Ref No.: ITI/BGP/RFP/PCB-24_Layers/2021-22Date: 10.07.2021



(A Government of India Undertaking)

REQUEST FOR PROPOSAL (RFP)

FOR ESTABLISHING THE INFRASTRUCTURE, SUPPLY, INSTALLTION & COMMISSIONING OF CONTROLLED IMPEDANCE MULTI LAYER PCB PLANT UP TO 24 LAYERS ON TURNKEY BASIS AT ITI BANGALORE PLANT

ITI Limited,
Bengaluru Plant
Dooravani Nagar, Bengaluru-560016
Website: itiltd-india.com
Ph No: 080-28503662

e-mail: avmurdeshwar bgp@itiltd.co.in

Last Date and Time for submission: 05.08.2021 @ 4 pm

TABLE OF CONTENT

SECTION NO.	ITEM	PAGE NO.
I	INTRODUCTION TO THE PROPOSAL	3-4
П	DETAILED SCOPE OF WORK	5-6
III	MINIMUM ELIGIBILITY CRITERIA	7
IV	INSTRUCTIONS TO THE BIDDERS	8-11
V	INSTRUCTIONS FOR ONLINE BID SUBMISSION TO BIDDERS	12-14
	BIDS	
VI	A. EMD	15-16
	B. TECHNICAL BID	
	C. COMMERCIAL BID	
VII	GENERAL (COMMERCIAL) CONDITIONS OF THE TENDER	17-22
VIII	LIST OF DOCUMENTS TO BE SUBMITTED	23-24
V 111	AS A PART OF THE BID	23-24
IX	BRIEF TECHNICAL SPECIFICATIONS	25
ANNEXURE-I-IV	TECHNICAL SPECIFICATIONS	26-33
ANNEXURE-V	FORMAT FOR PERFORMANCE BANK GUARANTEES	34-35
ANNEXURE-VI	FORMAT FOR THE BID SECURITY/ EMD	36
ANNEXURE-VII PRE-CONTRACT INTEGRITY PACT		37-42
ANNEXURE-VIII DECLARATION THAT THE BIDDER HAS NOT BEEN BLACKLISTED/DEBARRED		43
ANNEXURE-IX	NON-DISCLOSURE AGREEMENT	44-45

SECTION I: INTRODUCTION TO THE PROPOSAL

1.1. Brief about Intender and Tender Intent

ITI Limited ("ITIL"), the first CPSU of the Independent India is a manufacturer of Telecom equipment and is providing various Telecom and IT goods and services to its users. ITI has diversified into new areas of providing end to end, infra services and turnkey solutions in the domain of IT, Telecom, IoT and Smart city for various Government / Private users. There are many ongoing OFC infra projects, Inter City /Intra City at hand, offering complete solution for integration of telecom network to name a few Army Static Switched Communication Network (ASCON) phase 4 for Army, Defence Communication Network (DCN), Network For Spectrum (NFS) for BSNL, and many such projects are under progress. ITIL already has done many such project as Master System Integration (MSI) for Government Departments and their subsidiaries. ITIL has an experience and track record to execute such projects with highest degree of efficiency and skill and earned good name to execute projects within given time lines.

As part of its revival has upgraded many of its manufacturing infra to latest technologies in SMT line, Fabrication shop, PCB manufacturing, 3D printing, Injection Moulding, test labs, etc. ITI Limited proposes to upgrade its existing 8 Layer PCB plant to 24 layer impedance controlled PCBs, which will befit in-house project like C-DOT Mini PDO, 4G (RRU Board, RLB (Radio Linearization Board), PAM (Power Amplifier Board), WAP (Wi-Fi Access Point), IP-Encryptors, DCN, IB-MHA, Mini OLT, Medical Electronics and also to gear up for future technologies such as 5G, AI, Robotics, IOT, etc.

In this Connection, ITIL invites sealed tenders for "ESTABLISHING THE INFRASTRUCTURE, SUPPLY AND INSTALLTION & COMMISSIONING OF CONTROLLED IMPEDANCE MULTI LAYER PCBs PLANT UP TO 24 LAYERS ON TURNKEY BASIS AT BANGALORE PLANT"

1.2 Purpose of Tender:

To invite Tender Bids from the interested companies having relevant financial capacity, Experienced work force and domain knowledge expertise to manage such projects matching with their experience in most professional and efficient manner to meet the requirements of Scope of Work (SoW) as mentioned in this document in general and in detail.

1.3 Scope of work:

The general scope of work include design of total plant, civil work, electrical work, supporting Utilities, Supply, installation & Commissioning for establishing manufacturing infra of controlled impedance multilayer PCBs up to 24 Layers with capacity of 2000 sq. mtr. per month on turnkey basis at Bangalore plant. The scope also includes providing the skilled / experienced manpower, training them for operation / Maintenance, Exploring market and bringing orders on revenue sharing basis. The detailed Schedule and Scope of Work is also provided in the Tender Document.

1.4 Important Information:

Sl. No.	Information	Details	
1.4.1	Tender Number	Ref No: ITI/BGP/RFP/PCB-24_Layers/2021-22 Date: 10.07.2021	
1.4.2	Tender Name	"Establishing the infrastructure, supply, installation & commissioning of controlled multi-layer PCB plant up to 24 layers on Turnkey basis at Bangalore plant"	
1.4.3	Work description/Nature of the work	Design of total plant, civil work, electrical plant, supporting Utilities, Supply, installation & Commissioning for establishing manufacturing infra of impedance controlled 24 Layer PCBs at Bangalore plant	
1.4.4	Date of Issue/Publishing of the Tender	10.07.2021	
1.4.5	Last Date Of Clarifications on Tender	19.07.2021	
1.4.6	Pre-Bid Meeting (Virtual/Physical)	19.07.2021	
1.4.7	Last Date and Time for Submission of Bids	05.08.2021 @4 pm	
1.4.8	Date and Time of Opening of Technical Bids	06.08.2021 @ 11 am	
1.4.9	Date and Time of Opening of Financial Bids	Will be intimated later	
1.4.10	Tender Fee	Rs. 10,000/-(Rupees Ten thousand only)	
1.4.11	EMD	1 Cr in the form of DD/Bankers Cheque /BG	
1.4.12	Bid Validity	180 Days	
1.4.13	Validity of the contract	Seven Years	
1.4.14	Attachments/Annexures	Formats and Specifications	
1.4.15	Tender issuing Authority	Deputy General Manager (IMM), Bangalore Plant, ITI Limited, Dooravani Nagar, Bengaluru – 560016	

--- END OF SECTION I ---

Ref No: ITI/BGP/RFP/ PCB-24 Layers /2021-22 Date: 10-07-21

SECTION II: DETAILED SCOPE OF WORK

The overall scope of work is Design of total plant, civil work, electrical plant, supporting Utilities, Supply, installation & Commissioning for establishing manufacturing infra of impedance controlled 24 Layer PCBs with a capacity of 2000 sq. mtr. per month as detailed at clause 9.5 on Turnkey basis at Bangalore plant.

The major activities include:

2. 1. CIVIL Works:

- 2.1.1 Planning & Execution: Plant Layout plan with the help of an architect and confirmation of Project Head/Manager. Identify area for various processes
- 2.1.2 Clearing of all the equipment's, fittings and fixtures from the existing F80 Hangar at Bangalore plant as well as in the basement.
- 2.1.3 Clearing and cleaning of the area behind F80 Hangar for installation of utilities like RO, Zero Discharge, DI, ETP, CDA Plant, HVAC Plant as required for the PCB Plant etc.,
- 2.1.4 Identify, Design & Construct Outside Utilities: HVAC Plant, ETP Plant, RO Water Plant, DI Water Plant, Water Sump (Capacity: 1,50,000 Litres), Waste Disposal unit, DI Plant, RO Plant, Zero Discharge, CDA Plant and Chiller Plant
- 2.1.5 Identify & Construct **Inside Utilities**: Cold Storage Room, Raw material store room and Chemical Store room.
- 2.1.6. Implement the Drainage, Plumbing and Sanitary System for the entire plant.
- 2.1.7 **Flooring:** Acid Resistant, Epoxy and ESD (FPT). Identify & provision of other utilities as per annexure-4.
- 2.1.8. Clean Room class 10,000 for DI, Cut sheet laminator & LED UV Exposure with Yellow lighting
- 2.1.9 Clean Room Class 10,000 for Photo Plotter and 1,00,000 for Solder Mask
- 2. 1.10 Planning and execution of Exhaust Pipe line and Installation of Copper Recovery Plant

2.2. ELECTRICAL Works:

- 2.2.1 Evaluation of available load and bring out load required for project.
- 2.2.2 Designing & Execution of Electrical works: Based on Machine specifications/requirements, Utility Power ratings identify UPS/Servo Stabilizer requirements, Laying of Electrical power / HT & LT cables as required for the entire plant with respective control panels with protection circuits, LED Light fittings, Laying of Network Cables with plant central server.
- 2. 2.2 Planning and Laying of Fire Alarm systems and Cables for CC TV monitoring Systems.

2.3. Supply, Installation & Commissioning of Machineries & Test equipment's:

- 2.3.1 Supply of Machineries & Instruments and Installation of Machineries & Instruments
- 2.3.2 Commissioning of Machineries & Instruments
- 2.3.3 Acceptance testing and handing over of Machineries & Test instruments
- 2.3.4 The bidder has to supply raw materials & consumables for 1000 Sq. Mt. to establish process, trail run, training & manufacturing.

2.4. Manpower, Training, marketing & Certification

- 2.4.1 Training on Operations, Processing and Maintenance shall be provided for Machineries/ Test Equipment's/ Utilities
- 2.4.2 Placement of qualified, skilled and experienced manpower for the period of 2 years (Till the completion of the warranty) as mentioned in clause no. 9.6
- 2.4.3 Finding out potential customers for PCB products (refer clause 9.5 for details)
- 2.4.4 Submission of Essential certification / approvals (MIL-PRF-31032, AS9100D 2015, UL, LCSO/ JSS) required for marketing and manufacturing
- 2.4.5 Project Handover

2.5 Comprehensive Warranty and AMC

- 2.5.1 The Bidder shall provide comprehensive on-site warranty for a minimum period of Two (02) years from the date of commissioning and handing over.
- 2.5.2 The CAMC will be for the period of 5 years after completion of warranty.
- 2.5.3 In the Service / shelf life of the machineries / Equipment's shall be 10 years and the letter of support from OEM should be provided for 10 years
- 2.5.4 Any breakdown during the warranty/CAMC period shall be attended by the Bidder within defined service level warranty/ agreement (SLW/ SLA) of informing the complainant through telephone/email.

2.5.4.1 Critical Break Down

- 24 Hrs with required spares

2.5.4.2 Noncritical Break Down

- 48 - 72 Hrs with required spares

--- END OF SECTION II ---

6

SECTION III: MINIMUM ELIGIBILITY CRITERIA

C	SECTION III: MINIMUM ELIGIBILITY CRITERIA				
Sl. No.	Criteria	Documentary Proof to be Submitted			
3.1	a) The bidder / partners must be, a company registered under the Companies Act, 1956/2013 or LLP, under LLP act 2008 or Partnership firm under Partnership Act 1932 and should be in operation for at least 5 years in the business of establishing PCB plant.	a) Copies of the Certificate(s) of Incorporation/Partnership Deed. Memorandum of association shall be provided by the bidder.			
	b)The consortium shall be one lead bidder with maximum two partners	b) The bidder shall provide the consortium partners agreement with detailed scope.			
2.2	a) The bidder's and their consortium partners should be financially strong, profitable having Positive Net worth in each of the last 3 financial years.	Audited financial statements for the last 3 years (2018- 19, 2019-20 and 2020-21) to be enclosed. In case, 2020-21 Balance Sheet is not audited till bid submission, CA			
3.2	b) Average Annual Financial Turnover of bidder / consortium partners during the last 3 years, shall be 80 Crs. ending on 31st March-2021 covering turnkey projects/ involving products related to impedance controlled high end PCB manufacturing systems.	Certified report shall be accepted.			
3.3	The bidder shall have CIN/PAN/GST registration	Self-certified copies CIN/PAN/GST registration to be provided			
3.4	Bidder should be ISO 9000/ 2015 certified company for the last 3 financial year	Copy of relevant certificates submitted.			
3.5	A. The Bidder must have successfully executed such turnkey projects involving supply, installation & commission of all the tender systems/ sub-systems during the last five years (till 31st March'2021). a. One project worth 50 Crs or b. 2 Projects worth 30 Cr each/ cumulative value or c. 3 projects worth 20 Cr each / cumulative value.	Copy of relevant work order(s)/Proof of execution along with completion/ ongoing certificate(s) with details from the client(s)/Users stating the work(s) executed by the bidder.			
	B. Also the bidder should have implemented at least two turnkey projects of ITI's capacity (clause no. 9.5) or one 24 layer PCB manufacturing plant				
3.6	The Bidder should not be blacklisted by any Govt. Dept. or any PSU in India as on the date of publication of this Tender.	Self-declaration by the bidder Duly signed by the authorized signatory.			
3.7	The bidder shall submit the list of customers with contact details with ref to point no 3.5	List of customers with contact details to be provided			
3.8	The bidder should be authorized supplier and integrator of the OEM's whose system/ sub systems are being quoted for this tender	OEM's authorization certificate to be provided with support letter from OEM for 10 years			
3.9	The Bidder & consortium partners shall meet the Govt guidelines released by Ministry of Finance, No.F. 18/37/2020 -PPD dtd. 8 th Feb 2021 (Restrictions under rule 144 xi)	Registration certificate from competent Authority shall be provided (if applicable)			

--- END OF SECTION III ---

SECTION IV: INSTRUCTIONS TO BIDDERS

4.1. Invitation to Bid:

Bids are invited from Companies/LLPs/Firms to participate in this Tender for "Establishing the infrastructure, supply, installation & commissioning of controlled impedance multi-layer PCB plant up to 24 layers on Turnkey basis at Bangalore plant" who meet the minimum eligibility criteria as specified in this Tender.

4.1.1. Bid Preparation Costs

- 4.1.2. The bidder shall be responsible for all costs incurred in connection with participation in this Tender process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of bid, in providing any additional information required by the ITI to facilitate the evaluation process, and in negotiating a definitive contract or all such activities related to the bid process.
- **4.1.3.** ITIL shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

4.2. <u>Authentication of Bid</u>

A bid should be accompanied by a power-of-attorney in the name of the signatory of the bidder.

4.3. <u>Bid Submission</u>

- 4.3.1. ITI's Tender document can be downloaded from ITI web site www.itiltd.in or CPP portal www.eprocure.gov.in The hard copy of the Tender document is not available for sale by ITI.
- 4.3.2. Tender document fee of Rs. 10,000 (Rupees Twenty Five Thousand Only) plus GST @18% (Total Rs. 10,000) shall be payable with the bid. This shall be submitted as a Demand Draft or through NEFT or bank transfer or Pay Order drawn at a Scheduled Bank/Post Office in favor of ITI Limited, Bengaluru plant, Dooravani Nagar, Bengaluru 560016. The Bank details for crediting/Transferring money to ITIL is as below.

Account No: 10637729854

Bank: State Bank of India

Branch: Dooravani Nagar

IFSC Code: SBIN0001438

- 4.3.3. The Tender document fee is non-refundable.
- 4.3.4. Bid shall be valid for at least 180 days from the date of Bid opening.

Date: 10-07-21

- 4.3.5. Bid shall be accompanied with an EMD from a Scheduled Bank for an amount of 1 Cr in the form of DD/Bankers Cheque /Bank Guarantee in favor of "ITI Ltd, Bengaluru Plant, Bengaluru-560016" valid for a minimum period of 180 days from the date of bid opening.
- 4.3.6. The successful bidder shall submit a Performance Bank Guarantee (PBG) from a Scheduled Bank to ITI Ltd for an amount equal to 3% of the work awarded valid for three years. The PBG should be submitted latest within 14 days from the date of ITI's requisition (LOI). The validity of the PBG shall be extended in case of the extension of original delivery time lines of the project.
- 4.3.7. The EMD of the unsuccessful Bidder will be returned/discharged to the Bidder within 30 days of finalization of selection of the Bidder. The EMD of the successful Bidder will be returned on submission of Performance Bank Guarantee for an amount equal to 3 % of the total value of the project awarded, for implementation.
- 4.4 Bids in prescribed Electronic forms shall be submitted in the E-Tender portal (EMD, Technical and Financial Bids, separately).
- 4.5 Qualified and interested bidders has to submit their bids in a three bid system as stated in Clause 4.5.2 below.
 - 4.5.1 Offers are to be submitted strictly through online for which procedure stated below in clause 4.5.2, 4.5.3 and Section-V needs to be followed.
 - 4.5.2. E-tendering Instructions to Bidders: Submission of Bids shall be only through online process which is mandatory for this Tender.
 - 4.5.3 Tender Bidding Methodology: Sealed Bid System:

Tender Type: 'Three bids i.e., EMD, Technical and Financial Bids shall be submitted by the bidder at the same time on the portal.

4.6 CLARIFICATIONS:

4.6.1. PRE BID MEETING:

4.6.1.1 Bidders desirous of seeking clarifications on the Tender, may send their queries before pre bid meeting through **email to: avmurdeshwar_bgp@itiltd.co.in** at the following address:

DGM (IMM), Bangalore Plant, ITI Limited, F-100, 2nd Floor Bangalore Plant, Dooravani Nagar, Bengaluru-560016, Ph: 080-28503662; E-mail: avmurdeshwar bgp@itiltd.co.in

Contact Details:

A. Shri Chiranjeevi, AGM- New PCB Plant, Mobile No: +91-7337650079 B. Shri A V Murdeshwar, DGM- IMM, Mobile No: +91-9845815940

4.6.1.2 The pre bid meeting date is as per clause 1.4, Bidders are requested to attend the pre bid meeting seeking all clarifications and suggestions. The corrigendum if required will be provided and will be announced on tender portal.

Date: 10-07-21

Ref No: ITI/BGP/RFP/ PCB-24 Layers /2021-22

- 4.7 On the Bid opening day, only technical bids will be opened. The Bidders who are desirous of attending bid opening may do so as per the e-Tendering process (TOE).
- 4.8 Bids without authenticated proof of Bid document fee, EMD and other technical compliances as required and prescribed in this Tender, will be rejected.
- 4.9 The date for opening the financial bids will be communicated to all technically qualified and eligible bidders separately, through registered email.
- 4.10 The address for all correspondences regarding this Tender shall be:

DGM IMM), Bangalore Plant, ITI Limited, F-100, 2nd Floor Bangalore Plant, Dooravani Nagar, Bengaluru-560016 Ph: 080-28503662, E-mail: avmurdeshwar bgp@itiltd.co.in

- 4.11 The offers prepared by the Bidders and all the correspondences and documents relating to the offers submitted/exchanged by the Bidder, shall be written in English language.
- 4.12 ITI reserves the right to suspend or cancel the Tender process at any stage, or to accept, or reject any, or all offers at any stage of the process and / or to modify the process, or any part thereof, at any time without assigning any reason, without any obligation or liability whatsoever and the same shall be published in the ITI website or intimated through email.
- 4.13 The Bidder shall bear all costs associated with the preparation and submission of its Tender, including cost of presentation for the purpose of clarification of the offer, if so desired by ITI.
- 4.14 At any time prior to the last date for receipt of offers, ITIL, may, for any reason, whether at its own initiative or in the response to a clarification requested by the prospective bidders, modify the Tender document.
- 4.15 Also, ITI may, at its discretion, extend the last date and time for the receipt of offers and/or make other changes in the requirements set out in the Invitation for Tender at its own accord or in order to provide reasonable time to bidders to take the amendments into account in preparing their offers.
- 4.16 If the last day for the bid submission is declared as a holiday, the bid will be opened at the same time on the next working day.
- 4.17 Tender will be received/submission up to 05.08.2021 upto 4pm and technical bid will be opened on 06.08.2021 at 11:00 am
- 4.18 Any change/clarifications in the Tender Terms or Schedule shall be notified at ITI Ltd's website: www.itiltd.in (Tender Section) and CPP Portal www.eprocure.gov.in. The intended bidders need to take notice of the same.
- **4.19 BID PRICES:** The bidder shall quote the item wise price for all the items and including all incidentals, inclusive of all taxes and levies but exclusive of Goods and Service Tax. Goods and Service Tax shall be paid extra, as applicable.

4.20 PERIOD OF VALIDITY OF BIDS:

4.20.1 Bid shall remain valid for 180 days from date of opening of the bids (Qualifying Bid). A Bid valid for a shorter period shall be rejected by ITIL as non-responsive.

4.20.2 In exceptional circumstances, the tendering authority may request the consent of the bidder for an extension to the period of bid validity. The request and the response thereto shall be made in writing. In such cases, the bid security provided shall also be suitably extended. The bidder may refuse the request without forfeiting its bid security. A bidder accepting the request and granting extension will not be permitted to modify its bid.

4.21 **SIGNING OF BID**:

- 4.21.1 The bidder shall prepare, as a part of his bid, the bid documents duly signed on each and every page submitted (digital signatures accepted on e-tendering portal), establishing the conformity of his bid to the bid documents of all the works to be executed by the bidder under the contract and the credentials claimed to comply the bid conditions.
- 4.21.2 The bid shall contain no inter-lineation, erasures or overwriting except as necessary to correct errors made by the bidder in which case such corrections shall be signed with dated by the person or persons signing the bid.
- 4.21.3 In case of any difference between the figures at E-Tender Site and Physical copy submitted, the one at E-Tender Portal, shall prevail.

4.22 <u>Disclaimer:</u>

- 4.22.1 ITI and/or its officers, employees disclaim all liability from any loss or damage, whether foreseeable or not, suffered by any person acting on or refraining from acting because of any information including statements, information, forecasts, estimates or projections contained in this document or conduct ancillary to it whether or not the loss or damage arises in connection with any omission, negligence, default, lack of care or misrepresentation on the part of ITI and/or any of its officers, employees.
- 4.22.2 All information contained in this Tender provided / clarified is in good faith and interest. This is not an agreement and is not an offer or invitation to enter into an agreement of any kind with any party.
- 4.22.3 Though adequate care has been taken in the preparation of this Tender document, the interested bidders shall satisfy themselves that the information contained in the document is complete in all respects to enable to make an informed decision to bid. Interested Bidders are required to make their own enquiries and assumptions wherever required.
- 4.22.4 Information provided in this document or imparted to any respondent as part of the Tender process is confidential and shall not be used by the respondent for any other purpose, distributed to, or shared with any other person or organization
- 4.22.5 Bid received / submitted after due date and time will not be considered.

Date: 10-07-21

Ref No: ITI/BGP/RFP/ PCB-24_Layers /2021-22

SECTION-V: INSTRUCTIONS TO BIDDERS FOR ONLINE BID SUBMISSION

5.	Submission of Bids shall be only through online process which is mandatory for this Tender.
	Tender Bidding Methodology:
5.1	Sealed Bid System
	Tender Type: Three bids i.e., EMD, Technical and Financial Bids shall be submitted by the
5.2	bidder at the same time on the portal.
5.2	Broad outlines of the activities from Bidders perspective:
5.2.1	Procure a Digital Signing Certificate (DSC) Register on Electronic Tendering System® (ETS)
5.2.3	Create Users and assign roles on ETS
5.2.4	View Request for Proposal (Tender) on ETS
5.2.5	Download Official Copy of Tender Documents from ETS
5.2.6	Clarification to Tender Documents on ETS
5.2.7	Query to ITI LTD (Optional)
5.2.8	View response to queries posted by ITI LTD, as an addendum/corrigendum.
5.2.9	Bid Submission on ETS
5.2.10	Attend Public Online Tender Opening Event on ETS Opening of Technical/Financial Part
5.2.11	View Post-TOE Clarification posted by ITI LTD on ETS (Optional) Respond to ITI LTD's Post-TOE queries.
	For participating in this tender online, the following instructions need to be read
	carefully.
	These instructions are supplemented with more detailed guidelines on the relevant screens
	of the ETS.
	Note 1:
5.3	It is advised that all the documents to be submitted are kept scanned or converted to
	PDF format in a separate folder on your computer before starting online submission.
	BOQ (Excel Format) may be downloaded and rates may be filled appropriately. This
	file may also be saved in a secret folder on your computer.
	Note 2:
	While uploading the documents, it should be ensured that the file name should be the
	name of the document itself.
	Digital Certificates:
	For integrity of data and its authenticity/ non-repudiation of electronic records, and be
	compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC)
5.4	also referred to as Digital Signature Certificate (DSC) of Class 3 or above, issued by a
	Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer
	http://www.cca.gov.in].
	Registration in e-procurement portal:
_ _	Bidder has to Register first in https://www.tenderwizard.com/ITILIMITED and then
5.5	Tender document can be downloaded from the web site:
	https://www.tenderwizard.com/ITILIMITED and bid has to be submitted in the e-format.
	ionnat.

5.6	ITI LIMITED has decided to use process of e-tendering for inviting this tender and thus the physical copy of the tender would not be sold.
	Special Note on Security of Bids:
	Security related functionality has been rigorously implemented in ETS in a multi-dimensional manner. Starting with 'Acceptance of Registration by the Service Provider', provision for security has been made at various stages in Electronic Tender's software.
5.7	Specifically, for Bid Submission, some security related aspects are outlined below: - As part of the Electronic Encrypt functionality, the contents of both the 'Electronic Forms' and the 'Main-Bid' are securely encrypted using a Pass-phrase created by the server itself. The Pass phrase is more difficult to break. This method of bid- encryption does not have the security and data-integrity related vulnerabilities which are inherent in e-tendering systems which use Public-Key of the specified officer of a User organization for bid-encryption. Bid-encryption in ETS is such that the Bids cannot be decrypted before the Public Online Tender Opening Event (TOE), even if there is connivance between the concerned tender opening officers of the User organization and the personnel of e-tendering service provider.
	Public Online Tender Opening Event (TOE):
	ETS offers a unique facility for 'Public Online Tender Opening Event (TOE)'. Tender Opening Officers as well as authorized representatives of bidders can attend the Public Online Tender Opening Event (TOE) from the comfort of their offices. For this purpose, representatives of bidders (i.e. Supplier organization) duly authorized are requested to carry a Laptop and Wireless Connectivity to Internet.
	Every legal requirement for a transparent and secure 'Public Online Tender Opening Event (TOE)' has been implemented on ETS.
5.8	As soon as a Bid is decrypted with the corresponding 'Pass-Phrase' as submitted online by the bidder himself (during the TOE itself), salient points of the Bids are simultaneously made available for downloading by all participating bidders. The work of taking notes during a manual 'Tender Opening Event' is therefore replaced with this superior and convenient form of 'Public Online Tender Opening Event (TOE)'.
	ETS has a unique facility of 'Online Comparison Chart' which is dynamically updated as each online bid is opened. The format of the chart is based on inputs provided by the User for each Tender. The information in the Comparison Chart is based on the data submitted by the Bidders in electronic forms. A detailed Technical and/ or Financial Comparison Chart enhance Transparency. Detailed instructions are given on relevant screens.
	ETS has a unique facility of a detailed report titled 'Minutes of Online Tender Opening Event (TOE)' covering all important activities of 'Online Tender Opening Event (TOE)'. This is available to all participating bidders for 'Viewing/ Downloading'.
5.9	Other Instructions:

	For further instructions, the vendor should visit the home page of the portal i.e. https://www.tenderwizard.com/ITILIMITED .		
	Important Note: It is strongly recommended that all authorized users of Supplier organizations should thoroughly peruse the information provided under the relevant links, and take appropriate action. This will prevent hiccups, and minimize teething problems during the use of ETS. If require any clarification on vendor registration, Digital Signature and submission of quote, etc please contact our e-tendering partner Mr. Dhanraj (Antares); Mob: 9686115308; e-mail ID: dhanraj.p@antaressystems.com		
5.10	The following 'FOUR KEY INSTRUCTIONS for BIDDERS' must be assiduously adhered to:		
5.10.1	Obtain individual Digital Signing Certificate (DSC or DC) well in advance of your tender submission deadline on ETS.		
5.10.2	Register your organization on ETS well in advance of your tender submission deadline on ETS.		
5.10.3	Get your organization's concerned executives trained on ETS well in advance of your tender submission deadline on ETS.		
5.10.4	Submit your bids well in advance of tender submission deadline on ETS to avoid any unforeseen last-minute problems due to internet timeout, breakdown, etc. While the first three instructions mentioned above are especially relevant to first-time users of ETS, the fourth instruction is relevant at all times.		
5.11	Minimum Requirements at Bidders end: Computer System with good configuration and OS preferably supporting Windows, Word, Excel & PDF, High Speed Broadband connectivity, Internet Browser and Digital Certificate(s).		

---- END OF SECTION V ----

SECTION VI: BIDS

Three bid system includes EMD, Technical Bid and Commercial BID to be submitted separately

6A. EMD

Bid shall be accompanied with an EMD from a Scheduled Bank for an amount of 1 Cr in the form of DD/Bankers Cheque /Bank Guarantee in favor of "ITI Ltd, Bengaluru Plant, Bengaluru-560016" valid for a minimum period of 180 days from the date of bid opening

6B. <u>TECHNICAL BID</u>

Technical bid shall contain the following

- 6B.1. All documents as called for in the eligibility criteria as per section III
- 6B.2 Signed copy of the RFP document and its Annexure as a token of acceptance.
- 6B.3 Clause wise compliance for the all clauses in the tender and also for Annexures I-IV shall be submitted
- 6B.4 Bidder should submit complete technical literature, wherever applicable.
- 6B.5 Bidder is required to place a summary of the offered items in the technical bid without indicating the quoted price (unpriced bill of materials).
- 6B.6 The above said documents are to be uploaded in the technical section as per section V.

6C. COMMERCIAL BID

The bidders are to quote the prices after fully understanding the scope of complete Supply and Service (as applicable).

- 6C.1 The rates must be quoted for all the items irrespective of their actual quantum of execution.
- 6C.2 The bids with incomplete rates, not quoting for all the items, shall be rejected.
- 6C.3 The work shall be awarded to the eligible, lowest weighed price bidder.
- 6C.4 GST shall be extra, payable at the prescribed rate against the GST invoice.
- 6C.5 L1 would be decided based on the lowest total project cost and lowest AMC cost (T2) shall be matched by L1 bidder.
- 6C.6 The price quoted shall be on FOR ITI BANGALORE basis and inclusive of Basic Price, Packing, Insurance Freight, etc. Destination place will be at Bengaluru Plant.

6C.7 Commercial Bid to be provided in the prescribed format mentioned below.

Sl.No	Item Description	Qty	Unit	Unit Rate* in Rs.	Price in Rs.	GST%	GST Amt Rs.	Total (All Incl.)
	1	3	4	5	6	7	8	9
	Refer Scope of Work				3*5		6*7	6+8
6C.7.1	a) Establishment of Civil infra with design, implementation and handing over on turnkey basis at Bangalore plant. (Section II and Clause 2.1)							
	b) Establishment of electric infra with design, implementation and handing over on turnkey basis at Bangalore plant. (Section II and Clause 2.2)							
	c) Supply, Installation and Commissioning of Machineries and test equipment's as per Annexure 1 to 4 and handing over project (Section II and Clause 2.3)							
	d).Manpower, Training, marketing & Certification (Section II and Clause 2.4)							
	e) Comprehensive Warranty (Section II and Clause 2.5)							
	Total Project Cost (T1) = $(a+b+c+d+e)$							
	Comprehensive AMC Charges (Section II and Clause 2.5)							
	1 st Year							
	2 nd Year							
6C.7.2	3 rd Year							
	4 th Year							
	5 th Year							
	Total AMC Cost (T2) = (1st Y+ 2nd Y+ 3rd Y+4th Y+ 5th Y)							

<u>Note:</u> All Prices has to be quoted in Rupees only. The detailed line item wise breakup price shall be given for Infra, Utility, Machinery, Test Instruments and all other items which constitutes your offer for turnkey solution in both technical (unpriced BOM) and commercial bid.

---- END OF SECTION VI ----

SECTION VII: GENERAL (COMMERCIAL) CONDITIONS OF THE TENDER

7.1 <u>APPLICATION:</u>

The General conditions shall apply in contracts made by the ITIL for the execution of Designing, Supply, Installation, Testing, Commission and Operation & Maintenance of PCB plant including 2 year Warranty and AMC for 5 years.

7.2 **STANDARDS**:

The works to be executed under the contract shall confirm to the specifications mentioned in the tender. All the Machineries, Instrument & Utilities supplied should be brand new and from current line of manufacturing, refurbished items will not be accepted

7.3 PRICES:

Prices charged by the bidder for the works performed under the Contract shall not be higher from the prices quoted by the bidder in his Bid. Price once fixed will remain valid for the period of contract. Increase and decrease of taxes/duties will not affect the price except Goods and Service tax (GST) which will be paid at prevailing rate, during this period

7.4 LIABILITY:

ITIL will not be liable to the bidder for any losses or damages, costs, charges which the bidder may in any way sustain/suffer due to delay in the project work.

7.5 PERFORMANCE SECURITY:

- 7.5.1 The successful bidder shall submit a bank guarantee for an amount equivalent to 3 % of the value of work awarded at the Tender approved price as security deposit (Bank Guarantee) towards performance of the contract called PBG within 14 days from the date of issue of LOI, in favor of 'ITI Limited, Bengaluru Plant, payable at Bengaluru from any scheduled bank in India
- 7.5.2 The PBG will commence form the date of PO, till the date of commencement of AMC
- 7.5.3 On receipt of PBG from the bidder and after confirmation of the genuineness of the PBG from the bank, the EMD, received earlier, will be returned.
- 7.5.4 On entering into AMC contract for next 5 years after completion of warranty the fresh PBG of 3% of PO value shall be submitted
- 7.5.5 If there are recoveries to be made, bidder shall deposit the money before the release of PBG as the case may be. In case of failure to make good the charges payable towards ITIL including accrued penalties, PBG will be forfeited and recovery to be effected from the realized amount. The balance amount, if any, after adjustment of above recoveries, same shall be paid to the bidder.
- 7.5.6 No interest will be paid to the bidder on the PBG

Date: 10-07-21

7.6 <u>DELIVERY SCHEDULE:</u> In the event of an order, the successful bidder needs to deliver, Install and Commission all the items at the respective destination as per the detailed scope of work (Section II and Section-IX) and following below table-1.

Table-1: Tentative project timelines (32 Weeks)

S.No	Description	Duration
1	Completion of Civil / Electrical infra / all Utility works	8 Weeks
2	Supply of Machineries and test equipment's	14 Weeks
3	Installation & commissioning of the Machineries and test equipment's	2 Weeks
4	Commissioning of the total plant & Training	4 Weeks
5	Acceptance and submission of essential certification/ approvals	1 Week
6	Finding out potential customers mentioned in clause 2.4.3	2 Weeks
7	Project Handover	1 Week

7.7 BID OPENING AND EVALUATION:

7.7.1 Opening of bids by the ITIL:

The Electronic Envelope marked as 'Bid Security, Bid cost & Authorization Envelope' shall be opened first and examined by the designated Tender/Bid Opening Committee (TOC) of ITIL. The TOC shall ascertain that the documents submitted in the envelope meet the requirements of eligibility for opening the qualifying bid of a bidder for this tender then only the TOC shall open and download the Qualifying Bids online after the due date and time by logging into the e-tender portal.

7.8 CLARIFICATION OF BIDS BY THE ITIL:

To assist in examination, evaluation and comparison of bids, the ITIL may, at its discretion ask the bidder for clarification of its bid. The request for its clarification and its response shall be in writing. However, no post bid clarification at the initiative of the bidder shall be entertained.

7.9 VERIFICATION OF BIDS BY THE ITIL:

If any of the documents, required to be submitted along with the technical bid is found wanting, the offer is liable to be rejected at that stage. However, the ITIL at its discretion may call for any clarification regarding the document within a stipulated time period. In case of non-compliance to such queries in the given time, the bid will be out rightly rejected without entertaining further correspondence in this regard.

7.10 PRELIMINARY EVALUATION:

- 7.10.1 ITIL shall evaluate the bids to determine whether they are complete, whether any computational errors have been made, whether required securities have been furnished, whether the documents have been properly signed/authenticated and whether the bids are generally in order.
- 7.10.2 Prior to the detailed evaluation, the ITIL will determine the substantial responsiveness of each bid to the bid document. For purpose of these clauses a substantially responsive bid is one which conforms to all the terms and conditions of the bid documents without deviations.
- 7.10.3 The ITIL may waive any minor infirmity or non-conformity or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of the bidder.
- 7.10.4 Bids found technically and commercially compliant and suitable would only be considered for Price bid opening.

7.11 <u>INFLUENCING THE ITIL:</u>

- 7.11.1 No bidder shall try to influence the ITIL on any matter relating to its bid, from the time of bid opening till the time the contract is awarded.
- 7.11.2 Any effort by the bidder to modify his bid or influence the ITIL in the ITIL's bid evaluation, bid comparison or the contract award decisions shall result in the rejection of the bid.

7.12 ITIL'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS:

The ITIL 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 assigning any reason whatsoever and without thereby incurring any liability to the affected bidder or bidders on the grounds for the ITIL's action.

7.13 ISSUE OF LETTER OF INTENT:

- 7.13.1 The issue of letter of intent (LoI) shall constitute the intention of the ITIL to enter into the contract with the bidder. LoI will be issued as offer to the successful bidder(s).
- 7.13.2 The bidder shall within 14 days of issue of letter of intent, give his acceptance along with Performance Security (PBG).

7.14 SIGNING OF AGREEMENT:

- 7.14.1 Once the tender is approved by the competent authority and Letter of Intent (LoI) is issued, the bidder shall deposit the Performance Bank Guaranty (PBG) within 14 days. The Bid EMD along with the tender shall be refunded to the bidder after signing of the agreement.
- 7.14.2 An agreement based upon the terms and conditions mentioned in this document shall be signed after submission of PBG.

7.15 TESTING AND ACCEPTANCE TESTING:

Scope of Acceptance and Testing: The purpose of acceptance and testing is to meet the parameters as mention in the specifications

7.16 COMPHREHENSIVE WARRANTY & AMC(CAMC):

- 7.16.1 The Bidder shall provide comprehensive onsite warranty for a minimum period of Two (02) years from the date of commissioning and handing over. The CAMC will be for the period of 5 years after completion of warranty. In Service / shelf life of the machineries / Equipment's shall be 10 years and the letter of support from OEM should be provided for 10 years
- 7.16.2 Any break down during the warranty/CAMC period shall be attended by the Bidder within defined service level warranty (SLW) of informing the complaint through telephone/email.
 - 17.16.2.1 Critical Break down 24 Hrs with required spares
 - 17.16.2.2 Non-Critical Break Down 48-72 Hrs with required spares

- 7.16.3 Any parts required to be replaced has to be done and make the machine operational at his risk and cost within the shortest possible time. The Bidder should stock minimum spares required for smooth operation of the plant
- 7.16.4 If any defect is not remedied within a reasonable time, as prescribed by the ITIL (clause 7.16.2), the ITIL may levy penalty of 0.5% of the value of defective component/ sub system/ services per day
- 7.16.5 Replacement under warranty /CAMC clause shall be made by the bidder free of all charges at site including freight, insurance, cost of works and other incidental charges.

7.17 PAYMENT TERMS:

7.17.1 Procedure for Preparation and settlement of bills: All items of work involved in the work order shall be completed in all respects before preparing the bills for the work against the work order. The details of payment of bills is enumerated as under:

Mile Stones	Details	Weigh tage	Criteria
M-1	Completion of Civil ,Electric & all Utility Works	10%	with 60 Days Credit
M-2	Supply of Machineries & Instruments	50%	with 60 Days Credit
M-3	Installation of Machineries & Instruments	5%	with 60 Days Credit
M-4	Commissioning including process establishment, Deployment of manpower, training, consumables & raw materials for 1000 sq. mtr. as per clause 9.5	10%	with 60 Days Credit
M-5	After Acceptance, Certification & Handover	5%	with 30 Days Credit
M-6	Marketing & bringing order to meet the plant capacity as per clause 9.5 with respect to product mix and All essentials Certification (like MIL-PRF-31032, AS9100D 2015, UL, LCSO/ JSS, etc)	5%	with 30 Days Credit
M-7	After completion of warranty or on submission of 15% BG till end of warranty period.	15%	with 30 Days Credit

- 7.17.2 The payment shall be released as per payment terms and on submission of Invoice. The payment shall also be made after deducting necessary taxes applicable, TDS, if any. All bank charges and interest charges shall be borne by supplier.
- 7.17.3 Payment will be released by ITI on satisfactory completion of work / delivery & duly certified by designated person by ITI.
- 7.17.4 Concession on taxes/levies, if any, claimed during submission of the bill has to supported with documentary evidences
- 7.17.5 <u>LD Clause:</u> For delay in supply LD will be imposed at a rate of 0.5% of PO/Contract value per week with a maximum value of 10% of PO/Contract value or may be suitably devised linked with milestone
- 7.17.6 All the penalties & LD charges if any shall be recovered from payments / PBG / BG.

7.18 TAXES AND DUTIES:

Bidder shall pay all rates, levies, fees royalties, taxes and duties payable or arising from out of, by virtue of or in connection with and/or incidental to the contract or any of the obligations of the parties in terms of the contract documents and / or in respect of the works or operations or any part thereof to be performed by the bidder and the bidder shall indemnify and keep indemnified the ITIL from and against the same or any default by the bidder in the payment thereof. However, service tax (GST) shall be paid extra by ITIL as applicable.

7.19 **INSURANCE**:

Without limiting any other obligations or liabilities, the bidder shall, at his own expenses & risks take and keep comprehensive insurance including third party risk for the plant, machinery, and materials etc., brought to the site for all the work during the execution of the contract. The Bidder shall also take out workman's compensation insurance as required by law. For any damage/accidents caused during the tenure of the contract, only the Bidder / Bidder is responsible and there is no liability on the company

7.20 FORCE MAJEURE:

If any time, during the continuance of this contract, the performance in whole or in part by either party or any obligation under this contract shall be prevented or delayed by reason of any war, or hostility, acts of the public enemy, civil commotion sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts or act of God (Herein after referred to as events) provided notice of happenings of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any such claim for damages against the other in respect of such non-performance and work under the contract shall be resumed as soon as practicable after such event may come to an end or cease to exist, and the decision of the ITIL as to whether the work has been so resumed or not shall be final and conclusive, provided further that if the performance, in whole or part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, either party may, at his option terminate the contract.

7.21 ARBITRATION:

- 7.21.1 If the Bidder / Bidder be dissatisfied with the decision of the Company, on any matters in question, dispute or difference on any account or as to the withholding by the Company of any certificates to which the Bidder / Bidder may claim to be entitled to or if the Company fails to make a decisions within a reasonable time (which reasonable time will in no case exceed three months) as the case may be shall demand in writing that such matters in question, dispute or difference be referred to Arbitration. Such demand for Arbitration shall be delivered to the Company by the Bidder / Bidder and shall specify the matters which are in question, dispute or difference and such disputes or difference of which the demand has been made and no other matter shall be referred to arbitration.
- 7.21.2 Provisions of the Arbitration Act 1996 or any statutory modification or reenactment thereof & the rules made there under & for the time being in force shall apply to the arbitration proceedings.

7.21.3 The Arbitration shall have its seat in Bengaluru. The decision of the Arbitrator shall be final and binding on the parties to this Contract. Each party shall bear its own cost of preparing and presenting its case. The cost of Arbitration including the fees and expenses of the Arbitrator shall be shared equally by the Bidder / Bidder and the Company.

7.22 Governing Law:

This Contract shall be governed in accordance with the laws of India.

7.23 Jurisdiction of Courts:

The courts of India at Bengaluru have exclusive jurisdiction to determine any proceeding in relation to this Contract.

7.24 ADHERENCE TO SPECIFICATION / DRAWINGS:

The whole of the works shall be executed in perfect conformity with the specifications / drawing of the contract. If the Bidder / Bidder performing any work in a manner contrary to the specifications or drawing or any of them and without such references and without approval from in-charge person in writing, he shall bear all the costs arising or ensuing there from and shall be responsible for all loss to the Company.

7.25 **Award of Contract:**

Award of Contract will be purely based on the Commercial competitiveness of the technically Qualified and eligible bidder.

- 7.25.1 The ITIL shall consider L-1 bidder whose offer has been found technically, commercially and financially acceptable. The L-1 bidder is one whose overall quote is the lowest for the turkey project. However, the competitiveness and genuineness of L-1 rates shall be an underlined criterion before acceptance of such rates and efforts may be made to reach such rates with the L-1 bidder.
- 7.25.2 The bidder shall submit all PO copies issued to OEM's & shipping documents as and when the machineries are supplied to ITI Limited, Bengaluru Plant.

--- END OF SECTION-VII ---

SECTION-VIII: LIST OF DOCUMENTS TO BE SUBMITTED AS A PART OF THE BID

Chec	k list of documents/information to be submitted with the bid:
	FOR EMD
8.1	EMD in the form of DD or BG for the value mentioned at 1.4.11 valid for 180 days from a Nationalized / Scheduled bank as per format at Annexure-VI (in case of EMD being in BG form)
	FOR TECHNICAL BID
8.2	Bidder's Profile.
8.3	Certificates of Incorporation/ Partnership deed
8.4	Memorandum & Articles of Association.
8.5	Audited financial statements for the last 3 years. (2018-19, 2019-20 & 2020-2021) and CA certificate in case of Unaudited report of 2020-21 with an undertaking to submit the audited report, soon it is available.
8.6	Certificate from Statutory Auditor/CA specifying the Annual Turnover during last three years (2018-21).
8.7	Experience Certificates: Work Order / Agreements of the Project along with completion certificates clearly highlighting Scope of the Work (SOW. The experience as required to meet eligibility conditions during the last 5 years only (period ending 31st March 2021), shall be considered.
8.8	Net Worth positive and the bidder company being profitable, certificate for the last 3 years (2018-21).
8.9	GST Registration Certificate.
8.10	Copy of PAN Card.
8.11	CIN (Corporate Identity Number).
8.12	Self-declaration for non-barring from business on account of blacklisting etc. (As per Annexure-VIII)
8.13	Authorization letter in the bidder company's letterhead authorizing the person signing the bid for this Tender and Power of Attorney (POA).
8.14	Clause by clause compliance to all the clauses of the tender.
8.15	Undertaking in letter head to indemnify ITIL from any claims / penalties / statutory charges, liquidated damages, with legal expenses etc.
8.16	NDA (Non-Disclosure Agreement) as per Annexure-IX (to be submitted in advance to obtain the Link details)
8.17	Pre-Contract Integrity Pact Annexure –VII
8.18	List of customers with contact details to be provided to support eligibility criteria as mentioned at clause 3.5 & 3.7
8.19	All other docs as mentioned in this Tender elsewhere
8.20	An undertaking to submit PBG (as per Annexure-V) along with LOI acceptance for 3 % of the contract value commencing from the date PO till commencement of AMC
8.21	Warranty SLA and Testing/Inspection Requirements
	FOR COMMERCIAL BID
8.22	Commercial Bid Formats (Section VI & Clause 6C)

Date: 10-07-21

Note:

- All the documents to be submitted separately with bid.
- ITIL or its nominee reserves the right to cross check / validate the authenticity of the documents submitted and the information provided in the Pre-qualification and Eligibility criteria. The requisite support to prove the claims must be provided by the Bidder failing which the supporting document shall be taken as not proved followed with attached consequences of false claim.

---- END OF SECTION VIII ----

SECTION IX: BRIEF TECHNICAL SPECIFICATIONS

For establishing the infrastructure and manufacturing of Multilayer PCBs up-to 24 Layers with controlled impedance with a manufacturing capacity of 2000 Sq.Mtr at ITI Limited, Bangalore plant, as per the following details:

- 9.1 Technical Specification of End product of PCBs up-to 24 Layer is given at annexure-1.
- 9.2 A tentative list of machines/Equipment's/Instruments required for manufacturing of multilayer PCBs up-to 24Layers with Controlled impedance is given at annexure-2.
- 9.3 List of testing equipment's required for quality control/Quality assurance is given at Annexure-3.
- 9.4 List of utilities required for establishing the infrastructure and manufacturing of multilayer PCBs up-to 24Layers with Controlled impedance is given at annexure-4.
- 9.5 Product mix:- Layer wise bifurcation for the capacity of 2000Sq.Mt per month is shown in below table

Sl.No	Layer	Percentage	Area in Sq. Mt.
1	2 Layers	50%	1000
2	4-8 layers	25%	500
3	8-12 layers	10%	200
4	14-18 layers	10%	200
5	20-24 layers	5%	100
		Total	2000

9.6 Manpower required for operation of plant for 3 shift basis.

Sl. NO	Designation	Qualification	Grade / Cat.	Manpower required
1	Manager/CMR	BE/B.Tech	Gr.5/6	04
2	Shop Floor Engineers	BE/B.Tech	Gr.2/3	12
3	Shop Floor Supervisors/ Inspectors/ CAM	Diploma (Computer Science/Chemical/Mechanical/ Electronics/Electrical)	Cat-E	40
4	Operators	ITI (Electroplaters/Fitter/EM /Electrician/COPA)	Cat-C	40
5	Helpers	8th Pass	Cat-A	20
			Total	116

ANNEXURE-I

TECHNICAL SPECIFICATION OF END PRODUCT WITH CONTROLLED IMPEDENCE MULTI LAYER PCBs UPTO 24 LAYERS

Sl.No	Parameter	Standard Capability
		FR4 - High Tg 175 / 180 (IPC4101/98/99/126)
		FR4 - High Tg 210 (IPC4101/29)
		Polyimide - Tg 250 (IPC4101/41)
		Low loss PTFE based materials - Teflon -Rogers
		/ Taconic / Arlon
		Hydrocarbon Ceramic material for High
		frequency application
		RO4350(IPC4103A/11/240) /
1	Material	RO4003C(IPC4103/10)
		Hybrid PCBs- FR4+RO 4350
		laminates(IPC4103A/11/240)
		Polyimide Flex for Rigid Flex -
		Adhesiveless FCCL. Std thickness is
		0.050mm (2mil)
		Polyimide Flex for DS /SS Flex - Adhesiveless
		FCCL / FCCL with Epoxy adhesive
		PI Coverlayer with Acrylic Adhesive
2	Max Layer Count – Rigid	24 Layer
3	Train Bayor Count Trigit	480 x 560 mm (Multilayer)
	Max circuit Size	` '
	Train enegge Size	500 x 580 mm (DSPTH)
4	Inner Layer smallest Line width /	3 mil /3 mil (0.076 mm / 0. 076 mm) in 12μ
4	Spacing	base copper
	Outer Layer smallest Line width /	3mil /3 mil (0.076 mm / 0. 076 mm) in 9 to
5	Spacing	12μ base copper +/- 10%
6	Conductor width and spacing tolerance	+/-20%
7	Smallest via hole pad size	0.50mm
8	Smallest Antipad clearance	0.35mm
9	Smallest drill to track spacing	0.20mm
10	Smallest spacing of board edge to	0.20mm
10	conductor	
11	Minimum Di electric thickness (RIGID)	Laminate: 0.050mm, pre-preg:0.060mm
12	Flex minimum thickness	0.05mm
		+/-0.15mm for PCB thickness <=1.5mm,
13	PCB thickness tolerance	+/-10% for >1.5mm (Typical tolerance)
		Tolerance will depends on design and stack up.
14	Minimum finished Hole diameter	0.20 mm
15	Hole dia tolerance	+/-0.10mm
16	Hole positional tolerance	+/-0.035mm
	Hole edge to Board edge for V-scoreing	0.6mm
17	Boards	
18	V-scoring Depth tolerance	+/-0.10mm

19	Web Width tolerance	+/-0.10mm
20	Smallest annular ring	6 Mil
		Up to 299mm+/-0.1mm
21	CNC cutting tolerance	300-600mm+/-0.2mm
		>600mm+/-0.3mm
22	Aspect Ratio	10:1
23	Blind Via PCBs	Yes.
24	Buried Via PCBs	Yes
25	Plating thickness	Minimum copper plating thickness: 25µ
26	Non conductive via filling	With epoxy filling / Cap plating (IPC 4761, Type
20		5, 6 & 7)
27	Minimum soldermask clearance	2.0 Mil
28	Minimum soldermask DAM	2.5 Mil
29	Solder Mask coverage	2.0 Mil
		HASL
	Surface finish	ENIG(Electroless Nickel and Immersion Gold)-
		Ni- 3 to 6μ, Au-0.05 to 0.10μ
30		Gold plating thickness for the Edge connectors-
		0.80 to 1.0μ
		Electrolytic Gold on Cu up to 3 microns for RF
		PCBs
31	Impedance tolerance	+/-10% against to the calculated impedance
		Metal Core - 6061 Aluminium Core
32	Heat Sink PCB's	0.8, 1.0 & 1.6mm Thickness
32	Tion onk I CD s	Copper Core 0.2mm / 0.3mm / 0.4mm
		thickness

ANNEXURE-II

LIST OF THE MACHINES REQUIRED FOR ESTABLISHING THE INFRASTRUCTURE AND MANUFACTURING OF CONTROLLED MULTI LAYER PCBS UP TO 24 LAYERS ON TURNKEY BASIS AT BANGALORE PLANT

Sl. No	Name of the machine	Specification	Preferred make/Equivalent	Qty.
1	CAM Station for product engineering (data analysis)	For Gerber data analysis.	UCAMCO / GENESES/ EASTEK	1
2	CAM Station for CAM Engineering	CAM software that must generate inputs for Plotters, Data formats, Drilling, Routing, Jump- Scoring, Netlist for FPT, AOI, Ink Jet Printer and MDI.	UCAM / GENESES/ EASTEK	2
3	Control Impedance test system - Stacking software Impedance Tester, Coupon generator.	Control Impendence system with software to generate stack-up, coupon Gerber and all necessary accessories to meet the specification as per our requirement.(supplied along with 2 PCs and Printer)	POLAR	1
4	Photo plotter with automatic film Processor	To plot the photo-tools of minimum line width / spacing: 3mil/3mil with automatic replenish system.	UCAMCO/EIE/ORBOTECH / ECOGRAPHICS / COLENTA	1
5	Direct Imaging of inner, outer and solder mask - DMD Technology based	To convert gerber data to image on PCBs for Inner layer, Outer Layer and Solder mask application.	SCHMOLL/ EIE / SCREEN/CBTECH/ DIS	1
6	Chemical cleaning machine for inner & outer layers	For surface preparation prior to photo printing operation and should have capability to handle thin cores.	SCHMID/WISE/CIM/LUMI PLAS/IS/TTM/TSK	1
7	Cut Sheet Laminator - Fully automatic	To laminate dry film resistor over copper clad laminates (for inner and outer layer).	DYNACHEM/C SUN/ HAKUTO/ CEDATEC	1
8	UV LED Exposure machine for Inner Layer (fully automatic)	Image transfer for laminated inner layer PCBs with auto alignment.	ALTIX/C SUN/ HAKUTO/CBTECH	1
9	Mylar Peeler for Inner Layers	To Remove mylar sheets for the laminated Inner layer PCBs.	DYNACHEM/C SUN/ HAKUTO/ CEDATEC	1
10	DES Line for Inner Layers with Vacuum Etching.	Developing, Etching and dry film stripping system for Inner layers with auto dosing system should be capable of handling 50 micron laminates.	SCHMID/WISE/CIM/IS/TT M/TSK	1
11	AOI for inner layer and outer layer with verification stations & advanced track welding machine	Automated Optical Inspection system with repair station for inner and outer layer (prior to etching and post etching)	ORBOTECH/CAMTEK/M ACHVISION/ CIMS/SCREEN	2
12	Brown Oxide coating (Bond Film)	Uniform brown oxide coating for inner layer prior to MLB Pressing	SCHMID/WISE/CIM/IS/TT M/TSK	1
13	Cu Foil / Prepreg Cutting Machine	To Cut Copper foil and prepreg of different thickness	CEDATEC / VIGOR	1
14	Induction Bonding- Pinless	Pinless Inner layer bonding prior to pressing	CE DATEC /DIS/ PIERGIACOMI ROBOTICS	1
15	Post etch punch – pin	For inner layer punching operation.	SCHMOLL/ MULTILINE/CAPICARD	1
16	Multilayer Layup Process Table	To prepare Books/ Stacks for Multilayer Pressings.	LAUFFER / BURKLE / VIGOR/KITAGAWA SIEAI/HML	2

		Vacuum laminating multilayer press for bonding/lamination of high layer count multi-layer boards rigid and	LAUGEER / DURVI E /	1
17	Multilayer Vacuum Pressing machine	rigid- flex, multi –flex PCBs including cover lay bonding etc with automatic loading and unloading (4 opening x2 hot x 1cold press)	LAUFFER / BURKLE / VIGOR/KITAGAWA SIEAI/HML	
18	X-ray Drilling with dust collector	X-ray tooling with registration and measurement systems with high resolution CCD camera for micro drilling.	PLURITEC / POSALUX/ SCHMID/ SCHMOLL	1
19	Stacking, Pinning and Depinning	To prepare stack for drilling	VF / North Star	2
20	Manual Planarizing machine for removing copper burs	To remove burrs after drilling	ITC/MASS	1
21	CNC Drilling Machine (2 Spindle, RPM >200K) with CCD Camera alignment, with dust collector	CNC Drilling machine with CCD camera alignment with dust collector with accuracy of ±0.025 mm (minimum drill diameter: 0.15 mm)	SCHMOLL/ POSALUX/ TONGTAI/PLURITEC/ VIAMECH	4
22	Plasma Desmear with Etch back for Outer layer	To remove the smear and to get desired etch back in the drilled holes prior to electroless plating	NORDSON MARCH/ NEMS/ PLASMA ETCH/ZESAGI/PINK THERMO SYSTEM	1
23	Electroless copper plating line (Vertical) with automatic loading and unloading	To electroless copper plate over drilled holes of minimum diameter: 0.1mm	PAL/CIM/AEL/ LUMIPLAS/CIM	1
24	Outer layer Cu Flash plating line, Vertical Hoist type machine. (8 to 12 microns Cu plating) with automatic loading and unloading	Copper flash Electroplating of PCBs	PAL/CIM/AEL	1
25	Resin Pluging - Via Filling	Filling of VIA with resins	ITC/MASS	1
26	Planarizer	Planarizer after VIA Filling	WISE/POLAMASA	1
27	Dry Film Developing machine for outer layer	To Develop outer layer PCBs with 3mil width /3mil spacing.	SCHMID/WISE/CIM/LUMI PLAS/IS/TTM/TSK	1
28	Pattern plating Line (Cu + Tin) with automatic loading and unloading	To electroplate Copper and tin plating of PCBs with aspect ratio:10:1	PAL/AEL/TSK/CM/HIJI	1
29	Soldermask Screen Printing Machine-Semi automatic	To SMOBC for PCBs with semi- automatic machine	ATMA/HANKEY	2
30	Solder Mask Spray Coating machine	To SMOBC for PCBs with Spray coating machine	ITC/ECO SYSTEMS/ ALL- 4PCB/DYNACHEM	1
31	Soldermask Tackdry Tunnel Oven	To cure solder mask coated PCBs	C SUN/GROUP UP/ATMA	1
32	Solder mask Developing machine	To Develop solder mask coated board after UV Exposure	SCHMID/WISE/CIM/LUMI PLAS/IS/TTM/TSK	1
33	Solder mask Final Curing Tunnel Oven	To final cure solder mask coated PCBs prior to hot air levelling	C SUN/GROUP UP / PLURITEC/DYNACHEM/A TMA	1
34	Solder mask UV Curing Oven Double Side Conveyorized	To cure solder mask coated PCBs	C SUN /DYNACHEM/ GROUP UP/	1
35	ENIG Line for Surface	Electroless Nickel and Immersion	SCHMID/WISE/CIM/LUMI	1

	Finishing	Gold Plating line for PCBs Surface Finishing.	PLAS/IS/TTM/TSK/ASIDA/ PAL	
36	HASL machine for Surface Finishing along with Pre- Cleaning, fluxing, Post- Cleaning and Cooling system.	Hot Air Solder levelling machine for PCBs Surface Finishing.	PENTAGAL /LAIF	1
37	Legend Inkjet Printer	To legend print on finished PCBs.	ORBOTECH / MICROCRAFT/ASIDA/EIE	1
38	CNC Routing Machine- 2 Spindle with > 80, 000 RPM with depth Control and Dust Collector	To route the finished PCBs with accuracy of ± 0.05 mm with minimum of 2 spindle.	SCHMOLL/ POSALUX/ TONGTAI/PLURITEC/ VIAMECH	3
39	CNC Jump score with dust collector (Automatic Multi V-cut machine)	To Jump score the finished PCBs.	PIERGIACOMI ROBOTICS/LHMT/ SHODA/CHMT/ SHINGANG	2
40	Water wash after Routing	To clean the PCBs after Routing	SCHMID/WISE/CIM/LUMI PLAS/IS/TTM/TSK	1
41	Flying Probe Tester	To Test the Bare PCB after final Finishing	ATG/MICROCRAFT/ SEICA/FWT/CL TECH	2
42	Shearing / Bevelling Machine with dust collector	To Shear/bevelling copper clad laminates of different sizes with dust collector.	PIERGIACOMI ROBOTICS/LHMT/ SHODA/SHINGANG	1
43	Co-ordinate measuring Machine with granite based Non contact PCB and Film inspection	Non-contact co-ordinates measurement of PCBs and inspections of Film.	ARCS/MACHVISION/OPT EK/NIKON/IMPEX	1
44	Inspection AVI	To inspect Final PCBs through automated Video Inspection	SHIRAI / SCREEN/ASIDA/ KUROBO	1

Note:

- A.2.1. Other Machines may also be included / Deleted by the bidder for manufacturing 24 layer PCBs with controlled impedance, if required
 A2.2. All brand new machines should be Industry 4.0 compliant.

ANNEXURE-III

LIST OF THE TESTING EQUIPMENTS - QC/QA

Sl.No	Test Equipment	Specification	Preferred make/ Equivalent	Qty.
1	Slanted glass tables with magnifier	For Stage Inspection of PCBs with magnifier of range 10x to 50x or better	Wunca	3
2	Inspection Light Table	To inspect the PCBs in various process stages	Wunca	2
	Micro section facility with microscope	1 5		1
3	a. Auto Cutting machine		ZEISS/ BUEHLER/ STRUERS	1
	b. Moulding machine	To prepare samples for micro-		1
	c. Grinding Polishing system with variable speed 50 to 500 RPM	sectioning and to test.	A CA DNIO/NII/ON/ OL VIADNIG/CANON	1
	d. Measuring microscope		AGARNO/ NIKON/ OLYMPUS/CANON	1
4	XRF	To check thickness of surface finished PCBs (ENIG, Copper and Tin, etc)	FISCHER	1
5	PTH thickness tester	To measure copper thickness of plated holes of minimum dia:0.1 mm	CMI	1
6	Hand held Copper Surface tester	To measure copper thickness of copper clad and Plated PCBs.	CMI	1
7	Auto Titrator	To analysis chemical solution for processes such as electroless copper plating, electro copper plating, Electro tin plating ,BOC, Desmear etc	Mettler/Toledo/ Metrohm	1
8	CVS (Cyclic Volumetric Stripping)	To check Leveller and brightener concentration in Plating Vats.	CVS	1
9	GEL timer	Gel Time tester to find gel time and equivalent viscosity value of Epoxy Resin	BROOK FILED	1
10	Stereo Zoom microscope	To examine the sample PCBs in 3 dimension	TAGARNO/NIKON/OLYMPUS/CANON	1
11	Solderability Tester	To check the solderability of PCBs	CEMCO, UK	1
12	Line Gauge	To measure line width of PCBs	MACHVISION	1
13	Peel and pull off strength Tester	To find Peel and Pull off strength of PCBs	MECMESIN	1
14	3 X, 10 X, 100X eye piece, plano	For inspection of PCBs	PEAK	1

	lens			
15	Micro meter	Digital Micrometre (0-25	MITUTOYO	1
	screw gauge	mm)		
16	Pin gauge	To measure diameter of drilled holes (0.1 mm- 7mm)	VERMONT	1
17	Digital pH meter	To measure pH of chemical solution	MT	1
18	Vernier calliper	Digital Vernier Calliper (0- 150 mm) & (0-300 mm)	MITUTOYO	1
19	Granite table for warpage checking	To measure warpage of PCBs and should be supplied along with dial gauge.	MITUTOYO	1
20	Ionic Contamination Tester	To measure conductivity or resistivity of sample PCBs	SES/OMEGA	1
21	Film Storage Cup boards	To store Photo-tools	WUNCA	3
22	Dust Matt for entrance to clean room	Dust matt For Clean room application	WUNCA	10
23	Dust Removal roller with pad	Dust removal roller with pad for cleaning photo-tool and other purposes	WUNCA	20
24	V-Score Checker with reader and printer	To measure web width of V-grooved PCBs	SHODA/SHINGANG/ PIERGIACOMI/LHMT/HML	1

ANNEXURE-IV

LIST OF CIVIL, ELECTRICAL AND UTILITIES/ SERVICES FOR ESTABLISHING THE INFRASTRUCTURE AND MANUFACTURING OF CONTROLLED MULTI LAYER PCBS UP TO 24 LAYERS ON TURNKEY BASIS AT BANGALORE PLANT

Sl.No	LIST of other EQUIPMENT
1	Civil Work – modification of the existing building
2	AC Room
4	Clean Room, class 10,000 / 1,00,000 (HVAC + Control Panel + AHU)
5	Water Distribution Systems
6	Water Sump, Capacity: 1,50,000 Litres
7	RO Plant, Capacity: 2500 Ltrs/hour
8	DM Water Plant, TDS 40 to 50 TDS, Capacity: 1000 Ltrs/hour
9	Effluent Treatment Plant (ETP) as per requirement
10	Zero Discharge of waste water from the RO Plant
11	Copper Recovery unit for Acid etch, Alkaline Etch
12	ENIG + Cyanide disposal
13	Cold Storage Room (Control Panel)
14	Store Room (Shearing machine)
15	Chemical Store Room
16	Control Panel Electrical + total wiring supply for the entire equipment
17	RO Water supply line for the required machines
18	DI water supply line for the required machines
19	Handling equipment's and Trolley & PCB Racks
20	Exhaust and Scrubbers system
21	ACID resistant for plating Area and Etching area
22	Epoxy Flooring for entire the plant area
23	Drain System / Trenches
24	CDA generation and supply line
25	Chiller Plant for the entire facility
26	All the Civil Works as per the Plant requirements ACID resist and tiles
27	All the Electrical Works as per the Plant requirements, including Lighting, Earthing,
	UPS, Safety devices, Control panel, Fire/Smoke Detectors/Rubber mats/Dust curtains.
28	Flooring for plating Area - Acid Resistant Tiles (CIVIL)
29	Conference Room all media equipment
30	Toilet for Gents and Ladies required
31	Toilet for Officers/Visitors
32	Dining Hall
33	CC TV Recording and Monitoring system as plant requirement
34	ESD Flooring for the flaying probe testing area
35	All the furniture required to establish the lab / process

NOTE:

A.4.1. It may kindly be noted that the above mentioned machines, test equipments, services and utilities are only indicative. However the successful bidder has to provide complete infrastructure and manufacturing facilities for "Establishing the infrastructure & manufacturing of controlled impedance multi-layer PCB plant up to 24 layers on turnkey basis at ITI Bangalore plant".

ANNEXURE-V

PROFORMA OF BANK GUARANTEE FOR PERFORMANCE

In Consideration of ITI Limited, Dooravaninagar, Bangalore-560016 (hereinafter called as the Company)

We Bank, Bangalore (hereinafter referred to as to	the 'Bank')
executed this Performance Guarantee Bond as surety to the cost of	(Rupees
Only) Supplied by (hereinafter called to as the 'S	upplier') as
per the Purchase Order No of ITI Limited.	
1. At the instance of hereby undertal	ce to pay to
ITI Limited, Dooravaninagar, Bangalore-560016 an amount not exceeding Rs	(Rupees
Only) if the Machine supplied by the Company fails to perform to the satisfa	ction of the
Company up toon or before the expiry of this guarantee, or	within the
agreed period whichever is earlier.	
2. We, agrees to pay for the value of the rejected materials up to	
Rs (Rupees Only) without any demur, merely on a demand noti	
Company stating that the Company has suffered loss due to non-performa	
supplied by the Supplier. Any such demand made o	n the Bank
shall be conclusive as regards the amount due and payable by the Bank under this guarantee.	
3. We, undertake to pay the Company any money as demanded not withstanding any dispute	or disputes
raised by the Supplier in any suit or proceedings pending before any court or any tribunal rela	-
out liability under this guarantee being absolute and unequivocable. The payment so made l	•
this bond shall be a valid discharge of our liability for payment thereunder and the Supplier sl	-
claim against us for making such payment.	idii iidve iio
Claim against as for making such payment.	
4. We, Bank further agree with the Company that the Company shall hav	e the fullest
liberty without our consent and without affecting in any manner, our obligation hereunder to v	ary the any
of the terms and conditions of the said agreement or to extend time of performance by the sa	id Supplier
from time to time or to postpone for any time or from time to time any of the powers exercise	sable by the
Company against the Supplier and to forbear or enforce of the terms and conditions relating	to the said
purchase order and we shall not be relieved from our liability by reason of any such variation of	or extension
being granted to the said Supplier or for any forbearance act or omission on the part of the G	Company or
any indulgence by the Company to the Supplier or by any such manner or thing whatsoever, v	vhich under
the law relating to sureties would, but for the provision, have effect of so relieving us.	
	1.
5. This guarantee will not be discharged due to change in the constitution of the Bank or the Su	ıpplier.

6. We,till	- Bank, further agrees that the guarantee herein contained shall remain in force
We,	Bank, undertake not to revoke this guarantee during its currency except with
the previous consent of the	Company by writing.
Dated the	day
	Corporate Seal of the Bank
Witnesses	Signature by its constituted Attorney or of a
	person duly authorized to sign on behalf of the
	Bank
1.	
2.	

Annexure-VI

(FORMAT FOR THE BID SECURITY/ EMD)

(To be typed on Rs.100/- non-judicial stamp paper)

Whereas
THE CONDITIONS of the obligation are:
 If the Bidder withdraws his bid during the period of bid validity specified by the Bidder on the Bid form or If the Bidder, having been notified of the acceptance of his bid by the Purchaser during the period of bid validity a. fails or refuses to execute the Contract, if required; or b. fails or refuses to furnish the Performance Security, in accordance With the instructions to Bidders. We undertake to pay to 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 owning to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions. This guarantee will remain in force as specified in clauses 11 of the RFP Document water and including 60 days from the tandar organize date and any demand in represent the reset.
upto and including 60 days from the tender opening date and any demand in respect thereof should reach the Bank not later than the specified date/dates. Signature of the Bank Authority Name Signed in Capacity of
Name & Signature of Witness Full address of Branch

Tel No. of Branch

Address of witness

Fax No. of Branch

Annexure-VII

PRE CONTRACT INTEGRITY PACT

PURCHASE ENQUIRY/ORDER No.

THIS Integrity Pact is made on	day of	20

BETWEEN:

ITI Limited having its Registered & Corporate Office at ITI Bhavan, Dooravaninagar, Bangalore – 560 016 and established under the Ministry of Communications, Government of India (hereinafter called the Principal), which term shall unless excluded by or is repugnant to the context, be deemed to include its Chairman & Managing Director, Directors, Officers or any of them specified by the Chairman & Managing Director in this behalf and shall also include its successors and assigns) ON THE ONE PART

AND:

Preamble

WHEREAS the Principal intends to award, under laid down organizational procedures, contract for Supply, Installation and Commissioning of Establish The Infrastructure And Manufacturing Of Controlled Impedance Multi-Layer PCBs Up To 24 Layers On Turnkey basis at Bangalore plant to ITI Limited (name of the Stores / equipment's /items). The Principal, values full compliance with all relevant laws of the land, regulations, economic use of resources and of fairness/transparency in its relations with its Bidder(s)/ Partner(s).

In order to achieve these goals, the Principal has appointed an Independent External Monitor (IEM), who will **monitor** the tender process and the execution of the contract for compliance with the principles as mentioned herein this agreement.

WHEREAS, to meet the purpose aforesaid, both the parties have agreed to enter into this Integrity Pact the terms and conditions of which shall also be read as integral part and parcel of the Tender Documents and contract between the parties.

NOW THEREFORE, IN CONSIDERATION OF MUTUAL COVENANTS STIPULATED IN THIS PACT THE PARTIES HEREBY AGREE AS FOLLOWS AND THIS PACT WITHNESSETH AS UNDER:

SECTION 1 – COMMITMENTS OF THE PRINCIPAL

- 1.1 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 the contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the personal 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.
- 1.2 If the Principal obtains information on the conduct of any of its employee, which is a criminal offence under IPC/PC Actor if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary action as per its internal laid down Rules/Regulations.

SECTION 2 – COMMITMENTS OF THE BIDDER/PARTNER

- 2.1 The Bidder(s)/Partner(s) commits himself to take all measures necessary to prevent corruption. He commits himself observe the following principles during the participation in the tender process and during the execution of the contract.
 - a. The bidder(s)/Partner(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)/Partner(s) will not enter with other bidder(s)/partner(s) 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)/Partner(s) will not commit any offence under IPC/PC Act, further the bidder(s)/Partner(s) will not use improperly, for purposes of competition of personal gain, or pass onto 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)/Partner(s) of foreign original shall disclose the name and address of the agents/representatives in India, if any. Similarly, the Bidder(s)/Partner(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any.
 - e. The Bidder(s)/Partner(s) will, when presenting the bid, disclose any and all payments made, are committed to or intend to make to agents, brokers or any other intermediaries in connection with the award of the contract.
 - f. The Bidder(s)/Partner(s) will not bring any outside influence and Govt bodies directly or indirectly on the bidding process in furtherance to his bid.
 - g. The Bidder(s)/Partner(s) will not instigate third persons to commit offences outlined above or to be an accessory to such offences.

<u>SECTION 3 – DISQUALIFICATION FROM TENDER PROCESS & EXCLUSION</u> FROM FUTURE CONTRACTS

- 3.1 If the Bidder(s)/Partner(s), during tender process or before the award of the contract or during execution has committed a transgression in 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 Bidder(s)/ Partner(s) from the tender process.
- 3.2 If the Bidder(s)/Partner(s), has committed a transgression through a violation of Section 2 of the above, such as to put his reliability or credibility into question, the Principal shall be entitled exclude including blacklisting for future tender/contract award process. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the Principal taking into consideration the full facts and circumstances of each case, particularly taking into account the number of transgression, the position of the transgressor within the company hierarchy of the Bidder(s)/Partner(s) and the amount of the damage. The exclusion will be imposed for a period of minimum one year.
- 3.3 The Bidder(s)/Partner(s) with its free consent and without any influence agrees and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground including the lack of any hearing before the decision to resort to such exclusion is taken. The undertaking is given freely and after obtaining independent legal advice.
- 3.4 A transgression is considered to have occurred if the Principal after due consideration of the available evidence concludes that on the basis of facts available there are no material doubts.
- 3.5 The decision of the Principal to the effect that breach of the provisions of this Integrity Pact has been committed by the Bidder(s)/ Partner(s) shall be final and binding on the Bidder(s)/ Partner(s), however the Bidder(s)/ Partner(s) can approach IEM(s) appointed for the purpose of this Pact.
- 3.6 On occurrence of any sanctions/ disqualifications etc arising out from violation of integrity pact Bidder(s)/ Partner(s) shall not entitled for any compensation on this account.
- 3.7 subject to full satisfaction of the Principal, the exclusion of the Bidder(s)/ Partner(s) could be revoked by the Principal if the Bidder(s)/ Partner(s) can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption preventative system in his organization.

SECTION 4 – PREVIOUS TRANSGRESSION

- 4.1 The Bidder(s)/ Partner(s) declares that no previous transgression occurred in the last 3 years immediately before signing of this Integrity Pact with any other company in any country conforming to the anti-corruption/ transparency International (TI) approach or with any other Public Sector Enterprises/ Undertaking in India of any Government Department in India that could justify his exclusion from the tender process.
- 4.2 If the Bidder(s)/ Partner(s) makes incorrect statement on this subject, he can be disqualified from the tender process or action for his exclusion can be taken as mentioned under Section-3 of the above for transgressions of Section-2 of the above and shall be liable for compensation for damages as per Section- 5 of this Pact.

SECTION 5 – COMPENSATION FOR DAMAGE

- 5.1 If the Principal has disqualified the Bidder(s)/Partner(s) from the tender process prior to the award according to Section 3 the Principal is entitled to forfeit the Earnest Money Deposit/Bid Security/ or demand and recover the damages equitant to Earnest Money Deposit/Bid Security apart from any other legal that may have accrued to the Principal.
- 5.2 In addition to 5.1 above the Principal shall be entitled to take recourse to the relevant provision of the contract related to termination of Contract due to Bidder's/ Partner's default. In such case, the Principal shall be entitled to forfeit the Performance Bank Guarantee of the Bidder / Partner or demand and recover liquidate and all damages as per the provisions of the contract agreement against termination.

SECTION 6 – EQUAL TREATMENT OF ALL BIDDERS/PARTNERS

- 6.1 The Principal will enter into Integrity Pact on all identical terms with all bidders and partners for identical cases.
- 6.2 The Bidder(s)/Partner(s) undertakes to get this Pact signed by its sub-contractor(s)/sub-vendor(s)/associate(s), if any, and to submit the same to the Principal along with the tender document/contract before signing the contract. The Bidder(s)/Partner(s) shall be responsible for any violation(s) of the provisions laid down in the Integrity Pact Agreement by any of its sub-contractors/sub-vendors/associates.
- 6.3 The Principal will disqualify from the tender process all bidders who do not sign this Integrity Pact or violate its provisions.

<u>SECTION 7 - CRIMINAL CHARGES AGAINST VIOLATING BIDDER(S)/</u> <u>PARTNER(S)</u>

7.1 If the Principal receives any information of conduct of a Bidder(s)/ Partner / Contractor(s) or sub-contractor/sub-vendor/associates of the Bidder(s)/Partner(s) / Contractor(s) which constitutes corruption or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer of the Principal for appropriate action.

SECTION 8 – INDEPENDENT EXTERNAL MONITOR(S)

- 8.1 The Principal appoints competent and credible Independent External Monitor(s) for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extend the parties comply with the obligations under this pact.
- 8.2 The Monitor is not subject to any instructions by the representatives of the parties and performs his functions neutrally and independently. He will report to the Chairman and Managing Director of the Principal.
- 8.3 The Bidder(s)/Partner(s) accepts that the Monitor has the right to access without restriction to all product documentation of the Principal including that provided by the Bidder(s)/Partner(s). The Bidder(s)/Partner(s) will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The Monitor is under contractual obligation to treat the information and documents Bidder(s)/Partner(s) with confidentiality.

- 8 .4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the project provided such meeting could have an impact on the contractual relations between the Principal and the Bidder(s)/Partner(s). As soon as the Monitor notices, 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 specific manner, refrain from action or tolerate action.
- 8.5 The Monitor will submit a written report to the Chairman & Managing Director of the Principal within a reasonable time from the date of reference or intimation to him by the principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 8.6 If the Monitor has reported to the Chairman & Managing Director of the Principal a substantiated suspicion of an offence under relevant IPC/PC Act, and the Chairman & Managing Director of the Principal 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.

The word 'Monitor' would include both singular and plural.

Details of the Independent External Monitor appointed by the Principal at present is furnished below: -

Shri Javeed Ahmad, IPS (retd.) M-1101, Shalimar Gallant Apartment VigyanpuriMahanagar LUCKNOW – 226 006

Any changes to the same as required / desired by statutory authorities is applicable.

SECTION 9 – FACILITATION OF INVESTIGATION

9.1 In case of any allegation of violation of any provisions of this Pact or payment of commission, the Principal or its agencies shall be entitled to examine all the documents including the Books of Accounts of the Bidder(s)/Partner(s) and the Bidder(s)/Partner(s) shall provide necessary information and documents in English and shall extend all help to the Principal for the purpose of verification of the documents.

SECTION 10 – LAW AND J URISDICTION

- 10.1 The Pact is subject to the Law as applicable in Indian Territory. The place of performance and jurisdiction shall the seat of the Principal.
- 10.2 The actions stipulated in this Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

SECTION 11 – PACT DURATION

- 11.1 This Pact begins when both the parties have legally signed it. It expires after 12 months on completion of the warranty/guarantee period of the project / work awarded, to the fullest satisfaction of the Principal.
- 11.2 If the Bidder(s)/Partner(s) is unsuccessful, the Pact will automatically become invalid after three months on evidence of failure on the part of the Bidder(s)/Partner(s).
- 11.3 If any claim is lodged/made during the validity of the Pact, the same shall be binding and continue to be valid despite the lapse of the Pact unless it is discharged/determined by the Chairman and Managing Director of the Principal.

SECTION 12 – OTHER PROVISIONS

- 12.1 This pact is subject to Indian Law, place of performance and jurisdiction is the Registered & Corporate Office of the Principal at Bengaluru.
- 12.2 Changes and supplements as well as termination notices need to be made in writing by both the parties. Side agreements have not been made.
- 12.3 If the Bidder(s)/Partner(s) or a partnership, the pact must be signed by all consortium members and partners.
- 12.4 Should one or several provisions of this pact turn out to be invalid, the remainder of this pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 12.3 Any disputes/ difference arising between the parties with regard to term of this Pact, any action taken by the Principal in accordance with this Pact or interpretation thereof shall not be subject to any Arbitration.
- 12. 4 The action stipulates in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

In witness whereof the parties have signed and executed this Pact at the place and date first done mentioned in the presence of the witnesses:

For PRINCIPAL	For BIDDER(S)/PARTNER(S)
(Name & Designation)	(Name & Designation)
Witness	Witness
1)	1)
2)	2)

Annexure-VIII

Declaration that the Bidder has not been blacklisted/debarred

(To be submitted on Non-Judicial Stamp Paper of Rs. 100/- duly notarized)

Place:
Date:
To,
<name address="" and=""></name>
Ref: Tender Notification no dated
Subject: Declaration of Bidder being not blacklisted
Dear Sir,
It is certified that our firm/company or any of our entity is not black listed/Debarred from
doing business or put on holiday list etc by any Govt. Organization / PSUs for any reason.
However, if we fail to complete the awarded work / fulfill the Tender conditions or if any of the
information submitted by our company or its employee or associate, proves to be false, ITI Ltd
shall be free to take action / black list our firm / company notwithstanding of taking any other
legal action."
Place :
Date :

Authorized Signatory's Name and Designation:

Bidder's Company Seal

Authorized Signatory's Signature

Annexure-IX

NON-DISCLOSURE AGREEMENT

(Between M/s. ITI Ltd & M/s.....)

This Agreement is made on......day of......between M/s ITI Limited a company incorporated under the Indian Companies act. 1956 and having its registered office at ITI Bhavan, Dooravani Nagar, Bengaluru-560016 with CIN No: L32202KA1950GOI000640 herein after called "ITI"

AND

M/s. xxxxx, a Company/LLP/Partnership Concern incorporated under the Companies Act, 1956/2013 or registered under partnership act 1932, having its Registered Office at, CIN No (hereinafter referred to as bidder which shall include its successors and permitted assigns, herein after referred to as Bidder); which expression shall unless repugnant to the subject or the context mean and include its successors, nominees or assigns. Bidder and ITI are hereinafter also referred to individually as "Party" and collectively as "Parties".

Background:

The Parties are evaluating and negotiating a potential contractual relationship, subject to mutually agreed definitive agreement, as per Tender No. ------due on sissued by ITI Limited for The FOR ESTABLISHING THE INFRASTRUCTURE, SUPPLY, INSTALLATION & COMMISSIONING OF CONTROLLED MULTI-LAYER PCB PLANT UP TO 24 LAYERS ON TURNKEY BASIS AT BANGALORE PLANT.

- (A) ITI may in these evaluations and negotiations disclose certain Confidential Information (as defined below) to Bidder;
- (B) The Parties agree that the disclosure and use of Confidential Information is to be made on the terms of this Agreement.

The Parties agree as follows:

Whereas Bidder is a prospective party to bid for the execution of establishing PCB Plant for a turnkey project being handled by ITI of Army project. The bidder will be issued details pertaining to locations which is highly classified and confidential information. The information is to protect from unauthorized use and disclosure.

In consideration of this, the bidder agrees as follows:-

1. This Agreement will apply to all information including information listed in Exhibit A attached hereto pertaining to project disclosed by M/s ITI Ltd to the bidder in writing or otherwise. Information consists of location details, equipment details and /or technical information, and all copies and derivatives containing such information that may be disclosed to PIA for and during the Purpose. Information may be in any form or medium, tangible or intangible, and may be communicated / disclosed in writing, orally, or through visual observation or by any other means by ITI to the bidder.

- 2 The bidder shall use the information pertaining to this project only for the purpose and shall hold information in confidence using the same degree of care as it normally exercise to protect its own proprietary information, but not less than reasonable care, taking into account the nature of the information and shall grant access to information only to its employees who have need to know, but only to the extent necessary to carry out the business purpose of this project as defined. The bidder shall cause its employees to comply with the provisions of this Agreement applicable and shall not reproduce information. The bidder may, however, disclose the information to its consultants as per need to know requirement, provided that by doing so, the bidder agrees to bind those consultants to terms at least as restrictive as those stated herein, advising them of their obligations and indemnify ITI Ltd for any breach of those obligations.
- 3. The bidder shall not disclose any information pertaining to this project to any third party.
- 4. The bidder failure to enforce any provision, right or remedy under this agreement shall not constitute waiver of such provision, right or remedy.
- 5. This Agreement will be construed in, interpreted and applied in accordance with the laws of India.
- 6. This Agreement attached hereto constitutes the entire agreement with respect to the bidder obligations in connection with information disclosed hereunder.
- 7. The bidder shall not assign this Agreement without first securing ITI's written consent.
- 8. This agreement will be in effect from the date of the disclosure of confidential information.

IN WITNESS WHEREOF, the parties hereto have executed this agreement by their duly authorized officer or representatives.

M/s	M/s ITI Limited
Signature	Signature
Printed Name	Printed Name
Title	Title
Witness No. 1	Witness No. 1
Name	Name
Witness No. 2	Witness No. 2
Name	Name