



ITI LIMITED :: KANJIKODE WEST :: PALAKKAD 678 623 :: INDIA

Phone: +91 491 2566180; Fax: +91 491 2566009

RFQ ref: PM114G011

Date:07-11-2014

To:

Sir,

Sub: Request for quotation – Smart Card Milling & Implanting Machine integrated with Glue Tape Lamination

ITI Limited, Palakkad, invites quotations from reputed Manufacturers for supplying one number of Milling and Implanting Machine integrated with Glue Tape Lamination for augmenting its Smartcard manufacturing capacity. The RFQ document attached herewith explains the scope of work, specification and requirement of the equipment, terms and conditions, minimum eligibility criteria for the bidders, instruction to the bidders, price bid format etc.

The RFQ document consists of :

1. Section A – General Terms & Conditions
2. Section B – Technical Specification & Other Requirements
3. Section C – Questionnaire / Compliance / Eligibility – Evaluation Format
4. Section D – Price Bid Format
5. Section E – Performance Bank Guarantee Format

Time Schedule :

1. RFQ Release date – 07-11-2014
2. Last date for request for clarification – 14-11-2014
3. Reply to clarification – 19-11-2014
4. Due date for submission of quotation – 01-12-2014, 14.00 Hrs
5. Tender opening (Eligibility and Techno-commercial bid) – 01-12-2014, 14.30 Hrs.

Please acknowledge the receipt of this RFQ and submit your quotation before the due date and time.

Thanking you

Yours faithfully
For ITI Limited

Deputy General Manager-MM & IT
ITI Limited
Kanjikode West, Palakkad 678 623
Kerala, India

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SECTION A

GENERAL TERMS & CONDITIONS

1. Introduction

- 1.1. ITI Limited, Palakkad, in Kerala State, India, has established a Smart Card manufacturing line and it has been producing Smart cards for different applications like GSM SIM cards, National ID cards etc. As part of augmenting its manufacturing facilities, it is proposed to install one Number of Smart Card Milling and Embedding machine of a capacity of at least 5000 cards per hour. **The scope of the tender covers supply, installation and commissioning of one number of Milling and Implanting machine integrated with Glue Tape Lamination, supported by warranty for 2 years and comprehensive Annual Maintenance Contract (AMC) for three years after warranty period.**

2. Definitions

- 2.1. “Purchaser” means ITI Limited, Kanjikode West, Palakkad, Kerala, India, PIN-678623.
- 2.2. “Bidder” means the individual or the firm who participates in the tender and submits the bid.
- 2.3. “Supplier” means the individual or the firm who is the successful bidder supplying and commissioning of the tendered items.
- 2.4. “Letter of Intent” means a letter issued by the Purchaser indicating his intention to place Purchase Order on the successful bidder.
- 2.5. “Purchase Order” means the order placed by the Purchaser on the Supplier for the supply and commissioning and fulfilling other conditions as required in the tender. This shall be deemed as “Contract”.
- 2.6. “Maintenance Consumables” means the items, like milling tool, which are required in the tendered machine to be replaced after the production of defined quantity of smart cards in order to ensure the expected level of quality in further production.
- 2.7. “Maintenance Spares” means the items which are required for the replacement of items becoming faulty in the tendered machine.
- 2.8. “Commissioning” means the acceptance of the system/s by the Purchaser in writing.

3. Eligible bidders

- 3.1. The Bidder must be the Original Equipment Manufacturer (OEM) of the proposed system and shall have track record of supplying and maintaining related machines at least 5 years.
- 3.2. The Bidder must have multiple Machine installation of similar type of equipments in India. A detailed list with type of machine and client contact shall be given in the bid document.
- 3.3. The Bidder shall enable the tendering organization to visit at least one client of the Bidder in India to visit their production plant.

3.4. The Bidder shall submit the following documents along with the bid to prove his capacity on addressing the requirements of this tender:

3.4.1 A certificate signed by the bidder for having supplied at least 5 machines by the OEM of each of the types called for in this tender as integrated solution for Milling and Implanting machine with throughput of not less than 3000 cards per hour. The bidder shall furnish the address and contact details of these customers along with supporting documents (PO copy, Invoice etc).

3.4.2 Certificates from at least two customers for the satisfactory working of similar types of the machines with address and contact details for these customers.

3.5 The Bidder should have a Service Infrastructure in India which is operated under the name of the Bidder for the last three years for the machineries used in Smart Card production. The Service centre must have certified Service Engineers and Spare Parts for the proposed equipment. The Technical Support group should be possible to extend on-site support within 24 hours of the call from the Purchaser. Bidder shall submit a document on the organization of the technical support group in India along with the bid.

4. Earnest Money Deposit (EMD)

4.1. The bidder shall submit a Demand Draft for an amount of Rs. 12,00,000/- (Indian Rupees Twelve lacs only) drawn in favor of ITI Limited, payable at Palakkad, from any Indian Nationalized/ Scheduled Bank towards Earnest Money Deposit.

5. Submission of Bid Documents

5.1. The bidder shall quote for supplying, installing and commissioning one number of Milling and Implanting machine integrated with Glue Tape Lamination of throughput of at least 5000 cards per hour along with all accessories as defined in Section B, comprehensive warranty support for a period of two years and AMC for three years after warranty period.

5.2. The bid will be processed on a **TWO BID SYSTEM**.

5.3. The bidder shall submit the following documents along with the bid. The documents shall be submitted in two sealed covers super scribing **RFQ reference and due date** and separately marked as following:

5.3.1. Eligibility and Techno-commercial Bid

5.3.2. Price Bid

5.4. The cover marked Eligibility and Techno-commercial Bid shall have the following documents:

5.4.1. The duly filled questionnaire/ eligibility/ evaluation format (Section – C)

5.4.2. Earnest Money Deposit as per clause 4 above.

5.4.3. Documents to prove eligibility conditions as per clause 3 above.

5.4.4. Clause-wise compliance to the following:

5.4.4.1. General Terms and Conditions (Section A)

5.4.4.2. Technical Specifications and Other Requirements (Section B)

5.4.4.3. Technical clarifications issued by the Purchaser after the release of the tender, if any.

- 5.4.5. Technical manual for the equipment covered in the tender including the details on the optional features supported by the system. This shall be submitted in hard copy as well as soft copy. The soft copy of the technical manual shall also include a video file (in a standard format) showing the actual machine operation.
- 5.4.6. Acceptance test procedure for the machine.
- 5.4.7. Copy of the Price bid (as per clause 5.5 below), but, **without showing the price.**
- 5.4.8. All the documents listed in clauses 5.4.1 to 5.4.7 shall be submitted in two sets.
- 5.5. The Price Bid cover shall have the Price of the Machine quoted as per the format at Section D.
- 5.6 The bidder is expected to examine all requirements, terms and conditions of the tender. Failure to furnish required information in every aspect or non-submission of necessary proof and relevant document or non-submission of EMD may lead to rejection of the bid.
- 5.7 Each page of the bid document shall be signed by the bidder (except the technical manuals associated with the bid where signing of each page is not mandatory).
- 5.8 The bid documents shall be submitted to the following address:
- Deputy General Manager-MM & IT
ITI Limited
Kanjikode West
Palakkad, Kerala, India - PIN 678 623
Phone: +91 491 2566180, FAX: +91 491 2566009
E-mail: pur4_pkd@itilttd.co.in,
- 5.9 The Purchaser assumes no responsibility of bids delivered to any other address other than that mentioned at clause 5.8 above. It will be the bidder's responsibility to ensure that the bids are submitted at the correct delivery address and before the bid closing time.

6. Clarification on Bid Documents

- 6.1 A prospective bidder, requiring any clarification on the Bid Documents shall notify the Purchaser in writing or by e-mail at the Purchaser's mailing address indicated in the invitation of Bid on or before the stipulated date. The Purchaser will respond in writing to any request for the clarification of the Bid Documents received within the schedule. Copies of the queries (without identifying the source) and clarifications by the Purchaser will be sent to all the prospective bidders who have asked for the clarifications. Clarifications shall be made available as a corrigendum in the Purchaser's web site (itilttd-india.com) and National Portal (tenders.gov.in) also.
- 6.2 Any clarification issued by the Purchaser in response to queries raised by prospective bidders shall form an integral part of bid documents and it may amount to an amendment of relevant clauses of the bid documents.
- 6.3 Notwithstanding the above, prior to the date of submission of the bids, the Purchaser may, for any reason, modify the tender documents. These amendments shall be put on the Purchaser's web site and National Portal also. In order to afford prospective bidders a reasonable time to prepare the bid, the Purchaser may, at its discretion, extend the date for bid submission. Prospective bidders are therefore requested to check the Purchaser's website prior to submission of the bids.

7. Discharge of Earnest Money Deposit

- 7.1 The EMD of bidders those who are not qualified after evaluating the eligibility criteria in the Eligibility and Techno-commercial bid will be returned within 30 days from the date of bid opening.
- 7.2 The EMD of successful bidder shall be discharged within 30 days after the bidder's acceptance of Purchase Order and submission of Performance Bank Guarantee.
- 7.3 The EMD of all other unsuccessful bidders shall be discharged within 60 days from the date of price bid opening.
- 7.4 The EMD will be forfeited if the bidder withdraws the bid during the validity of the bid, or, in the case of a successful bidder, the bidder fails to accept the Letter of Intent/ Purchase order or fails to submit the Performance Bank Guarantee.

8 Bid Submission and Period of Validity of Bids

- 8.1 The bids shall be submitted before 14.00 Hrs on due date. If this day is declared as holiday on account of any reason, the bid submission period is extended up to 14.00 Hrs on the next working day of the Purchaser.
- 8.2 Bids shall remain valid for 120 days from the due date for submission of bids.
- 8.3 The bidder may submit a revised bid before the deadline specified in clause 8.1, after a request in writing and the original bid is taken back by the bidder under acknowledgment.
- 8.4 Bids submitted beyond the period specified in clause 8.1 shall be rejected.

9 Bid Prices

- 9.1 The price bid format is given in Section D. The offer shall be in Indian Rupees. Terms of price shall be 'Delivery at the Purchaser's location' (at Kanjikode West, Palakkad, in Kerala State, India, PIN-678623).
- 9.2 Alternatively, the offer may be made in a foreign currency on CIP basis, where the cost of the equipment up to the delivery at the port of landing within India shall be shown in the bid in the same format as stated above in clause 9.1. The delivery up to the port of landing shall be by air freight. (Port of landing shall be Chennai in India). Such offers shall be made in one of the currencies US \$ or European €. The clearance of the system at the Customs will be the responsibility of the Purchaser. The transportation and insurance from the port of landing (Chennai) to the Purchaser's location (at Kanjikode West, Palakkad, in Kerala State, India) shall be the responsibility of the Supplier.
- 9.3 The price quoted by the bidder shall remain fixed during the entire period of the contract including AMC period (i.e., from the date of bid submission until five years from the date of commissioning). However, price variation may be permitted beyond a period of six months from the date of bid submission to account for any changes in the statutory duties and taxes during the period between the date of bid submission and the actual delivery date including supply of maintenance consumables/spares/optional modules during warranty and AMC period. Any variation in taxes/ duties beyond a period of six months from the date of bid submission shall be to the account of the Purchaser. Foreign currency fluctuations (if the price quoted is in foreign currency) while purchasing spares/ modules/

consumables during the warranty or AMC period shall also be to the account of the Purchaser.

- 9.4 For the prices quoted as per clause 9.2 above, the Purchaser shall evaluate the final price based on the exchange rate on the day of price bid opening. It is the responsibility of the bidder to deliver the goods at the Purchaser's location (Palakkad in Kerala State, India). All expenditure (transportation, insurance from Port of landing to the Purchaser's location, loading and unloading etc.) for transporting the goods from Port of landing (Chennai) to the Purchaser's location shall be borne by the Supplier. However, the customs clearance and customs duty payment at the port of landing will be borne and arranged by the Purchaser. The financial outflow for the Purchaser due to customs duty element (as on the date of price bid opening) shall form part of the price bid evaluation.
- 9.5 The price bids for maintenance consumables are used only for the bid evaluation and the Purchaser reserves the right to buy these consumables as and when required as per the manufacturing plan. Similarly, the Purchaser reserves the right to buy optional modules or maintenance spares when required.

10 Bid opening and Evaluation

- 10.1 The bids will be opened on the due date at 14.30 hours. The Purchaser will open the bids in the presence of the bidders or their authorized representatives who chose to attend the tender opening. The bidder's representatives, who are present shall sign in an attendance register. Authority letter to this effect shall be submitted by the bidders before they are allowed to participate in the bid opening. If the day of the bid opening is declared as holiday on account of any reason, the bid opening will be fixed at 14.30 Hrs on the next working day.
- 10.2 A maximum of two representatives of the bidder shall be permitted to attend the bid opening.
- 10.3 On the day of the bid opening as specified at clause 10.1 above, the covers containing Eligibility and Techno-commercial bids only will be opened. The Purchaser will evaluate the technical bids of those who have been found eligible. The Price bids of only those qualified after technical evaluation will be considered for further processing. Price bid opening date will be informed to the qualified bidders separately by the Purchaser.
- 10.4 The evaluation of the price bid for the machine shall be based on the total of the following.
- 10.4.1 Cost of one Milling and Implanting machine integrated with Glue Tape Lamination of throughput of 5000 cards per hour meeting the specifications defined in Section B.
 - 10.4.2 Cost of Maintenance Consumables for the machine for a total production of 30 million cards
 - 10.4.3 Money outflow due to Customs duty element for the machine, if any, calculated on the basis of Price-Bid opening date.
 - 10.4.4 Cost of AMC for three years (after two years' warranty)
- 10.5 The cost of maintenance spare and cost of optional modules/ features will not be part of the evaluation.
- 10.6 For the price bids quoted in foreign currency, the conversion rate as on the date of price bid opening shall be used for the purpose of bid evaluation.

10.7 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of contract without assigning any reason whatsoever and without thereby incurring any liability to the affected bidder or bidders on the grounds of Purchaser's action.

11. Placement of Letter of Intent (LOI) and Purchase Order (PO)

11.1 The Purchaser will consider placement of LOI/ PO for supply of machine only on the eligible bidder whose offer has been found technically and commercially acceptable.

11.2 Letter of Intent shall be issued to the successful bidder indicating the Purchaser's intention to place Purchase Order on him for the delivery of required items. The LOI shall contain the items proposed for procurement/lease and the value.

11.3 The successful bidder shall submit LOI acceptance within two weeks of LOI issuance by the Purchaser along with the Performance Bank Guarantee as per clause 12 below. On receipt of LOI acceptance and the PBG, Purchase Order shall be issued by the Purchaser.

11.4 The issue of Purchase order shall constitute the award of contract on the bidder.

12 Performance Bank Guarantee (PBG)

12.1 On receipt of Letter of Intent for the supply of the machine and the associated items, the Supplier shall submit Performance Bank Guarantee for an amount of **10%** of the LOI value, valid for 30 months from the date of Letter of Intent, drawn from any Nationalized/ Scheduled Bank.

12.2 The proceeds of the Performance Bank Guarantee shall be payable to the Purchaser as compensation due to Supplier's failure to complete his obligations under the contract.

12.3 The performance security Bond shall be in the form of Bank Guarantee issued by an Indian Nationalized/ Scheduled Bank and in the form provided in this Bid Document (Section – E).

12.4 The Performance Security Bond will be discharged by the Purchaser after completion of the Supplier's performance obligations including warranty obligations under the contract and also after the Supplier provides a separate PBG valid for three years for an amount of 10% of total AMC value for three years. If the Purchaser desires not to enter into AMC or withdraws from AMC at any time, the PBG will be released within 90 days from the date of end of warranty period or withdrawal from AMC.

13 Delivery and Commissioning

13.1 All items as per the Purchase Order shall be delivered at the Purchaser's location (at Kanjikode West, Palakkad, Kerala, India), within 12 to 16 weeks from the date of LOI. This will be excluding the time taken by the Purchaser for customs clearance, which is the responsibility of the Purchaser.

13.2 The commissioning of the system shall be completed within 4 weeks from the date of receipt at the items at Purchaser's location.

13.3 Delay by the Supplier in the performance of its delivery or commissioning obligations shall render the Supplier liable to any or all of the following sanctions: forfeiture of EMD, imposition of liquidated damages and/or termination of the contract for default. In the case of liquidated damages, the penalty shall be as per clause 15 in this section.

14 Payment Terms

14.1 The payment for the supply of goods shall be made as per the terms and conditions given below:

14.1.1 70% payment by LC with 90 days credit from the date of Airway Bill

14.1.2 10% payment by TT immediately after commissioning and acceptance

14.1.3 Balance 20% by TT after 3 months from the date of commissioning & acceptance

14.2 The following documents shall be submitted to enable the first installment of 70% payment.

14.2.1 Invoice & Packing list

14.2.2 Airway bill

14.2.3 Country of Origin Certificate issued by the Supplier

14.2.4 A Certificate from the Ordering Authority of the Purchaser stating that the Equipment ordered vide the purchase order have been received in good condition at the Purchaser's site.

14.3 The 2nd and 3rd installment of payment will be released as per clauses 14.1.2 and 14.1.3 above on submission of commissioning certificate from the Ordering Authority of the Purchaser.

15 Liquidated Damages

15.1 Should the Supplier fails to deliver or commission the system as per the delivery/ commissioning schedule, the Purchaser shall be entitled to recover from the Supplier a penalty equivalent to 0.5 % of the value of the Purchase Order of the full system per week for the first four weeks or part thereof and 0.7% per week there after for such delay or part thereof or cancel the purchase order and purchase elsewhere at the risk of the Supplier.

16 Language

16.1 The language used in all communication, bid documents, technical manuals, electronic documents, commercial papers etc. shall be English only.

17 Force Majeure

17.1 If, at any time, during the continuance of this contract till the date of commissioning, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons 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 (hereinafter 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 claim for damages against other in respect of such non-performance or delay in performance, and deliveries under the contract shall be

resumed as soon as practicable after such an event come to an end or cease to exist, and the decision of the Purchaser as to whether the deliveries have been so resumed or not shall be final and conclusive. Further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reasons of any such event for a period exceeding 60 days, either party may, at its option, terminate the contract, without any obligations.

- 17.2 Force Majeure clause shall be applicable during the tenure of Warranty and Annual Maintenance Contract / Lease Period and the decisions during this period shall be based on mutual agreements.

18 Arbitration

- 18.1 All disputes for differences of any kind, whatsoever, arising out of or in connection with this contract or in discharge of any obligation arising out of this contract, the parties to this contract shall endeavor to settle such disputes and or difference amicably. If both the parties fail to reach such amicable settlement, either party may, within 30 days of such failure, give a written notice to the other party clearly setting out therein the specific dispute and or differences, which require to be arbitrated upon. Such disputes and / or differences shall be referred to a sole arbitrator mutually agreed upon. In the absence of consensus about the single arbitrator, the dispute may be referred to joint arbitrator, one to be nominated by each party and the said arbitrators shall nominate a presiding arbitrator, before commencing the arbitrator proceedings.
- 18.2 Arbitration proceedings shall be held at Palakkad, in Kerala State, India. The arbitration shall be covered by the provision of the Arbitration and Conciliation Act, 1996 or any statutory modifications or re-enactment thereof and rules framed there under from time to time.

SECTION B

TECHNICAL SPECIFICATIONS AND OTHER REQUIREMENTS

1. Scope of the Tender

Supply, Installation, testing and Commissioning of Smart Card Milling and Implanting machine integrated with Glue Tape Lamination for implanting chip module on plastic cards, here after termed as “machine”. The supply, Installation and Commissioning shall be carried out at ITI Limited, Palakkad, Kerala, India. The machine shall include all the equipments and components so as to make it complete in all respects as may be required for smooth, reliable and satisfactory performance & operation envisaged for the purpose required and shall meet all technical, operational and maintenance requirements.

2. Technical Specifications

- 2.1 The machine shall perform the basic function of drawing the card body from the magazine into a conveyor followed by checking card orientation, thickness of the card and milling cavity in the card, do the ATR test on the chip module, implant the chip module by hot melt process on the milled cavity, do the ATR test on the embedded card, read the chip serial number, card serial number and then stack the card in the output magazine as a single pass automatic system. The machine shall include Glue Tape Lamination as a sub system to draw the glued chip module for embedding.
- 2.2 **The total throughput of the offered machine with the activation of all the functions shall be at least 5000 units per hour at 200⁰ C temperature, 65 newton pressure/module and 1400 ms pressing time for any type of chip module/ card body.**
- 2.3 **The machine shall be capable of continuous operation round the clock throughout the year and shall be branded new one.**
- 2.4 The machine shall be equipped with automatic magazine/hopper changers at the input as well as at the output stages with magazines/hoppers of 500 nos. card capacity. Provision shall exist for simultaneous loading of at least three magazines/hoppers at the input as well as at the output and the automatic changeover of magazine/hopper shall enable the machine using the next magazine/hopper when the previous one is fully utilized. The supply of the machine shall include at least three magazines/ hoppers at the input as well as at the output. All magazines shall be operator friendly to fill the magazines with blank cards.
- 2.5 The machine shall also have the facility to programme the changeover of output magazines after processing the cards in each input magazine.
- 2.6 The machine shall be able to handle cards of size ID1 of EN ISO/IEC 7816/7810 specification. The system shall be able to support cards of different material types, like PVC, ABS, PET-G, PC etc. or a combination of these materials.
- 2.7 The machine shall have card orientation check with any selectable location on the card surface so as to ensure processing of only those cards, which are loaded in the right direction. The rejected cards shall be dropped into a reject bin. On successive failure of cards in orientation check, the machine shall come to a halt automatically. The limit for the successive failure of cards leading to machine halt condition shall be selectable. A reject bin shall be available to collect rejected cards failed on account of any reasons.
- 2.8 The machine shall deliver sample cards at specified (programmable) intervals and also at operator request (by key board). The sample cards shall be collected in sample card tray.

- 2.9 The machine shall have provision to check the thickness of the cards being loaded and the acceptable thickness measurements (both in the positive side and negative side) shall be programmable. Cards beyond these acceptable thickness measurements shall be rejected. The measurement system shall have the facility to check the card thickness in millimeter up to 3 decimals with accuracy better than 90% for the third decimal. The rejected cards in this measurement shall be dropped into the reject bin. On successive failure of cards in thickness measurement check, the machine shall come to a halt automatically. The limit for successive failure of cards leading to machine halt condition shall be selectable.
- 2.10 The machine shall have provision to read the card serial number (Bar Code) printed front side of the card and chip serial number of the corresponding ATR passed embedded cards. Save both card serial number and the respective chip serial number of all the cards along with a sequence number to track the batch quantity as separate fields of a database table. Machine should have hardware interface and necessary interface software to send the data generated to a database table in a computer.
- 2.11 The offer shall be included suitable computer in addition to the O&M computer for saving and retrieving the database generated by the machine and heavy duty Laser Printer (speed shall be minimum 50ppm) for printing the database stored in the computer. The computer should have a minimum capacity to store data of 6 months continues production.
- 2.12 The machine shall capable of disabling the Glue Tape Lamination sub system and possible to operate milling & implanting process with pre laminated chip module in reel form.
- 2.13 The offer shall include the hardware and software required for milling and embedding of M4 size chip in normal operation and suitable hardware (conversion kit) and software required for M3 size chip also for changing over M4 to M3 as and when required.
- 2.14 The Database used may be MS SQL/MySQL/Oracle.
- 2.15 The machine shall have milling station(s) to mill the card body as per ISO 7810 specifications to enable embedding of contact type chip modules. The milling unit of the proposed system must be equipped with two independent operating milling heads which operate x, y and z direction. Milling heads must have proper cooling system. The operation of the milling station(s) shall be controllable for the milling depth and the bidder shall give the details on milling control available in the system in the technical bid. Milling layers at different depths shall be possible on the same card body and facility shall be available to adjust the milling depth so that co-planarity of the milled layer with reference to the top of the card is maintained. Simultaneous milling at two different depths with the same milling head shall also be possible. The milling process parameters shall be programmable and an accuracy of ± 30 micron in X-Y and ± 15 micron in Z axes shall be achievable. It shall be possible to activate all or required number of milling stations. The machine shall be delivered scratch free embedded cards.
- 2.16 The Milling stations in the machine shall support milling to embed 8 pin type (M4) modules. The machine shall also support milling for the embedding of chip modules of 6-pin type (M3) when required. The system should have automatic milling tool calibration mechanism after every tool change.
- 2.17 Dust extraction station(s) shall be available during and after the milling process to remove the dust on the milled cards.
- 2.18 Facility for automatic measurement of milling depth shall be available and the cards failing in this measurement shall be rejected and sent to reject bin. An automatic milling depth correction must be provided. This option shall be able to enable/disable.
- 2.19 The transportation mechanism of the machine shall be such a way that it should deliver scratch free embedded cards.
- 2.20 The machine shall be capable of handling the chip module tape of 35 mm width, pitch 9.5 to 14.25 mm with max.500 mm reel diameter and spacer tape reel of 330 mm. Machine shall be able to handle chip modules mounted on two track tap Disabled condition of Glue

- Tape Lamination sub system the machine shall be capable of handling the chip module tape of 35 mm width, pitch 9.5 to 14.25 mm with max.500 mm reel diameter and spacer tape reel of 330 mm. Machine shall be able to handle chip modules mounted on two track tapes.
- 2.21 Module cutting unit shall be available in the machine to take out chip modules from the tape for implanting. The machine shall have the facility to bypass faulty modules from embedding by identifying ATR failed and punched mark holes in such modules. The machine shall incorporate by a vision / optical verification system for checking the bad module and shall be bypassed without being embedded. It should be possible to program the machine to locate punched holes on any part of the module body. The bidder shall give the details on the punched hole detection mechanism in the machine.
 - 2.22 The machine shall support ATR (Answer to Reset) check for chip modules. Those modules, which fail in ATR test, shall be bypassed without being embedded and storage mechanism to be provided for storing the rejected modules. Inline machine (Milling & Embedding and Glue Tape Lamination) shall have a system for correct chip module position and orientation check at input stage of Glue Tape Lamination.
 - 2.23 Machine shall be able to keep a count on the number of modules failed in the ATR check. It shall also show the number of modules detected with punched hole marks.
 - 2.24 The chip implanting unit shall have tacking station(s) for prefixing the chip module in the milled cavity, hot press station(s) for completing the process of embedding followed by cold press station(s) for cooling. The process parameters like pressing time, pressure and temperature etc. for these units shall be programmable.
 - 2.25 Machine shall have rewinding spool system for empty chip module tape.
 - 2.26 The module implanting temperature shall be programmable up to 220⁰ C.
 - 2.27 The machine shall have the facility for measuring the module height with reference to the card surface after implanting with a differential height measuring station and the limits for the same shall be programmable. Cards failing in this check shall be rejected and sent to reject bin.
 - 2.28 The output cards shall not have any visible marks or scratches on account of the machine process at various stages on the card body or on the module.
 - 2.29 The machine shall have the facility to display the statistics of all stations and rejection at each station separately.
 - 2.30 It should be possible to activate all or any of the desired stations for a given job.
 - 2.31 It should be possible to independently set the parameters of all the stations in the system. In case of multiple stations for the same function, it should be possible to control the parameters independently for each station.
 - 2.32 The Glue Tape Lamination Sub System
 - 2.32.1 The sub system shall have the basic function of laminating the adhesive tape on the bottom of smart card chip modules in tapes.
 - 2.32.2 The sub system shall consist of spooling and indexing systems for chip module tapes, glue tapes and spacer tapes.
 - 2.32.3 The glue tape punching station shall perforate the hot melt adhesive tape and perforated tape sheets are blown from punch in to a container by compressed air or equivalent means. The module tape shall synchronize with reference to the perforation station.
 - 2.32.4 The laminating station shall be operable in the temperature range of 100° C to 170°C and temperature should be selectable. The module laminating temperature is of 120°C to 140° C and press time of 1.5 to 3.0 seconds. The holding time of the gluing process shall also be selectable. The clamping station shall hold the module tape in defined position.

- 2.32.5 Tape control and sagging control shall be incorporated to avoid sagging at the end of the tape.
- 2.32.6 The sub system shall have mechanically controlled module tape transport, top and bottom plate heating at the laminating station and also shall allow easy and fast tool changing to accommodate different product, sensors.
- 2.33 Functions of the Milling and Implanting machine shall be controllable through a computer, preferably a personal computer working on standard operating system and connected to the basic system through standard interfaces. This O&M (operation and maintenance) computer shall be based on hardware of latest technology and the Supplier shall give the details on this device and its interface to the basic system. At least one O&M computer along with all connecting accessories shall be part of the equipment supply. If additional computers are required for different operations, the same shall also be supplied.
- 2.34 The O&M computer shall have GUI based interface for operation. The display unit shall be at least of 17" size, colour LED/ LCD type.
- 2.35 The O&M computer shall have enough RAM and hard disk space to store operational data and reports for a period of six months. DVD/CD write/read facility shall be available for loading operating system and application software or backing up of machine software, operational data and reports.
- 2.36 The system shall provide instantaneous throughput, average throughput, no. of processed cards, process parameters, offset cumulative counter minimum 8 digits (non-resettable), job counters (resettable) etc., graphical display of milling track, rejection statistics, production/ fault/ error data logging etc. on the display unit.
- 2.37 All reports on the machine operation and the results of the operation including error messages shall be stored in non-volatile memory and should be possible to retrieve at any time or to be stored at user defined memory in the hard disk of the computer or to print on a laser printer.
- 2.38 The O&M computer shall have the facility to connect a standard printer either through a USB interface or through Parallel port. A standard A4 size laser printer with USB/parallel interface to the system along with interface accessories shall be supplied.
- 2.39 It should be possible to take the data back up in DVDs and external USB Hard Disk. However, if the data backup mechanism is different from this, the supplier shall indicate the data backup details and the details on the media to be used. In either case, the data backup application software along with the media required for the backing of the data for a period of six months from the date of commissioning shall be supplied by the Supplier.
- 2.40 The operating system as well as the application software shall be supplied in DVD or CD media. In case of any malfunctioning of the machine, it should be possible to reload these software and restart the machine. During machine commissioning the supplier shall provide mirror copy of the software including all customized machine set up to restore in case of break down/corruption of software.
- 2.41 The access to the machine shall have multi-level password control. There should be a facility to disable the password control, if it is so desired.
- 2.42 The Supplier of the machine shall not load any hardware/ software controls so as to limit the access to the machine. Also the supplier shall not load any software lock in the machine.
- 2.43 The machine shall have detailed diagnostics features. It shall have systematic diagnostic program for checking of the health of the machine. It shall have automatic failure detection and alarm generation on failure of any component in the machine. The component that has failed shall be reported in the display unit by change of color (say, to red) as well as by glowing of common external lamp. It should be possible to further diagnose the subsystem

to identify the faulty component. The failure data should be available in nonvolatile memory and it should be possible to generate reports on failure statistics.

- 2.44 The machine shall support remote diagnostic facility so as to access the machine remotely. This access shall be enabled through password control only.
- 2.45 All moving parts in the system shall be housed in an enclosure with safety locks so as to avoid any accidental interruptions. Also the offered machine shall have the features, which complies the International standards of safety measures (shall covers man and machine safety, emergency stops, etc.). All electrical wiring cables used shall be of international standard.
- 2.46 The up-time of the machine shall be better than 95% while running 24 hours a day averaged over a month. The yield shall be better than 99.5%.
- 2.47 The colour of the machine shall be Ivory white.

3. Documentation

The supply shall include all necessary documentation for the operation and maintenance of the machine. The documents shall be supplied in two sets. In addition to hard copies, the documentation shall also be available in soft copies (two sets). There shall be a technical manual giving details on each of the subsystems and its features, layouts of electrical and pneumatic systems, details of hardware items and the assembly diagram of all the hardware items. Specifications of each of the sub-systems shall be listed in this manual. There shall be a User manual for the operation and maintenance of the machine. List of DO's and DON'T's to be followed shall be listed in the User Manual. The User Manual shall contain detailed maintenance procedures as well as debug procedures in case of machine faults.

4. Training

Free of cost training for at least 3 personnel each of the operation and maintenance team at manufacturer location shall be given to the staff of the Purchaser covering installation, operation and maintenance of the system. However, the cost of travel, boarding and lodging of the trainees will be borne by the Purchaser. Separate Operation and Maintenance training shall also be imparted at the Purchaser's location and may cover at least 20 personnel per machine of the Purchaser in a minimum of three batches. The Supplier shall give the details of the training modules and the duration, in advance along with the tender. Purchaser shall have the right to include additional training modules on the operation and maintenance of the machine, if required, and the Supplier shall provide this training also free of cost. Hard Copy the training documents shall be supplied to the trainees on all the training modules, free of cost.

5. Environment

The machines shall work in an environment between 20⁰ C and 27⁰ C, 55% to 75% Relative Humidity. 220V AC (single phase) or 400V AC (three phase) UPS power shall be provided by the Purchaser. Compressed air supply for the pneumatic part of the system up to 6.5 bar shall also be arranged by the Purchaser. The Bidder shall indicate the maximum power and compressed air requirements in the technical bid. The Supplier shall furnish the machine dimensions (foot print) and the site requirements for installation/ commissioning also in the technical bid.

6. Installation, Trial Run, Acceptance Testing and Commissioning

- 6.1 The supply, Installation and Commissioning shall be carried out at ITI Limited, Palakkad.
- 6.2 The installation, trial run, acceptance testing and commissioning of the machine shall be completed by the Supplier within 4 weeks from the date of receipt of machine at purchaser's location.
- 6.3 The bidder shall give the details of installation requirements in the bid. The cards and the chip modules required during installation on trial run shall be arranged by the supplier. Also the supplier shall supply all the Maintenance Consumables required for the trial run and commissioning of the machine free of cost. However chip modules and plastic cards required for the one time acceptance test shall be arranged by the purchaser.
- 6.4 Acceptance test procedure which includes all features of the machine shall be submitted by the Bidder as part of the technical bid document. The Purchaser reserves the right to modify the test procedure to cover all the specifications. The procedure shall get the approval of the Purchaser prior to initiating any acceptance test.
- 6.5 The Supplier shall make available the software programs and testers, if any, required for carrying out the acceptance tests as per the schedule.
- 6.6 To arrive at the proving of the required machine throughput, the machine will be put through continuous operation for 8 hours and the throughput per hour shall be calculated on average basis. If the performance test is aborted due to any reason, the test shall be repeated again.
- 6.7 If the machine fails to meet any of the specifications, the Supplier shall carry out required modifications at no cost to the Purchaser. However, if the Supplier fails to meet the specifications within a period of four more weeks from the scheduled date of commissioning, the Purchaser reserves the right to accept the machine with penalties, as decided by the Purchaser, or outright rejection of the machine. Delayed supply or commissioning of the machine shall attract liquidated damages as per Sections A. In case the machine is rejected due to failure to meet the specifications, the equipment shall be taken back by the Supplier within a period of three months from the premises of the Purchaser. All expenditure to take back the equipment shall be borne by the Supplier. The Supplier shall also be liable for full refund of the payment already made, including penalties as decided by the Purchaser within one month from the date of rejection of the machine. The performance bank guarantee will be forfeited if the equipment is rejected fully.
- 6.8 All expenditure related to the Supplier's experts for the services related to installation and acceptance testing shall be borne by the Supplier.
- 6.9 Completion of the acceptance testing to the satisfaction of the Purchaser and issuance of a certificate in this regard by the Purchaser shall be considered as commissioning and the date of issuance of such certificate shall be considered as date of commissioning.

7. Maintenance Consumables and Maintenance Spares

- 7.1 Bidder shall give the details of all the Maintenance Consumables (like milling tool, cutting tools etc.) used in the machine and their expected life. Bidder shall give the list of Maintenance Consumables and their quantities required for the production of 30 million cards per machine in the technical bid (and their prices in the price bid). This shall form part of the bid evaluation. **Maintenance Consumables required for a production of at least 10 million cards and tool box (list of items to be indicated in Technical Bid) contain general and special tools required for machine maintenance shall be supplied free of cost as part of the supply of the main machine.**

- 7.2 All spares necessary for the maintenance during two years warranty shall be supplied by the Supplier free of cost and shall be positioned at the Purchaser's premises. The list of recommended spares and consumables for a period of three years after warranty on yearly basis (maintenance spares & maintenance consumables for the 3rd, 4th & 5th year) and their quantities shall be given by the bidder in the technical bid (and their prices in the price bid). The MTBF (Mean Time Between Failure) shall be given by the bidder for each of the spares. The prices quoted for the Maintenance Consumables and Maintenance spares shall remain fixed for a period of three years after warranty. The Purchaser reserves the right to buy the spares along with the machine purchase or after the period of warranty. Any budgetary impact during the intervening period or change in the statutory taxes while purchasing spares shall be to the account of the Purchaser. However, this does not absolve the Supplier from any of the obligations of Warranty and AMC. The price of spares shall not be part of the bid evaluation.
- 7.3 The Supplier shall supply all the Maintenance Consumables required for the trial run and commissioning of the system free of cost.
- 7.4 The prices quoted for the maintenance consumable and maintenance spares shall remain fixed during the period of 5 years after commissioning. Any budgetary impact during the intervening or change in the statutory taxes while purchasing these items during warranty / AMC period shall be to the account of the Purchaser.
- 7.5 The Supplier shall give the list of all **optional features** of offered model and their prices including their Maintenance Consumables and Maintenance Spares and their prices in the bid. This will not be part of the price bid evaluation.
- 7.6 In the event of termination of the production/supply of Maintenance Spares/ Maintenance Consumables by the Supplier at any time after the commissioning of the machine, at least six months' advance intimation shall be given to the Purchaser to buy life time stock of such spares.
- 7.7 The supplier shall provide the details of preventive maintenance schedule, activities of each preventive maintenance and spares required for the each preventive maintenance for entire life span of the machine.
- 7.8 The supplier shall provide the list of spares for the total machine.
- 7.9 The Supplier shall not refuse to supply Maintenance Consumables and Maintenance spares at the rates quoted in the bid during the period of the contract (warranty period plus 3 years).

8 Warranty

- 8.1 The Supplier shall provide comprehensive warranty for all the hardware and software supplied for a period of two years after the system has been declared commissioned as per clause 6.9 above.
- 8.2 The Supplier shall warrant that the stores supplied shall be new and free from all defects and faults in materials used, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards for materials of the type ordered and shall perform in full conformity with the specifications and drawings. The Supplier shall be responsible for any defect that may develop under the conditions provided by the contract and under proper use, arising from faulty material, design or workmanship, inadequate quantity of material to meet equipment requirements, inadequate contact protection, deficiencies in circuit design and/or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writing in what respect the stores are faulty. The Supplier shall make good all the deficiencies free of cost.

8.3 The terms and conditions of the Annual Maintenance Contract including penalty (see clause 9 below) shall be applicable during the warranty period. However, there will not be any payment for the warranty service. Any penalty during the warranty period will be deducted from the next payment(s) due to the Supplier for the supply of equipments / service / or adjusted with PBG.

9. Annual Maintenance Contract (AMC)

9.1 If the Purchaser desires, the Supplier shall provide comprehensive AMC support including free supply of maintenance spares for a period of three years. The AMC shall begin after the end of warranty period on signing a contract by the Purchaser with the Supplier. One month before the end of warranty period, the Supplier shall provide a separate PBG valid for three years and three months for an amount of 10% of total AMC PO value for three years.

9.2 Bidder shall quote Year-wise AMC price in the price bid.

9.3 During the AMC period, Supplier shall provide Maintenance spares, if any required, free of cost.

9.4 Any spares not quoted but required for maintenance shall also be supplied free of cost by the Supplier. The Purchaser may buy the spares during warranty/ AMC or at the end of AMC period at the rates quoted in the bid. Any variation in taxes during the intervening period or foreign currency fluctuations (if the price quoted is in foreign currency) shall be to the account of the Purchaser. However, this does not absolve the Supplier from any of the obligations of Warranty and AMC.

9.5 During the period of AMC the Supplier shall inter alia:

9.5.1 Diagnose the hardware, system software and application software faults (which ever applicable) as and when they occur.

9.5.2 Rectify the hardware, system software and application software faults detected.

9.5.3 Repair and replace the faulty component.

9.5.4 Provide application/system software related fixes / patches and/or work around to resolve the application/system related faults.

9.5.5 Carry out preventive maintenance of hardware and system software once in every six months. The Supplier shall give the preventive maintenance schedule in advance and carry out the maintenance on approval from the Purchaser.

9.6 The Supplier shall have a Help Desk facility in the country which would be the focal point for fault/query register and manage all calls with respect to the maintenance of the equipments and applications. The Help desk shall be available between 09.00 Hrs and 18.00 Hrs on all working days (Working days are all days excluding Sundays and three national holidays, viz., January 26th, August 15th and October 2nd.) It should be possible to register the fault complaint through Telephone, Fax or by E-mail.

9.7 The Supplier shall give an up-time commitment of 95% for the machine (both hardware and the software) even while running the machine 24 hours a day during the AMC period calculated on monthly basis.

9.8 All the faults shall be attended within 12 hours of the call from the Purchaser and rectified within 48 hours (either through remote assistance, and if remote assistance does not solve the problem, then by on-site visit).

- 9.9 If the fault is a 'major' type (because of which the machine performance has fallen below 60% of rated efficiency) and if the Supplier fails to restore such fault within the time limit specified in clause 9.8 above, a penalty of 0.5% of the annual AMC charges shall be applicable for every day (or part of thereof) of delay. If the fault is of minor type (because of which the machine performance has fallen below 100% of the rated efficiency (and above 60%) or any other fault) and if the Supplier fails to rectify the fault within the time limit specified in clause 9.8 above, a penalty of 0.25% of the annual AMC charges shall be applicable for every day (or part thereof) of delay. Penalties will be calculated on quarterly basis and will be deducted from the next bill towards supply/service.
- 9.10 If the up-time of the machine falls below 95% averaged over every month, penalty of 0.5% of annual AMC charges will be imposed for the month for every 1% fall up to 85% and 1% of annual AMC charges for every 1% below 85%. This will be over and above any penalty as per clause 9.9 above.
- 9.11 The maximum penalty for a quarter shall be limited to 100% of the quarterly bill of the AMC.
- 9.12 No charges for AMC will be paid in advance. Bills will be paid on quarterly basis on submission of bills by the Supplier, on satisfactory working report from the Purchaser. Any penalties for the quarter for the failure of the system as per clauses 9.9 and 9.10 above will be deducted from the bill.
- 9.13 Extension of this Agreement shall be negotiable for the second term depending on the performance of the Supplier during the period of the initial term.
- 9.14 Notwithstanding the above, the Purchaser reserves the right to enter into AMC with the Supplier, or, if entered in to AMC agreement, withdraw from AMC at any time without assigning any reasons. However, after entering into AMC agreement, if the Purchaser wishes to withdraw from AMC, the Purchaser will give a notice on withdrawal from AMC three months in advance. The PBG for the AMC service will be released by the Purchaser within 90 days from the end of AMC agreement.
- 9.15 All conditions of AMC on performance and the penalties will be applicable to the Warranty period also. The penalties during the warranty will be calculated based on the AMC cost for the first year of AMC. Any penalty during the warranty period will be deducted from the next payment(s) due to the Supplier for the supply of equipments/ services or from the PBG.

SECTION C

QUESTIONNAIRE / COMPLIANCE / ELIGIBILITY – EVALUATION SHEET

(to be filled by the bidder)

- 1 Name and address of the Bidder :
- 2 Whether the bidder himself is the OEM? : Yes/ No
- 3 Whether supporting documents as required in clauses 3 and 5.3 of Section A enclosed to the Eligibility cum Techno-commercial bid? : Yes/ No
- 4 Details of Earnest Money Deposit (DD no. / date / value / Bank name) :
- 5 Validity of Bid document (120 days from the due date of bid submission) : Yes / No
- 6 Whether Clause-wise compliance to Section A, Section B, and Clarifications given by the Purchaser, if any, enclosed to the Eligibility cum Techno-commercial bid? : Yes / No

We undertake that we fulfill the Minimum Eligibility Criteria, as per Clause 3 in Section A. We agree to abide by this bid, for the bid validity period and it shall remain binding upon us and may be accepted at any time before the expiry of that period. Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of the award, shall constitute a binding contract between us.

Dated this.....day of.....2014.

.....
(Signature in the capacity of duly authorized to sign and on behalf of)

SECTION D – PRICE BID FORMAT – PRICE BID

(For 1 no. of Milling & Implanting Machine with Glue Tape lamination facility)

Sl. No.	Item	Quantity	Currency	Value		
1	Smart Card Milling and Implanting Machine with Glue Tape Lamination facility	1				
2						
2	Maintenance Consumables required for the machine at Sl. No. 1 above	Measuring unit	Quantity for 30 ML card production	Currency	Unit Rate	Total Value
2.1	Item 1 (Pl. give the actual item name and part no. here)					
2.2	Item 2					
...					
2.n	Item n					
TOTAL						
3						
3	AMC for the machine at Sl. No.1 above	Currency	Rate			
3.1	1 st Year					
3.2	2 nd Year					
3.3	3 rd Year					
TOTAL						
4						
4	Optional Items for the machine at Sl.No.1 above	Measuring unit	Quantity	Currency	Unit Rate	Total
4.1	Item 1 (Pl. give the actual item name/ part no. here)					
4.2	Item 2					
...						
4.n	Item n					
5						
5	Maintenance Spares required for the machine at Sl. No.1 above	Measuring unit	Recommended Quantity per annum	Currency	Unit Rate	Total
5.1	Item 1 (Pl. give the actual item name/ part no. here)					
5.2						
....						
5.n						
TOTAL						

.....
(Authorized signatory of the bidder with date and seal)

SECTION E

PERFORMANCE BANK GUARANTEE FORMAT

In consideration of ITI Limited, Kanjikode West, Palakkad, Kerala, India (herein after called as Company) we,Bank executed this Performance Guarantee Bond as surety to the cost of to be supplied by (hereinafter called as the Supplier) as per the Letter of Intent no. dated, of the Company.

1. At the instance of failure by the Supplier to perform to the satisfaction of the Company, up to..... or before the expiry of this guarantee, or within the agreed period whichever is earlier, we.....Bank hereby undertake to pay to *(The Purchaser's name and address)* an amount not exceeding Rs. *(10% of total proposed purchase order value)*.
2. We.....Bank agrees to pay for the value up to a limit of Rs. and interest thereon from the date of notice till the date of payment at % per annum without any demur, merely on a demand notice from the Company stating that the Company has suffered loss due to non-performance of the equipment supplied by the Supplier. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee.
3. We undertake to pay to the Company any money as demanded notwithstanding any dispute or disputes raised by the Supplier in any suit or proceedings pending before any court or tribunal relating thereto our liability under this guarantee being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Supplier shall have no claim against us for making such payment.
4. We..... Bank, further agree with the Company that the Company shall have the fullest liberty without our consent and without affecting in any manner, our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Supplier from time to time or to postpone for any time or from time to time any of the powers exercisable 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 or extension being granted to the said supplier or for any forbearance act or omission on the part of the Company or any indulgence by the Company to the Supplier or by any such manner or thing whatsoever, which, under the law relating to sureties would, but for this provision, have effect of so relieving us.
5. This guarantee will not be discharged due to the change in the constitution of the Bank or the Supplier.
6. We.....Bank, further agrees that the guarantee herein contained shall remain in force till..... We.....Bank undertake not to revoke this guarantee during its currency except with the previous consent of the Company by writing.

Dated the.....day.....

Witnesses

For Bank

1.

2.