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Notice of Expression of Interest (EOI) for Purchase of a Biometric System

Dated: 1/May/ 2019

IISc is a premier academic institute in India. CeNSE (http://www.cense.iisc.ac.in/) is a department for interdisciplinary research at IISc and houses a 14,000-sq. ft. clean room apart from other lab and office space for students and staff. About 50 faculty members from all over IISc are associated with it in one way or another. It is unique in the annals of IISc and in many ways, is indeed unique in India. The centre has been running an INUP (Indian Nanoelectronics User Program) that attracts many participants from more than 150 universities spread across all over India. The program provides a hands-on experience to its participants. Similar programs also provide hands-on experience to senior professionals from various other academic and industrial research labs. Given this background, it is felt that any tool in the center will receive unparalleled exposure to the Indian and for that matter the international scientific community.

Centre for Nano Science and Engineering (CeNSE) at Indian Institute of Science (IISc), invites **Expression of Interest** (EOI) from original equipment manufacturer (OEM) and their authorized representative(s) to supply a Biometric System to be deployed at CeNSE, IISc. Vendors fulfilling the **Technical Specifications** are requested to express their interest in providing the Biometric System. The **Expression of Interest** must be submitted with brief profile of the vendor mentioning total experience in the field.

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Important Information:

1. The goal of this EOI is to identify the vendors who have the technical competence, experience and technology to provide a high-quality and secure biometric system at CeNSE.

2. The specific criteria being sought are:
   a. Past experience of the firm and OEM: CeNSE is looking for vendors who have in the past deployed biometric access systems at similar or larger scale
   b. Ability to guarantee service and support for the next 10 years: Biometric systems are long-term investments. The proposed system must have guaranteed spare and service support for at least 10 years. The vendors must demonstrate a track record of providing service and support to other customers for extended periods of time.
   c. Security: The Biometric system must conform to established international safety standards. Vendor must prove that their system is secure, of high build quality and accurate.
   d. Upgradable: Any system must come with firmware that is upgradable or extendable in the future. System that are due to become obsolete, with no option of an upgrade, are not acceptable.
   e. Modular: Selected system must be modular. The system should allow subsequent addition of more sensors, more doors, and more users. This addition should not require a complete overhaul of the existing system.

3. Vendors are invited to submit an EOI along with a ***technical proposal***. Technical proposals should only include technical specification and capabilities, **NOT financial details**. Any mention of financial details in the technical proposal will lead to disqualification.

4. The **technical proposal should contain a compliance table** with 4 columns.
   a. The first column should list the technical requirements given below , in the same order.
   b. The second column should describe your compliance in a "Yes" or "No" response.
   c. The third column should provide the justification to the yes/no response, by providing the details of the specification or the extent of deviation, whichever is applicable.
   d. The fourth column can be used to provide more context to the purchase committee, e.g. you can compare your tool with that of your competitors or provide more details.

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e. Additional specification that you would like to bring to the attention of the purchase committee can be listed at the end of the compliance table.

f. Vendors are encouraged to highlight the advantages of their tools over comparable tools from the competitors.

5. Evaluation procedure of the EOI will be thus:

a. All vendors who submit an EOI by the deadline and have conformed to the format of the EOI, will be invited to make presentation on the technical specification of the proposed system, expertise, and experience with similar deployments.

b. Based on the presentation and technical compliance table, the purchase committee will declare a list of "Short-listed" vendors, who satisfy the technical specification.

c. The short-listed vendors will be invited for submission of commercial bids (Request-for-Quote or RFQ) by a certain deadline. Typically, one week from the publishing the list of short-listed vendors.

d. The purchase committee will compare the commercial bids for identifying the "lowest bid" (L1).

6. Important rules for submitting the **commercial bid**:

a. Only people short-listed after the EOI will be eligible to submit a commercial bid.

b. The commercial bids must be submitted in sealed envelopes.

c. The quotes should be CIF Bangalore, India, i.e. include shipping.

d. Please provide **_itemized_** quotes for the system and any attachments/packages. Vendors are encouraged to quote for as many packages as their tool portfolio permits.

e. The proposals should be addressed to Chairperson, Centre for Nano Science and Engineering.

7. The deadline for submission of the **EOI including the technical proposal** is **15th of May 2019, 5 pm, Indian Standard Time.** The documents should be submitted in a **sealed envelope with a proper label** identifying that this is an EOI for CeNSE Biometric System.

8. Proposals should arrive at the office of Prosenjit Sen, Centre for Nano Science and Engineering, Indian Institute of Science, India, 560012 by the above deadline. The application packages can also be left with Ms. Usha (Chairpersons Office), Centre for Nano Science and Engineering, Indian Institute of Science, India, 560012 or Ms. Bhagyajyothi (First Floor Office), Centre for Nano Science and Engineering, Indian Institute of Science, India, 560012.

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Technical Specification

1. All performance parameters requested here needs to be demonstrated at the time of installation as a part of the equipment acceptance.

2. Due to the security and safety issues involved with the national facilities at CeNSE **bids from reputed OEM and their authorized representatives will be encouraged**. If the bid is not being submitted by an OEM please provide a letter from the OEM identifying the vendor as its authorized representative.

3. Please provide references of large installation of a biometric access system in India. Here "large installation" is defined as more than 100 doors and more than 300 concurrent users. The vendor should have at least 5-year experience in maintaining large installations. Please provide historical data with references.

4. The vendor is required to provide a guarantee that the proposed system will be supported with spares, software, and support for at least 10 year from the date of installation.

5. **Biometric System**

    a. Centrally controlled biometric system for 120 doors. The system should consist of door readers and central controllers. The door readers should have capability to check **access using finger print and access cards**. The door readers should verify access with the controller. Once approved the door lock should be released.

    b. Communication between readers and central server must be encrypted. Please mention the standard and the protocol.

    c. Biometric data store on the server must be encrypted.

    d. Operating temperature range should include 0 °C to 50 °C.

    e. Operating humidity 5 to 85% (non-condensing)

    f. Capability to electronically trigger system shutdown in cases of emergencies (fire alarm, gas alarm etc.). During shutdown all the doors should default to an open state. Provide technical details regarding the triggering system. **This capability is critical**.

    g. Please specify the compatibility of the controller units with readers from other reputed vendors. Please specify if the controller and the readers communicate using any standard protocol. Please specify the compatible industry standards.

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    h.   The vendors should provide a technical drawing showing connections, routers and protocols used for communication between the different components of the biometric system.

6. **Reader and door locks**
    a.   Door lock should be electromagnetic.
    b.   Out of the 120 doors, 107 doors will have entry access through readers. Exit access will though a touchless exit button. 9 doors will be emergency exit only with touchless exit button. 4 doors should have the capability to enter and exit both using separate readers. Based on door counts a total of 115 readers and 116 exit switches will be required.
    c.   Please mention the capability of these readers to work on outside of the building (i.e. building entry /exit doors). The readers should have weatherproof housing (meeting IP65 standard). Out of the total readers mentioned above 10 such readers will be for external (building entry / exit doors). Remaining readers will be for doors inside the building.
    d.   Inbuilt buzzer for warning and error indication
    e.   Please indicate if the reader can capture image of the individual using the reader.

7. **Upgrades and Extensions**: The system should be modular and upgradable. Specifically,
    a.   We should be able to add upto 50 extra sensors to the system without requiring a complete overhaul.
    b.   The system should be able to add/replace fingerprint/card readers with other type of readers, such as iris, face, or voice recognition. The vendor must specify other compatible readers for this system.
    c.   The system should be reconfigurable, such that any of the touchless exit sensors can be replaced with fingerprint exit sensors.
    d.   The system should allow addition of card-readers and fingerprint readers that can be used for authentication (not just opening doors).

8. **Software**
    a.   For the doors equipped with readers at both entry and exit the software should allow us to generate real time report of occupancy of those rooms.
    b.   Access control, database management and setup should be possible through remote console.

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c. The remote console should allow capability to operate door lock remotely.

d. All the doors should be programmable through a remote console.

e. Additional view only consoles to monitor the status of the overall system

f. User interface should show door status.

g. For selected doors the system should have capability to raise alarm if the door is left open for a duration more than a set duration.

h. Capability to provide time dependent access control. The software should allow us to disable access control on selected doors for a fixed duration.

i. The system should have the capability to generate access reports. The system should have capability to automatically download access control data from the controllers to the server.

j. Provide information regarding the compatibility of the card and the reader with other software or database. For example, if the same access card can be used to interface with an external/additional database (e.g. managing consumables).

9. **AMC:**

a. Please provide information regarding **annual maintenance contract (AMC) for 3 years after the warranty**

b. The AMC must include service visits.

c. Vendors are encouraged to provide comprehensive AMC (which included cost of spares).

d. In event of a technical issue that requires service, the firsts response from a service engineer must be within 24 hours. In event of breakdown replacement should be provided within 1 week.

10. **Warranty:**

a. Please indicate the warranty provided with the system. Longer (3 year) warranty periods are preferable.

b. During the warranty, the firsts response from a service engineer must be within 24 hours. In event of breakdown replacement should be provided within 1 week.

11. The lead time for delivery/installation of the system should be less than 3 months from the date of receipt of the purchase order.