500	1			
20		1			
21		1			
22		1			
23		1			
Sl. No	Carrier Frequency (GHz)	Modulation rate (KHz)	Setting Deviation (KHz)	Measured reading (KHz)	Measurement uncertainty (±) (%)
24	1	1			
25		1			
26		1			
27		1			
28		1			

ARBITARY WAVEFORM GENERATOR PN-HP33120

Calibration ranges requirement as follows :-

01	Frequency/1 Hz to 15 MHz	Setting 1Hz,10Hz,100Hz,1KHz,10KHz,100KHz,1MHz, 10MHz,15MHz
02	Amplitude/50 mV to 10V	Setting 2V,5V,10V

Accuracy: ± 20ppm for Frequency

: ± 1% for Amplitude

ARBITARY WAVEFORM GENERATOR PN-HP33120

Calibration ranges requirement as follows :-

Accuracy: ± 20ppm for Frequency

: ± 1% for Amplitude

Sl.No	Parameter/ Range	Setting	STD Reading	Accuracy (±)	Observed Deviation	Measurement Uncertianity (±)	Remarks
01	Frequency /1 Hz to 15 MHz	1 Hz					
02		10 Hz					
03		100 Hz					
04		1 KHz					
05		10 KHz					
06		100 KHz					
07		1 MHz					
08		10 MHz					
09		15 MHz					
10	Amplitude 50 mV to 10V	50mV					
11		100mV					
12		500mV					
13		1V					
14		5 V					
15		10 V					

MULTIMETER DIGITAL PN-34401A

Calibration ranges requirement as follows :-

DC VOLTAGE RANGE		
1	100mV DC	I/P- 20mV,60mV,100mV
2	1 V DC	I/P- 0.2V,0.6V,1V
3	10 V DC	I/P- 2V,6V,10V
4	100 V DC	I/P- 20V,60V,100V
5	1000 V DC	I/P- 200V,600V,1000V
AC VOLTAGE RANGE		
1	100mV AC 400 Hz	I/P- 20mV,60mV,100mV
2	1V AC 400 Hz	I/P- 0.2V,0.6V,1V
3	10V AC 400 Hz	I/P- 2V,6V,10V
4	100V AC 400 Hz	I/P- 20V,60V,100V
5	750V AC 400 Hz	I/P- 150V,600V,750V
DC CURRENT RANGE		
1	10mA DC	I/P- 2mA,6mA,10mA
2	100mA DC	I/P- 20mA,60mA,100mA
3	1 A DC	I/P- 0.2A,0.6A,1A
4	3 A DC	I/P- 1A,2A,3A
AC CURRENT RANGE		
1	1 A AC 400Hz	I/P- 0.2A,0.6A,1A
2	3A AC 400Hz	I/P- 1A,2A,3A
RESISTANCE RANGE		
1	100Ω	I/P- 20Ω,60Ω,100Ω
2	1 KΩ	I/P- 0.2KΩ,0.6KΩ,1KΩ
3	10 KΩ	I/P- 2KΩ,6KΩ,10KΩ
4	100 KΩ	I/P- 20KΩ,60KΩ,100KΩ
5	1 MΩ	I/P- 0.2MΩ.0.6MΩ,1MΩ
6	10 MΩ	I/P- 2MΩ,6MΩ,10MΩ
7	100MΩ	I/P- 20MΩ,60MΩ,100MΩ

MULTIMETER DIGITAL PN-34401-A

Calibration ranges requirement as follows :-

DC VOLTAGE RANGE							
SR. No	**RANGE**	**UUC. RDG.**	**STD. AVA RDG.**	**EXP UN**	**% EXP UN**	**ERROR**	**% ERROR**
1	100mV DC	20mV					
		60mV					
		100mV					
2	1 V DC	0.2V					
		0.6V					
		1V					
3	10 V DC	2V					
		6V					
		10V					
4	100 V DC	20V					
		60V					
		100V					
5	1000 V DC	200V					
		600V					
		1000V					
AC VOLTAGE RANGE							
6	100mVAC 400 Hz	20mV					
		60mV					
		100mV					
7	1V AC 400 Hz	0.2V					
		0.6V					
		1V					
8	10V AC 400 Hz	2V					
		6V					

		10V					
9	100V AC 400 Hz	20V					
		60V					
		100V					
10	750V AC 400 Hz	150V					
		600V					
		750V					
DC CURRENT RANGE							
11	10mA DC	2mA					
		6mA					
		10mA					
12	100mA DC	20mA					
		60mA					
		100mA					
13	1 A DC	0.2A					
		0.6A					
		1A					
14	3 A DC	1A					
		2A					
		3A					
AC CURRENT RANGE							
15	1 A AC 400Hz	0.2A					
		0.6A					
		1A					
16	3A AC 400Hz	1A					
		2A					
		3A					
RESISTANCE RANGE							
17	100Ω	20Ω					
		60Ω					

		100Ω					
18	1 KΩ	0.2KΩ					
		0.6KΩ					
		1KΩ					
19	10 KΩ	2KΩ					
		6KΩ					
		10KΩ					
20	100 KΩ	20KΩ					
		60KΩ					
		100KΩ					
21	1 MΩ	0.2MΩ					
		0.6MΩ					
		1MΩ					
22	10 MΩ	2MΩ					
		6MΩ					
		10MΩ					
23	100MΩ	20MΩ					
		60MΩ					
		100MΩ					

MICROWAVE FREQ,COUNTER PN-CNT-90/151

Calibration ranges requirement as follows :-

Channel A		
01	Test Frequency	100KHz,500KHz,1MHz,10MHz,50MHz,100MHz,200MHz,300MHz
Channel B		
02	Test Frequency	100KHz,500KHz,1MHz,10MHz,50MHz,100MHz,200MHz,300MHz
Channel C		
03	Test Frequency	300MHz,500MHz,1GHz,2GHz,4GHz,6GHz,8GHz,10GHz,12GHz,14GHz

TIMER/COUNTER/ANALZER P/N:CNT-90

Channel A

Sl. No.	Test Frequency	Units	Frequency Readings in kHz	Measurement Uncertainty (±) in kHz	Remarks
1	100	kHz			---
2	500				---
Sl. No.	Test Frequency	Units	Frequency Readings in MHz	Measurement Uncertainty (±) in MHz	Remarks
3	1	MHz			---
4	10				---
5	50				---
6	100				---
7	200				---
8	300				---

Channel B

Sl. No.	Test Frequency	Units	Frequency Readings in kHz	Measurement Uncertainty (±) in kHz	Remarks
1	100	kHz			---
2	500				---
Sl. No.	Test Frequency	Units	Frequency Readings in MHz	Measurement Uncertainty (±) in MHz	Remarks
3	1	MHz			---
4	10				---
5	50				---
6	100				---
7	200				---
8	300				---

Channel C

Sl. No.	Test Frequency	Units	Frequency Readings in MHz	Measurement Uncertainty (±) in MHz	Remarks
1	300	MHz			---
2	500				---
Sl. No.	Test Frequency	Units	Frequency Readings in GHz	Measurement Uncertainty (±) in GHz	Remarks
3	1	GHz			---
4	2				---
5	4				---
6	6				---
7	8				---
8	10				---
9	12				---
10	14				---

SOUND LEVEL METER P/N-886-2

TEST REPORT:

RANGE OF UUC (dBm)	STD. READING (dBm)	AVG.UUC READING (dBm)	UNCERTAINITY %	ERROR	% ERROR
OSHA	94				
OSHA	114				
90	94				
110	114				

SOUND LEVEL METER P/N:886-2

Calibration ranges requirement as follows: -

TEST REPORT	
RANGE OF UUC (dB)	**STD READING (dB)**
OSHA	94
OSHA	114
90	94
110	114

SOUND LEVEL CALIBRATOR P/N:890-2

Calibration ranges requirement as follows :-

TEST REPORT	
RANGE OF UUC (dB)	**STD READING (dB)**
70-130	94
70-130	114

SOUND LEVEL CALIBTRATOR P/N-890-2

TEST REPORT:

RANGE OF UUC (dBm)	STD. READING (dBm)	AVG.UUC READING (dBm)	UNCERTAINITY %	ERROR	% ERROR
70-130	94				
70-130	114				

AUDIO ANALYZER PN- APX515

Calibration ranges requirement as follows :-

	PARAMETER TESTED	I/P SIGNAL
1	CH 1 GEN FREQ OUTPUT	1KHz
	GEN AMPLITUDE OUTPUT (1KHz)	1KHz
2	CH 1 GEN FREQ OUTPUT	1KHz
	GEN AMPLITUDE OUTPUT (1KHz)	1KHz
3	1 ANALYZER FREQ MEASURE	1KHz
	ANALYZER Amp MEASURE (1KHz)	1KHz
4	2 ANALYZER FREQ MEASURE	1KHz
	ANALYZER Amp MEASURE (1KHz)	1KHz

AUDIO ANALYZER PN- APX515

Calibration ranges requirement as follows: -

S/N	PARAMETER TESTED	APPLIED SIGNAL	LOWER LIMIT	UPPER LIMIT	ACTUAL RESULT	ERROR	% ERROR
1	CH 1 GEN FREQ OUTPUT	1KHz					
	GEN. AMPLITUDE OUTPUT (1KHz)	1KHz					
2	CH 2 GEN FREQ OUTPUT	1KHz					
	GEN AMPLITUDE OUTPUT (1KHz)	1KHz					
3	1 ANALYZER FREQ MEASURE	1KHz					
	ANALYZER Amp MEASURE (1KHz)	1KHz					
4	2 ANALYZER FREQ MEASURE	1KHz					
	ANALYZER Amp MEASURE (1KHz)	1KHz					

TV ANALYZER (ETL) PN-ETL2112.0004K13

Calibration ranges requirement as follows :-

PARAMETER TESTED		STANDARD PARAMETER VALUE
01	Absolute Amplitude (Ref.)	0.00 dBm
02	Absolute Amplitude	-10 dBm
03	Absolute Amplitude	-20 dBm
04	Absolute Amplitude	-30 dBm
05	Frequency Accuracy	500 MHz
06	Frequency Accuracy	1 GHz
07	Frequency Accuracy	1.5 GHz
08	Frequency Accuracy	2 GHz

TV ANALYZER (ETL) PN-ETL2112.0004K13

Calibration ranges requirement as follows: -

S/N	PARAMETER TESTED	STANDARD PARAMETER VALUE	LOWER LIMIT	UPPER LIMIT	ACTUAL VALUE OF PARAMETERS ON UUC
01	Absolute Amplitude (Ref.)	0.00 dBm			
02	Absolute Amplitude	-10 dBm			
03	Absolute Amplitude	-20 dBm			
04	Absolute Amplitude	-30 dBm			
05	Frequency Accuracy	500 MHz			
06	Frequency Accuracy	1.0 GHz			
07	Frequency Accuracy	1.5 GHz			
08	Frequency Accuracy	2 GHz			

TEST TRANSMITTER PN- SFE 100

Calibration ranges requirement as follows :-

FREQUENCY ACCURACY TEST @ 0dBm		
01	STANDARD FREQUENCY	100KHz,1MHz,10 MHz,100 MHz,200 MHz,500 MHz,1000 MHz
LEVEL ACCURACY TEST @100KHz		
02	STANDARD LEVEL (dBm)	13dBm, 05dBm, 0dBm, -5dBm, -10dBm, -20dBm, -30dBm, -60dBm,-90dBm
LEVEL ACCURACY TEST @10MHz		
03	STANDARD LEVEL (dBm)	13dBm, 05dBm, 0dBm, -5dBm, -10dBm, -20dBm, -30dBm, -60dBm,-90dBm
LEVEL ACCURACY TEST @1000MHz		
04	STANDARD LEVEL (dBm)	13dBm, 05dBm, 0dBm, -5dBm, -10dBm, -20dBm, -30dBm, -60dBm,-90dBm
LEVAL FLATNESS TEST @ 10dBm		
05	FREQUENCY	100KHz,1MHz,10 MHz,100MHz,200MHz,400MHz,500MHz,1000 MHz
LEVAL FLATNESS TEST @ 0dBm		
06	FREQUENCY	100KHz,1MHz,10 MHz,100MHz,200MHz,400MHz,500MHz,1000 MHz
LEVAL FLATNESS TEST @ -20dBm		
07	FREQUENCY	100KHz,1MHz,10 MHz,100MHz,200MHz,400MHz,500MHz,1000 MHz

TEST TRANSMITTER PN- SFE 100 SN- 132213

Calibration ranges requirement as follows: -

FREQUENCY ACCURACY TEST @ 0dBm			
STANDARD FREQUENCY	**AVG FREQUENCY**	**% ERROR**	**% UNCERTAINTY**
100KHz			
1MHz			
10 MHz			
100 MHz			
200 MHz			
500 MHz			
1000 MHz			
LEVEL ACCURACY TEST @100KHz			
STANDARD LEVEL (dBm)	**AVG FREQUENCY**		
13dBm			
05dBm			
0dBm			
-5dBm			
-10dBm			
-20dBm			
-30dBm			
-60dBm			
-90dBm			

LEVEL ACCURACY TEST @10MHz				
03	STANDARD LEVEL (dBm)	**AVG FREQUENCY**		
	13dBm			
	05dBm			
	0dBm			
	-5dBm			
	-10dBm			
	-20dBm			
	-30dBm			
	-60dBm			
	-90dBm			
LEVEL ACCURACY TEST @1000MHz				
04	STANDARD LEVEL (dBm)	AVG LEVEL (dBm)		
	13dBm			
	05dBm			
	0dBm			
	-5dBm			
	-10dBm			
	-20dBm			
	-30dBm			
	-60dBm			
	-90dBm			
LEVAL FLATNESS TEST @ 10dBm				
05	FREQUENCY	AVG LEVEL (dBm)		
	100KHz			
	1MHz			
	10 MHz			
	100MHz			
	200MHz			
	400MHz			
	500MHz			
	1000 MHz			

LEVAL FLATNESS TEST @ 0dBm				
06	FREQUENCY	AVG LEVEL (dBm)		
	100KHz			
	1MHz			
	10 MHz			
	100MHz			
	200MHz			
	400MHz			
	500MHz			
	1000 MHz			
LEVAL FLATNESS TEST @ -20dBm				
07	FREQUENCY	AVG LEVEL (dBm)		
	100KHz			
	1MHz			
	10 MHz			
	100MHz			
	200MHz			
	400MHz			
	500MHz			
	1000 MHz			

OSCILLOSCOPE P/N: DPO7054

Calibration ranges requirement as follows :-

S/N	RANGE OF UNIT UNDER CALIBRATION	STANDARD READING	UUC READING	% OF ERROR READING	UNCERTAINTY (+)
01	**CH 1 : ACCOUPLE**	**Vp-p(mV) @1KHz**	**Vp-p(mV) @1KHz**		
	2 mV/div	10.000 mV**p-p**			
	5 mV/div	25.000 mV**p-p**			
	10 mV/div	50.000 mV**p-p**			
	20 mV/div	100.0 mV**p-p**			
	50 mV/div	250.0 mV**p-p**			
	100 mV/div	500.0 mV**p-p**			
	Vp-p (mV) @1kHz				
	200 mV/div	1.0000 V**p-p**			
	500 mV/div	2.5000 V**p-p**			
	1 V/div	5.0000 V**p-p**			
	2 V/div	10.000 V**p-p**			
	5 V/div	25.000 V**p-p**			
	10 V/div	50.000 V**p-p**			
S/N	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING**	**UUC READING**	**% OF ERROR READING**	**UNCERTAINTY (+)**
02	**CH 1 :DC COUPLE**	**(mVdc)**	**(mVdc)**		
	2 mV/div	10.000 mV**dc**			
	5 mV/div	25.000 mV**dc**			
	10 mV/div	50.000 mV**dc**			
	20 mV/div	100.0 mV**dc**			
	50 mV/div	250.0 mV**dc**			
	100 mV/div	500.0 mV**dc**			
	(Vdc)				
	200 mV/div	1.0000 V**dc**			
	500 mV/div	2.5000 V**dc**			
	1 V/div	5.0000 V**dc**			
	2 V/div	10.000 V**dc**			
	5 V/div	25.000 V**dc**			
	10 V/div	50.000 V**dc**			

S/N	RANGE OF UNIT UNDER CALIBRATION	STANDARD READING	UUC READING	% OF ERROR READING	UNCERTAINTY (±)
03	**CH2 : ACCOUPLE**	**(mVp-p) @1KHz**	**(mVp-p) @1KHz**		
	2 mV/div	10.000 mV**p-p**			
	5 mV/div	25.000 mV**p-p**			
	10 mV/div	50.000 mV**p-p**			
	20 mV/div	100.0 mV**p-p**			
	50 mV/div	250.0 mV**p-p**			
	100 mV/div	500.0 mV**p-p**			
	Vp-p (mV) @1kHz				
	200 mV/div	1.0000 V**p-p**			
	500 mV/div	2.5000 V**p-p**			
	1 V/div	5.0000 V**p-p**			
	2 V/div	10.000 V**p-p**			
	5 V/div	25.000 V**p-p**			
	10 V/div	50.000 V**p-p**			
S/N	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING**	**UUC READING**	**% OF ERROR READING**	**UNCERTAINTY (±)**
04	**CH2 : DC COUPLE**	**(mVdc)**	**(mVdc)**		
	2 mV/div	10.000 mV**dc**			
	5 mV/div	25.000 mV**dc**			
	10 mV/div	50.000 mV**dc**			
	20 mV/div	100.0 mV**dc**			
	50 mV/div	250.0 mV**dc**			
	100 mV/div	500.0 mV**dc**			
	(Vdc)				
	200 mV/div	1.0000 V**dc**			
	500 mV/div	2.5000 V**dc**			
	1 V/div	5.0000 V**dc**			
	2 V/div	10.000 V**dc**			
	5 V/div	25.000 V**dc**			
	10 V/div	50.000 V**dc**			

S/N	RANGE OF UNIT UNDER CALIBRATION	STANDARD READING	UUC READING	% OF ERROR READING	UNCERTAINTY (±)
05	**CH3 :AC COUPLE**	**(mVp-p) @1KHz**	**(mVp-p) @1KHz**		
	2 mV/div	10.000 mV**p-p**			
	5 mV/div	25.000 mV**p-p**			
	10 mV/div	50.000 mV**p-p**			
	20 mV/div	100.0 mV**p-p**			
	50 mV/div	250.0 mV**p-p**			
	100 mV/div	500.0 mV**p-p**			
	Vp-p (mV) @1kHz				
	200 mV/div	1.0000 V**p-p**			
	500 mV/div	2.5000 V**p-p**			
	1 V/div	5.0000 V**p-p**			
	2 V/div	10.000 V**p-p**			
	5 V/div	25.000 V**p-p**			
	10 V/div	50.000 V**p-p**			
S/N	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING**	**UUC READING**	**% OF ERROR READING**	**UNCERTAINTY (±)**
06	**CH3 :DC COUPLE**	**(mVdc)**	**(mVdc)**		
	2 mV/div	10.000 mV**dc**			
	5 mV/div	25.000 mV**dc**			
	10 mV/div	50.000 mV**dc**			
	20 mV/div	100.0 mV**dc**			
	50 mV/div	250.0 mV**dc**			
	100 mV/div	500.0 mV**dc**			
	(Vdc)				
	200 mV/div	1.0000 V**dc**			
	500 mV/div	2.5000 V**dc**			
	1 V/div	5.0000 V**dc**			
	2 V/div	10.000 V**dc**			
	5 V/div	25.000 V**dc**			
	10 V/div	50.000 V**dc**			

S/N	RANGE OF UNIT UNDER CALIBRATION	STANDARD READING	UUC READING	% OF ERROR READING	UNCERTAINTY (±)
07	**CH4 :AC COUPLE**	**(mVp-p) @1KHz**	**(mVp-p) @1KHz**		
	2 mV/div	10.000 mV**p-p**			
	5 mV/div	25.000 mV**p-p**			
	10 mV/div	50.000 mV**p-p**			
	20 mV/div	100.0 mV**p-p**			
	50 mV/div	250.0 mV**p-p**			
	100 mV/div	500.0 mV**p-p**			
	Vp-p (mV) @1kHz				
	200 mV/div	1.0000 V**p-p**			
	500 mV/div	2.5000 V**p-p**			
	1 V/div	5.0000 V**p-p**			
	2 V/div	10.000 V**p-p**			
	5 V/div	25.000 V**p-p**			
	10 V/div	50.000 V**p-p**			
S/N	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING**	**UUC READING**	**% OF ERROR READING**	**UNCERTAINTY (±)**
08	**CH4 :DC COUPLE**	**(mVdc)**	**(mVdc)**		
	2 mV/div	10.000 mV**dc**			
	5 mV/div	25.000 mV**dc**			
	10 mV/div	50.000 mV**dc**			
	20 mV/div	100.0 mV**dc**			
	50 mV/div	250.0 mV**dc**			
	100 mV/div	500.0 mV**dc**			
	(Vdc)				
	200 mV/div	1.0000 V**dc**			
	500 mV/div	2.5000 V**dc**			
	1 V/div	5.0000 V**dc**			
	2 V/div	10.000 V**dc**			
	5 V/div	25.000 V**dc**			
	10 V/div	50.000 V**dc**			

S/N	RANGE OF UNIT UNDER CALIBRATION	STANDARD READING	UUC READING	% OF ERROR READING	UNCERTAINTY (±)
09	TIME MARKER	(nS)	(nS)		
	10 nS	10.00 nS			
	20 nS	20.00 nS			
	100 nS	100.0 nS			
	200 nS	200.0 nS			
	500 nS	500.0 nS			
S/N	RANGE OF UNIT UNDER CALIBRATION	STANDARD READING	UUC READING	% OF ERROR READING	UNCERTAINTY (±)
10	TIME MARKER	(µS)	(µS)		
	1 µS	1.000 µS			
	2 µS	2.000 µS			
	5 µS	5.000 µS			
	10 µS	10.00 µS			
	20 µS	20.00µS			
	50 µS	50.00 µS			
	100 µS	100.0 µS			
	200 µS	200.0 µS			
	500 µS	500.0 µS			
S/N	RANGE OF UNIT UNDER CALIBRATION	STANDARD READING	UUC READING	% OF ERROR READING	UNCERTAINTY (±)
11	TIME MARKER	(mS)	(mS)		
	1 mS	1.000 mS			
	2 mS	2.000 mS			
	5 mS	5.000 mS			
	10mS	10.00 mS			
	20mS	20.00 mS			
	50mS	50.00 mS			
	100 mS	100.0 mS			
	200 mS	200.0 mS			
	500 mS	500.0 mS			

BANDWIDTH

STANDARD READING	**CH-1**		**CH-2**		**UNCERTAINTY**
	AC COUPLE	**DC COUPLE**	**AC COUPLE**	**DC COUPLE**	**(±)**
FREQUENCY @1Vp-p	**Vp-p (VAC)**	**Vp-p (VAC)**	**Vp-p (VAC)**	**Vp-p (VAC)**	
50 KHz					
100 KHz					
500 KHz					
1 MHz					
10 MHz					
50 MHZ					
100 MHz					
300 MHz					
500 MHz					
STANDARD READING	**CH-3**		**CH-4**		**UNCERTAINTY**
	AC COUPLE	**DC COUPLE**	**AC COUPLE**	**DC COUPLE**	**(±)**
FREQUENCY @1Vp-p	**Vp-p (VAC)**	**Vp-p (VAC)**	**Vp-p (VAC)**	**Vp-p (VAC)**	
50 KHz					
100 KHz					
500 KHz					
1 MHz					
10 MHz					
50 MHZ					
100 MHz					
300 MHz					
500 MHz					

OSCILLOSCOPE P/N: DPO7054

Calibration ranges requirement as follows :-

CH1 : AC COUPLE		
SR.No	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING Vp-p @1kHz**
01	2 mV/div	10.000 mV**p-p**
	5 mV/div	25.000 mV**p-p**
	10 mV/div	50.000 mV**p-p**
	20 mV/div	100.0 mV**p-p**
	50 mV/div	250.0 mV**p-p**
	100 mV/div	500.0 mV**p-p**
		Vp-p (mV) @1KHz
	200 mV/div	1.0000 V**p-p**
	500 mV/div	2.5000 V**p-p**
	1 V/div	5.0000 V**p-p**
	2 V/div	10.000 V**p-p**
	5 V/div	25.000 V**p-p**
	10 V/div	50.000 V**p-p**
	CH1 : DC COUPLE	
SR.No	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING**
02	2 mV/div	10.000 mV**dc**
	5 mV/div	25.000 mV **dc**
	10 mV/div	50.000 mV**dc**
	20 mV/div	100.0 mV**dc**
	50 mV/div	250.0 mV**dc**
	100 mV/div	500.0 mV**dc**
		(Vdc)
	200 mV/div	1.0000 V**dc**
	500 mV/div	2.5000 V**dc**
	1 V/div	5.0000 V**dc**
	2 V/div	10.000 V**dc**
	5 V/div	25.000 V**dc**
	10 V/div	50.000 V**dc**
	CH2 : AC COUPLE	
SR.No	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING @ 1KHz**
03	2 mV/div	10.000 mV**p-p**
	5 mV/div	25.000 mV**p-p**
	10 mV/div	50.000 mV**p-p**
	20 mV/div	100.0 mV**p-p**
	50 mV/div	250.0 mV**p-p**
	100 mV/div	500.0 mV**p-p**
		(Vp-p) @1kHz
	200 mV/div	1.0000 V**p-p**
	500 mV/div	2.5000 V**p-p**
	1 V/div	5.0000 V**p-p**
	2 V/div	10.000 V**p-p**
	5 V/div	25.000 V**p-p**
	10 V/div	50.000 V**p-p**

CH2 : DC COUPLE		
SR.No	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING**
04	2 mV/div 5 mV/div 10 mV/div 20 mV/div 50 mV/div 100 mV/div 200 mV/div 500 mV/div 1 V/div 2 V/div 5 V/div 10 V/div	10.000 mV**dc** 25.000 mV**dc** 50.000 mV**dc** 100.0 mV**dc** 250.0 mV**dc** 500.0 mV**dc** **(Vdc)** 1.0000 V**dc** 2.5000 V**dc** 5.0000 V**dc** 10.000 V**dc** 25.000 V**dc** 50.000 V**dc**
CH3 : AC COUPLE		
SR.No	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING @ 1KHz**
05	2 mV/div 5 mV/div 10 mV/div 20 mV/div 50 mV/div 100 mV/div 200 mV/div 500 mV/div 1 V/div 2 V/div 5 V/div 10 V/div	10.000 mV**p-p** 25.000 mV**p-p** 50.000 mV**p-p** 100.0 mV**p-p** 250.0 mV**p-p** 500.0 mV**p-p** **(Vp-p)** 1.0000 V**p-p** 2.5000 V**p-p** 5.0000 V**p-p** 10.000 V**p-p** 25.000 V**p-p** 50.000 V**p-p**
CH3 : DC COUPLE		
SR.No	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING**
06	2 mV/div 5 mV/div 10 mV/div 20 mV/div 50 mV/div 100 mV/div 200 mV/div 500 mV/div 1 V/div 2 V/div 5 V/div 10 V/div	10.000 mV**dc** 25.000 mV**dc** 50.000 mV**dc** 100.0 mV**dc** 250.0 mV**dc** 500.0 mV**dc** **(Vdc)** 1.0000 V**dc** 2.5000 V**dc** 5.0000 V**dc** 10.000 V**dc** 25.000 V**dc** 50.000 V**dc**

CH4 : AC COUPLE		
SR.No	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING @ 1KHz**
07	2 mV/div 5 mV/div 10 mV/div 20 mV/div 50 mV/div 100 mV/div 200 mV/div 500 mV/div 1 V/div 2 V/div 5 V/div 10 V/div	10.000 mV**p-p** 25.000 mV**p-p** 50.000 mV**p-p** 100.0 mV**p-p** 250.0 mV**p-p** 500.0 mV**p-p** **(Vp-p)** 1.0000 V**p-p** 2.5000 V**p-p** 5.0000 V**p-p** 10.000 V**p-p** 25.000 V**p-p** 50.000 V**p-p**
CH4 : DC COUPLE		
SR.No	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING**
08	2 mV/div 5 mV/div 10 mV/div 20 mV/div 50 mV/div 100 mV/div 200 mV/div 500 mV/div 1 V/div 2 V/div 5 V/div 10 V/div	10.000 mV**dc** 25.000 mV**dc** 50.000 mV**dc** 100.0 mV**dc** 250.0 mV**dc** 500.0 mV**dc** **(Vdc)** 1.0000 V**dc** 2.5000 V**dc** 5.0000 V**dc** 10.000 V**dc** 25.000 V**dc** 50.000 V**dc**

TIME MARKER		
SR.No	**RANGE OF UNIT UNDER CALIBRATION**	**STANDARD READING**
09	10 nS 20 nS 100 nS 200 nS 500 nS	10.00 nS 20.00 nS 100.0 nS 200.0 nS 500.0 nS
	1 µS 2 µS 5 µS 10 µS 20 µS 50 µS 100 µS 200 µS 500 µS	1.000 µS 2.000 µS 5.000 µS 10.00 µS 20.00µS 50.00 µS 100.0 µS 200.0 µS 500.0 µS
	1 mS 2 mS 5 mS 10 mS 20 mS 50 mS 100 mS 200 mS 500 mS	1.000 mS 2.000 mS 5.000 mS 10.00 mS 20.00 mS 50.00 mS 100.0 mS 200.0 mS 500.0 mS

SR.No	**BANDWIDTH**	
10	FREQUENCY	50 KHz, 100 KHz, 500 KHz, 1 MHz, 10 MHz, 50 MHz, 100 MHz, 300 MHz, 500 MHz

Tender No.: AIESL/MMD/EOD/RD07/54/25 **DATE: 28.05.2025**

SPECIAL TERMS & CONDITIONS

COMPLETION PERIOD:

The calibration should be carried out in 3rd week of August and period of calibration is max 3 days.

WITHHOLDING THE PAYMENTS:

AIESL may withhold part or whole of any payment due to the contractor, which in opinion of AIESL, Mumbai is necessary to protect himself from loss on account of:

a) Defective work not remedied or guarantees not met as per contract.
b) Failure to meet the mutually agreed schedules and scope of work within given time.
c) Partial completion of the subject work and denied to complete the work as per tender.

SITE CONDITIONS:

i) The site for this work is in old airport at AIESL premises at KALINA SANTACRUZ EAST MUMBAI- 4OOO29 and it is a security sensitive area. The contractor will keep entry passes always valid and will employ safe practices at work.

ii) Interested bidders must visit the Site, study the tender documents, take the actual measurements and fully clarify to understand the exact work content and note the site conditions before quoting. This proposed work is to be done in existing working area; hence contractor must understand the site constraints.

iii) A qualified and responsible supervisor will always remain present at site, when the work is being carried out. He will ensure compliance of standard safety precautions and use of safety equipment.

iv) Calibration should be carried out in house at EOD, AIESL, Old Airport, Kalina Mumbai 400029

v) Any damage caused during the execution of work will be made good by the contractor on his own cost else the cost of damages will be recovered from the payment due to contractor.

ENGINEERING FACILITIES DIVISION

EFD/05-00/048 **Date : 16/04/2025**

SAFETY NORMS

The following norms are to be observed by the Contractor for the construction, installation, maintenance, repair, overhaul and erection jobs at the AIESL Premises.

As a part of the contract, contractor must satisfy the under mentioned safety requirement and must always ensure that these are followed without deviation:

Contractor should ensure in writing before starting job that their workers and Supervisor are trained and having adequate knowledge & experience of work and related safety precautions to follow.

Smoking is strictly prohibited in areas with combustibles or flammable and other areas where smoking are prohibited.

Any hot job (welding, soldering, gas, cutting etc.) however minor it may be or any job which involves open flame or using a hot source or temporary electrical connections shall not be done without prior hot work permission from Fire Officer-AIESL. Contractors are not permitted to carry out any hot work on holidays, Saturdays and Sundays or beyond AIESL normal working hours without AIESL-Supervision and prior permission in writing.

It is entirely contractor's responsibility to ensure that protective equipments such as safety belts, lifelines, helmets, Safety Shoes etc. depending on the jobs are issued & used by contract workmen. Contractor's supervisor shall be present at site all the time and ensure that these PPEs are used by workers. If contractor need any suggestion on the matter, contractor can approach EIC/Safety Officer-AIESL. Any lapse on matters of safety will be viewed seriously.

All equipment used to carry out work shall be rendered safe. No equipments such as ladders, tractors, cranes, etc. or welding sets or any tools which belong to the AIESL shall be used by contractor unless specifically mentioned in

writing in the terms of contract. Notwithstanding these it is obligatory on contractor's part, to verity the quality and safety aspects of such equipment, machinery or tools so that no injury or accident will occur when used in the expected manner. Any incident occurs during work, contractors are entirely responsible for it including compensation that may arise out of the incident.

Contractor must clearly bear in mind that a competent supervisor shall always be on site when contractor's men are at work. Lapse on this point shall be viewed seriously irrespective of occurrence of any incidents.

Contractor shall ensure that safety precautions expected of contractor's professional work are completely understood by contractor's supervisors and workers and that these are followed. Contractor shall also ensure that in every job that contractor must take cognigence of varying site conditions. Contractor's staff are completely knowledgeable about the hazards and dangers associated with the work for which due alertness and safe working methods shall be followed.

Site work is quite different from work in an organized workshop. Contractor shall bear this point in mind so that proper work methods to protect contractor's staff from any danger can be evolved.

Contractors are not permitted to carry out work within the premises of this AIESL which otherwise under conditions of contract are expected to be carried out in contractor's premises.

Contractor's materials which are flammable / combustible must under no circumstances be stored in any of our workshops or building or near aircraft. Contractor shall plan of temporary sheds so located that a fire in such a shed shall not involves any of the AIESL property. A Separate permission must be taken from Safety Officer-AIESL for it.

Supervisors and field staff may not be aware of the seriousness of consequences of going near aircraft under run-up. Contractors are responsible to see that out of curiosity and lack of awareness while going in a vehicle or otherwise people should not approach an aircraft under run-up.

Precautions During Welding

The contractor must ensure that welding machine is equipped with an earthing cable without joints.

Electrical supply to be tapped from power source identified by MSE-AIESL & connections must be firm to eliminate sparking. Circuit must be protected by fuse.

There should be no flammable material nor any spillage of such material in the locations of work spot.

There should be no joint in the phase side conductor cables.

If the welding is to be carried out in the vicinity of aircraft, separating, distance should not be less than 150 feet.

Welding job should not be carried out directly above or below the aircraft in the hangar.

The welding work carried out in workshop should be under the personal supervision of Engineering Facilities Division Supervisor. He will ensure that welding work is carried out in safe location & all flammable material are removed from the site

The said Supervisor should inform the related workshop / Section Incharge (eg. COD, AOD etc.) that the welding job is being be carried out.

The Contractor's staff must be appraised of the hazards of

i) Being near to an engine under run-up and
ii) Not following smoking restrictions.

The above should also be conveyed in writing to concerned contractor/ supervisor before starting the job.

Additional Precautions & Instructions

The Contractor should ensure to arrange due supervision to avoid accident and cause of accident.

The Contractor must be careful regarding "SAFETY FIRST" during working and in AIESL premises.

Each hot job that may be carried out particularly beyond office hours or on Holidays must have prior concurrence from a responsible authority of the rank of not below Technical Officer from (EFD).

The Contractor must ensure provision of adequate firefighting capacity to deal with at incident state itself, such provision should not be less than 2-gallon foam extinguishers properly maintained by them. The staff should know the uses of the above-mentioned fire extinguishers.

Jobs will be carried out only after obtaining a daily work permit from the AIESL.

1. General:

a. All workers to wear helmets at the construction site. To be provided by the contractor.

b. All workers to wear safety shoes. To be provided by the contractor.

c. All workers to wear suitable clothing for the job required e.g. Welders to have leather aprons while welding and gloves to protect from the heat. To be provided by the contractor.

d. All workers to be familiarised by the contractor the safe methods of operating and procedures in case of an emergency.

e. All workers to attend a class to be held by the Safety Engineer-AIESL to familiarise the safety aspects on site.

f. All scaffolding to be used should be of steel pipes and with adjustable clamps. To be provided by the contractor.

g. All workers must be covered under the workmen compensations act. A suitable insurance policy to be taken and original copy to be kept with AIESL. All statutory regulations etc. to be observed by the contractor, and in case of any non-compliance the AIESL must be indemnified by the contractor.

h. Where applicable, provident fund records to be kept at site.

i. All wage records to be kept at site and payments to be as per the minimum wages act.

j. Working in green field sites poses a problem of snake bites. Snakes' serums to be kept at site. Refrigeration will be provided by AIESL, if needed.

k. Chipping etc, to be done wearing protective eyeglasses.

l. Various types of fire extinguishers to be used depending upon the nature of fire are available with EFD Fire Section. Contractor has to ensure that they position at site, suitable fire extinguisher type listed below, depending on nature of work.

1. 1 No. of soda acid type for wood/paper type fires.
2. 1 No. of dry powder type fire extinguishers.
3. 1 No. of CO2 type fire extinguishers.
4. Two buckets of sand/water, preferably sand.

m. All unsafe incidents and occurrences will be reported to the site engineer immediately.

Working at heights:

a. Contractor has to ensure that only workers capable of scaling heights should be deputed to do the jobs.

b. All scaffolding to be made of steel pipes and with adjustable steel clamps. This should be tested and certified by the site supervisor of the contractor and AIESL site supervisor/Engineer to confirm the same. If possible, use A crow make scaffolding.

c. Bamboo/wooden ladders to be checked for missing rungs and the fitness of the ladder should be certified by the AIESL engineer at site/ Safety Officer.

d. All ladders to be tied at the top end, to prevent the slipping of ladders.

e. All workers at height to wear nylon safety belts, as approved by AIESL. The other end of the belt to be hooked to a structural member of the building.

f. While working on sloping roofs, nylon nets to be provided below to catch falling objects.

g. Men working heights, should be provided with holsters for keeping hand tools for easy retrieval and will leave both hands free for climbing.

h. As far as possible, mechanise the upward movement of materials, so that head load can be avoided.

i. Daily height work permit approved by Executive/AGM/DGM from AIESL be obtained for working at heights before beginning of work.

Electricals

a. All electrical equipment brought to site, should be checked by the factory/ site electrical supervisory staff of the AIESL, for the suitability of the equipment and certified by them. These certificates should be prominently displayed on the equipment.

b. All electrical equipment should have proper proper earthing.

c. The distribution board to have an ELCB of 30 mA capacity to be provided for the hand tools circuits.

d. All connections through the distribution board to be made with a plug and socket and no loose wires, with wooden splinters.

e. All hand tools to be earthen.

f. All welding equipment to be provided with a cutout switch. The welding cables should be of adequate length for the earthing of the job and usage of rods etc. is not permitted.

g. All wires/cables to run only above ground level at a height of min. 2.5 m.

h. All outdoor light fixtures left unattended for the night time work must be checked for water tightness.

i. While working with operating equipment they should be disconnected electrically and the fuses to be handed over to the supervisor of AIESL for safe keeping.

Vehicular traffic: (Applicable to vehicle owned by the contractor)

a. All vehicles delivering the goods must be driven by licenced driver.

b. Cleaners not to drive.

c. The vehicle must be in good condition.

d. Unsafe acts like carrying people on running boards etc should be avoided.

e. When outside vehicles come the contractor to ensure safe discharge of goods and send out immediately.

f. Wherever possible all heavy machinery and equipment to be unloaded using a crane, or a derrick.

AI ENGINEERING SERVICES LIMITED

MATERIALS MANAGEMENT DIVISION
OLD AIRPORT, SANTACRUZ (EAST), MUMBAI – 400 029

Tender No.: AIESL/MMD/EOD/RD07/54/25 **DATE: 28.05.2025**

Bidders General Information

BIDDER'S DETAILS:

S. No.	Required Details	To be filled by the Bidder
1	Name of the Company	
2	Status of the Bidder – a) Whether a Firm (Proprietary, Partnership), Company, Corporation, Registered Society	
	b) If the Bidder is a partnership firm, then please state whether the signatory has the authority to refer to arbitration, any disputes concerning the business of the partnership agreement or a power of attorney.	
	c) If the Bidder is a Company incorporated under the Companies Act, 1956 / 2013, then the signatory should have the authority to submit the bid on behalf of the said Company and refer to arbitration disputes arising under this Tender and / or Contract by a power of attorney board resolution.	
3	Company office Address of the bidder	
4	Name of the Contact Person Designation Telephone no. / Mobile no. Email Address	
5	GST registration number	
6	PAN Card Number	
7	Copy of valid certificate of registration with agencies / bodies as mentioned under the Clause 'Benefits / Preference for Micro & Small Enterprises (MSEs)' must be submitted.	
8	Please specify the details of the registration certificate:	
	Registration Certificate No.	
	Date of Issue	
	Valid Up to	
	Item covered under Registration Certificate	
9	Do you have any ongoing disputes with any Govt. or statutory agencies? *	
10	Is the bidder a MSE unit owned by a person belonging to Scheduled Caste or Scheduled Tribe	
11	Relaxation to Start-up companies (whether MSME or Non-MSME) as per clause in tender terms will be given provided, they submit the 'Certificate of Recognition' as mentioned in tender document under heading "Exemption of EMD" in tender terms.	
	a) Are you a Start-up Company	
	b) If yes, Certificate of Recognition to be attached.	
12	Any other relevant information	

(*) – if yes, please provide details.

Date:
Place:

Bidder Signature:
Name &Designation:
Company Name &Seal:

AI ENGINEERING SERVICES LIMITED

MATERIALS MANAGEMENT DIVISION
OLD AIRPORT, SANTACRUZ (EAST), MUMBAI – 400 029

Tender No.: AIESL/MMD/EOD/RD07/54/25 **DATE: 28.05.2025**

❖ Payment Terms:

- No request for advance / pre-payment will be entertained.
- Duly certified invoices to be submitted to Invoicing section along with Proof of Completion of the service.
- Payment will be made as per terms governed by GeM.
- 100 % payment will be made as per GeM guidelines.
- TDS/ taxes shall be deducted by AIESL from payment made against these invoices, as per the applicable laws.

Date:
Place:

Bidder Signature:
Name &Designation:
Company Name &Seal:

AI ENGINEERING SERVICES LIMITED

MATERIALS MANAGEMENT DIVISION
OLD AIRPORT, SANTACRUZ (EAST), MUMBAI – 400 029

Tender No.: AIESL/MMD/EOD/RD07/54/25 **DATE: 28.05.2025**

❖ Penalty Clause:

- If the supplier fails to supply the item/fails to complete the job within the time frame shall be liable to pay the liquidated damage (LD)/penalty charges at the rate 0.5 % per week or part thereof the value of the undelivered portation of the goods (Excluding taxes and delivery charges) subject to maximum of 10% of the value of the undelivered or delayed goods. This is to be recovered from the Security Deposit/ Performance Guarantee.
- There should normally be no system of waiver of LDs for delayed supplies in supply contracts and it may strictly be an exception rather than a rule. For an extension of the delivery date with waiver of LD, approval of the CA with consultation of associated Finance may be taken and justifications recorded.
- **Penalty for Substandard / defective Quality / Short supply:** At the time of delivery / acceptance of the item / goods if it is found that the items / goods so delivered are not as per the specifications given in the Contract / Purchase Order then AIESL reserves the right to reject the entire lot and get the entire quantity replaced free of cost by the bidder. The service is acceptable as per the specification provided in the tender and subject to quality control of the user department

❖ Termination and Exit Clause:

- In case of unsatisfactory performance or breach of any of the clauses of this contract, AIESL would issue a notice of 30 days to the party to rectify the breach and improve the performance failing which AIESL shall be at liberty to terminate this agreement by providing 30 days written notice to the party. The party shall not have any right to dispute or question the judgment of AIESL of the unsatisfactory performance of the party.
- Notwithstanding the above, AIESL shall also be at liberty to terminate this agreement for any reason including change in situation/circumstances, etc. by providing the party with 90 days written notice. The party shall also be at liberty to terminate this contract by providing AIESL with 90 days written notice. In such an event, the terminating party shall have no right to claim compensation/damages, etc. from the terminating party on account of early termination. However, the party shall duly comply with their respective obligations during the notice period and thereafter, shall discharge the obligations arising out of the agreement till the termination.

Date: **Bidder Signature:**
Place: **Name &Designation:**
Company Name &Seal: