BARC/ESG/STSS/2020/ACCS/789

Due date: 23/03/2020 at 14.30

Sub: Invitation to Submit Your Quotation

On behalf of president of India, Head Security Technical Support Section, Engineering Services Group, Bhabha Atomic Research Centre invites lowest technically suitable quotation in sealed envelope for the work given below as per the scope of work & technical specification enclosed herewith.

| Period of request (by Registered Post/Speed Post) for bid document | 11- March -2020 to 23-March-2020 |
| Period of completion | 1 month. |
| Last date for Submission of tender by Registered Post/Speed Post at following address in official working hours (before 14.30 Hrs). | 23/03/2020 |
| Shri A.K.Sharma SO/G, STSS, ESG BARC Room No 318, ESC Building Trombay, Mumbai- 400 085 | |
| Opening Date | 23/03/2020 |

Quotation are invited for the above system as per Annexure-A on or before March 23/2020 up to 14.30 hrs in a sealed envelope through registered post/speed post of Indian postal Services only.

The terms and condition are given below:

1. Qualifying criteria for bidders

1.1 Firms willing to bid for above mentioned job shall have been vetted by security section of BARC.
1.2 Firms willing to bid must have done similar type of Job in DAE/BARC.

1.2 All the supervisors and workers should have valid police verification (PVC) (FOR minimum 03 persons) and not expiring during the tender period (i.e from the date of issue of
this enquiry till competition of job after getting work order) the list of manpower available with firm shall also be submitted along with their details of PVC.

1.3 Workers/Labourers given by the vendor should be well experienced in installation, Wiring and Commissioning of similar type of jobs.

1.4 All Workers/Labourers of the Vendor/Contractor employed for execution of job in this tender should have proper Personal Protective Equipment (PPE), the arrangement of which shall be made by vendor/contractor.

2. The quotation envelop shall be superscripted with Description of the job and the tender Ref No, as mentioned above.

3. Authorization & Service support up to five years “Certificate from the OEM of Door Access control System & Its related accessories” shall be submitted along with the quotations.

4. The complete quotation shall reach the following address on or before 23/03/2020 14:30 hrs. by Registered Post/Speed post of Indian services only. The quotations will be opened on the 23/03/2020 in Accounts Division, BARC between 15.00 to 16.00 HRS

\[ TO, \]
\[ Shri A.K.Sharma \]
\[ STSS, ESG, \]
\[ Room No. 318 \]
\[ ESC building \]
\[ BARC, Trombay, \]
\[ Mumbai - 400085 \]

5. Printed Letter Head: Quotation (along with GST No.) should be printed on letter head; computer generated quotation is not valid.

6. Validity of the Offer: Validity of the offer shall be for 90 days from the date of opening of quotation.

7. Guarantee: Vendor shall have to give guarantee of the quality and workmanship of work done for the period of min. 12 months from the date of completion of the work.

8. Offer of firm: offer of those firm, who do not submit their quotation as per the details given in the technical specification and incomplete quotations in any respect shall not be considered.

9. The department reserves the right to extends /cancel the date of opening the quotations.

Note: Quotation which will be failing to fulfil any above conditions will be liable to reject without any correspondence

10. Payment Terms: Account division BARC Mumbai – 400085 shall make full and final payment only after submission of the satisfactory work completion certificate issued from the undersigned along with bill, Guarantee certificate, Delivery Challan and Advanced Stamp Receipt etc. No advance payment is permitted.
11. Income Tax Recovery Clause: Income Tax @ 2% & GST @2% will be deducted from the bill.

12. If any of the employee, consultant, or partner of the company is Ex – BARC employee, the same must be stated in the quotation clearly.

13. **Penalty:** any delay which is attributable to the contractor is liable for penalty @ 0.5% per week (max 5%)

14. **GST Number:** Quotation shall consist of GST Registration Number registered with local authority & PAN number of firm, etc.

15. **Safety & Security Rule:** The vendor shall follow all the safety procedures as per the normal industrial practice during the execution of the job at site. Any mishap occurring during the work due to unsafe Industrial Practice shall be the vendor’s liability. Security and transportation rule at BARC, Trombay premises shall be strictly followed.

16. **Confidential clause:**

I. **Confidentiality:** No party shall disclose any information to any third party concerning matters under this contract generally. In particular, any information identified as “Proprietary” in nature by the disclosing party shall be kept strictly confidential by the receiving party shall not be disclosed to any third party without the prior written consent of the original disclosing party. This clause shall apply to the sub-contractors, consultant advisors, or the employees engaged by a party with equal force.

II. “Restricted information” categorise under section 18 of the Atomic Energy Act, 1962 and “official secrets” under section 5 of the official Secret Act, 1923: Any contravention of the above mentioned provisions by any contractor, sub – contractor, consultant, advisor or the employee of a contractor will invite penal consequences under the aforesaid legislation.

III. Prohibition against use of BARC’s name without permission for any publicity purpose. The contractor or sub- contractor, consultant, advisor or the employees engaged by the contractor shall not be use any public purpose through any media like press, TV, or internet, without the prior written approval of BARC.

\(\text{\underline{\text{H.Mishra}}} \) 05/03/2026

Head STSS & AD, ESG.

(For and on behalf of President of India)
Technical Specifications for Door Access Control System Components

1. 13.56 MHz, Mifare Technology based Smart RFID card & Fingerprint Reader/terminal for Door Access Control System

TECHNICAL SPECIFICATIONS:-

1. READER TERMINAL:

Reader should support ISO 14443A based on the 13.56 MHz contactless Mifare technology. Mifare-plus, Desfire, SmartMX currently available in market. It should have optionally ISO 7816 SAM card interface and holder.

General
- Credential Support: Fingerprint, Card and PIN
- Display: 128 x 64 Dot Matrix Display
- Keypad: 16 Touch sense keys
- Input voltage Range: 7 to 24V DC
- Card sensing range: minimum 40mm
- Card processing time: less than 1 sec
- Card Read/Write Facility must support read and write to Mifare, Mifare-plus, Desfire, Smart MX contactless technology cards.
- There must be facility to configure fail-safe or fail secure mode in the case of power failure of card reader.
- Door opening time should be configurable.
- Card readers must have
  - Anti pass back (APB) check facility and it must be configurable.
  - Facility to check the validity of the card.
  - Arrangement for easy installation and maintenance.
  - An internally rechargeable battery for storage of time settings and other settings when reader power goes off.
  - Self-diagnostics features for readers
- DC power supply inputs must be protected against over-voltage, reverse polarity and over current.
- Card reader must read different data from various sectors available in Mifare 4Kb card memory such as UID, Employees name, Department, Validity, D.O.B. etc. using user defined ‘Keysets’ as per the Data structure provided by the user.

Capacity
- User Capacity: 50,000 (Min. 9600 in 1:N Mode) or higher
- Template Storage Capacity: 9,600 in 1:N Mode and 1 lac in 1:1 Mode
- Template Per User: Up to 10 (Single Template per Finger Mode)
- Event Buffer: Up to 5 (Dual Template per Finger Mode)
**Communication**
Ethernet

**Interfaces**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exit Switch</td>
<td>Push Button</td>
</tr>
<tr>
<td>Door Status Sense</td>
<td>Programmable NO, NC, Supervised</td>
</tr>
<tr>
<td>Door Lock Relay</td>
<td>SPDT Relay (Min. 2A@30 VDC)</td>
</tr>
<tr>
<td>Door Lock Power</td>
<td>Internal 12VDC @ 0.5A or External</td>
</tr>
<tr>
<td>Aux-In</td>
<td>Programmable NO, NC, Supervised</td>
</tr>
<tr>
<td>Aux-Out</td>
<td>SPDT Relay 2A@30 VDC contacts</td>
</tr>
<tr>
<td>Exit Reader Interface</td>
<td>RS-232, and Wiegand IN (optional)</td>
</tr>
</tbody>
</table>

**Audio-Visual Indications**

LED & Buzzer
for Status, Alarm, Allowed, Denied

**Environmental**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>α) Operating Temperature</td>
<td>5 to 55 Deg. C or better</td>
</tr>
<tr>
<td>β) Humidity</td>
<td>10-85% RH (Non-condensing) or better</td>
</tr>
<tr>
<td>χ) Enclosure</td>
<td>ABS</td>
</tr>
<tr>
<td>δ) Weight</td>
<td>Not more than 500 gms</td>
</tr>
</tbody>
</table>

**2. Battery Backed up Power Supply Unit**

The Smart uninterrupted switch mode battery backed Power Supply should provide power for the reader unit and the door locks. Optionally it should provide interconnection facility for field input/outputs, looping of main supply.

- Output: uninterrupted 10-14V dc @ 2A or higher
- Output Ripple: < 100 mV
- Load Regulation: < 2%
- Operating AC Power supply: 160 to 260V ac 50 Hz.
- Internal rechargeable 12/7 Ah Lead Acid Battery.
- Reader operation time: 12 hours on battery.
- Auto charge on mains supply.
- Low battery cut-off to avoid battery deep discharge.
- Visual Indications: for Battery Low, Mains fail.
- All visual indications on front display.
- Mountable on wall.
- Ingress Protection: IP54.
- Operating Temperature: 5-55 Deg. C
- Humidity: 10-85% RH (Non-condensing) or better
3. Fingerprint based Enrolment Station

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finger Print Sensor</td>
<td>Optical (Scratch free sensor surface)</td>
</tr>
<tr>
<td>Fingerprint Sensor Type</td>
<td>Suprema</td>
</tr>
<tr>
<td>Operating Voltage</td>
<td>Feed from PC / Laptop through USB</td>
</tr>
<tr>
<td>Enrolment Time</td>
<td>&lt;0.1 Seconds (Typical)</td>
</tr>
<tr>
<td>Interface USB 2.0</td>
<td>High Speed/ Full Speed, Plug &amp; Play</td>
</tr>
<tr>
<td>Resolution</td>
<td>500 / 256 DPI gray</td>
</tr>
<tr>
<td>Template Size</td>
<td>384 Bytes approx.</td>
</tr>
<tr>
<td>Sensing Area</td>
<td>16 x 18 mm</td>
</tr>
<tr>
<td>Image Size</td>
<td>288 x 320 Pixels</td>
</tr>
<tr>
<td>Operating System</td>
<td>Microsoft Windows</td>
</tr>
</tbody>
</table>

4. Mifare Card based Exit Reader
- Wiegand/RS-232 Interface
- IP65 Rating
- Tamper Detection
- Tri Color LED and Buzzer
- 12VDC Power Supply through Adaptor or Battery Backup

5. Multiple Door Controllers
- Controls Up to 255 Door Controllers
- Ethernet, RS-485, USB, Aux Input and
- Aux Output Port
- Works in Two Operation Modes:
  - Standalone Mode with Built-in Software
  - Network Mode with Host software
- Min. 25,000 Users Capacity and 500,000 Events Storage

6. Web based Access Control System Software for 100 Users

PC based software should communicates with multiple Access Control Reader Controllers using Ethernet LAN interface. It should communicate with the access control readers to configure them, to fetch swipe data and to monitor their health. It should generate various reports including Access granted, Access Denied, Attempted Entry, Unused Alarm Entry, Duress Alarms log w.r.t. Date & Time. The reports can be generated for one employee, a group of employees or for a department.

- Should Supports Up to 65,000 Door Controllers
• Basic Access Control, Basic Time Attendance and Enrollment Management
• Compatible with all reader Hardware
• Time, User and Zone based Access Control
• Access Zones, Access Modes and Access Level configuration
• Advanced Access Control Features Such as 2-Person Rule, First-in User Rule, Anti-pass Back, Guard Tour, Duress Detection, Time Stamping and More
• Input and Output Linking
• Various Reports Generation

Desired Features of software:

• **Reader Master** – Should allow editing of various access points and their interface details viz. IP address, Unit ID, Com Port.
• **Employee Master** - Allows editing of employee details, like name, employee number, shift, access zones.
• **Reader Configuration** - Allows modification of reader parameters, like operating mode, door open time, welcome string, Alarm settings, Timeouts, etc. These parameters are also stored in the local database.
• **Card Personaliser / Finger Encoding (option)**: Allows Mifare card/ Finger print encoding based on the employee master information. Needs externally connected personaliser.
• **Offline Data Gathering** – Periodically polls all the connected readers for swipe data and displays with user photograph if available. Data is available in near real-time (within 30 seconds).
• **Headcount** – Zonewise presence of employees is available. Alternately employee can be tracked within a zone.
• **Clock Data Editing** - Allows editing of the time data (by administrators with time data edit permission).
• **Database** : MYSQL
• **Export Function** - Export function can be used to export data to a CSV file.
• **Time Synchronization** - Time can be synchronized of all the connected readers on a periodic basis.
• **Large Data** - Upto 10Gb data can be stored in the current tables. Older data is moved to archives. Instantaneous Reports are available on the current table data.
• **Easy of Operation**: User can group different readers and employees. Different actions can be applied to selected group of readers or employees.

7. **Scope of Work:**

1. Supplier is fully responsible for Entire Installation & commissioning work of Door access system. Any item or tool, material required for completion of this job will be arranged by supplier.
2. Supplier should be disposing all the scrap, wastage produce during this job at proper disposable site and keep clean the working site area.
3. No any free issue material will be provided by BARC to supplier for this work.
4. Supplier will be providing training to min. 5 person of user division for operation & maintenance of the system.
8. Installation & commissioning:-
Installation & commissioning will be completely done by supplier and All installation related works like electrification, casing-capping & routing of cables as per requirements, carpentry & civil work has been done by supplier with no any extra cost supplier must do arrangement of required material & items for completion of this work.

7. Warranty: supplier should provide min.3 year onsite warranty for total system.

9. Mandatory Terms & conditions of Tender:-
1. Vendors must provide technical specifications of all the items along with Manufacturing Authorization form (MAF)
2. Tender no. must be mention in MAF.
3. OEM must certify that the vendor is authorized dealer/distributor to supply & Installation of their products for subject Tender. It is required for onsite warranty and technical support during warranty period and after sales services.
4. Vendor must be give technical compliance on OEM’s letter head with mentioning tender number.

Approved Makes: Virdi/Invixium/Matrix/Morpho/Axis etc.
<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Name of item</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Fingerprint &amp; RF card based door controller with touch screen, PoE, IP 65 rating</td>
<td>20 Nos.</td>
</tr>
<tr>
<td>2</td>
<td>Battery back-up for Door controller</td>
<td>20 Nos.</td>
</tr>
<tr>
<td>3</td>
<td>Fingerprint Enrollment Device</td>
<td>2 Nos.</td>
</tr>
<tr>
<td>4</td>
<td>Cat 6 Cable from reputed brands</td>
<td>1000 mtr.</td>
</tr>
<tr>
<td>5</td>
<td>Installation &amp; Commissioning &amp; training charges</td>
<td>1 Lot</td>
</tr>
<tr>
<td></td>
<td>Civil work &amp; casing, capping, wiring with all material</td>
<td>1 Lot</td>
</tr>
</tbody>
</table>