

**Unique Identification Authority of India (UIDAI)  
Planning Commission, Government of India**

Reference Number: A.11016/74/2010-UIDAI/Auth-POC



**INVITATION FOR EXPRESSION OF INTEREST  
FOR**

**Participation in Biometric Authentication Proof of  
Concept Studies**

**4<sup>th</sup> April 2011**

Unique Identification Authority of India (“UIDAI”) invites Expression of Interest (EOI) from all vendors specializing in biometric devices/sensors to participate in Biometric Authentication Proof of Concept (PoC) studies being carried out by UIDAI.

UIDAI is considering conducting Proof of Concept Studies for Biometric Authentication with various kinds of biometric devices/sensor technologies like Optical, Infrared, Multispectral, SEIR, Ultrasound, Capacitive etc. Vendors having sensors/ devices with any of these technologies can participate.

Detailed specifications of the sensor devices are given in Annexure 1.

UIDAI will be deploying its authentication application which will reside on Linux/Windows based Laptops.

### Scope of Work

Vendors are expected to bring sensor devices for capturing residents’ fingerprints required for authentication and extracting the minutiae. The devices should integrate with the application deployed by UIDAI. Sensors should connect to laptops through USB.

Following are the specific requirements from the vendors:

- Single finger print devices (preferably 20 in number for each model) that can be connected to PCs via USB
- Fingerprint extractor SDK which can extract minutiae compliant to ISO 19794-2 and raw image storage compliant to ISO 19794:4
- Technical manpower for integrating the fingerprint devices (& SDK) with UIDAI’s authentication application
- Upkeep, storage, management & troubleshooting of devices during the authentication PoC

The PoC is likely to be conducted in different states at North, South, East, West of India and the exact places will be informed later. The PoC is expected to be carried out over a period of 60 days.

### Timelines

S. No	Milestone	Timeline
1.	Last date for providing concurrence for participating in the PoC by device vendors	21 <sup>st</sup> April 2011
2.	Last date for bringing devices and technical manpower to UIDAI Delhi office for application integration	25 <sup>th</sup> April 2011
3.	Deploy devices for PoC Studies	2 <sup>nd</sup> May 2011 onwards

Your interest for participating in the PoC needs to be provided in template provided in Annexure 2 duly sent by post to: Shri. Yashwant Kumar Singh, ADG, UIDAI Jeevan Bharti Building, Connaught Place, New Delhi 110001. Email: yas\_its@hotmail.com.

## Annexure 1 – Device Specifications

<b>Specifications</b>	
<b>Minimum Platen Area</b>	12 mm (w) x 16.5 mm (h)
<b>Resolution</b>	500 DPI
<b>Grey scale</b>	8 bit, 256 levels
<b>Template Standard and Raw Image</b>	8 bit raw image; ISO 19794-2; ISO-19794-4, WSQ compression is desirable.
<b>Image quality</b>	High quality Image (NFIQ<=3) in dry, wet, dirt, oil and dry conditions
<b>Maximum Acquisition time (Placement to Template)</b>	< 2 secs
<b>Antispoofing</b>	Desirable
<b>Latent detection</b>	Yes, Preferable
<b>Platen</b>	Rugged
<b>Minimum Operating Temperature</b>	0 to 45
<b>Humidity</b>	0 to 90%
<b>ESD</b>	> 10Kv
<b>Optional parameter (mainly for PC based applications)</b>	
<b>Operating system environment</b>	Windows 2000, XP, Linux, Vista

## Annexure 2 – Response Template

One such table to be filled for each model being brought for the PoC:

S.No	Parameter	Vendor's Response
1.	Name of Organization	
2.	Contact Person's Name	
3.	Contact Person's address & contact details(phone and email)	
<b>Sensor Related:</b>		
4.	Sensor Name	
5.	Sensor Type (Technology)	
6.	Platen Area	
7.	Resolution	
8.	Image quality expected (NFIQ image quality)	
9.	Acquisition Time	
10.	Latency	
11.	Antispoofing capability	
<b>SDK Related:</b>		
12.	Biometric Algorithm SDK Name	
13.	Minutiae ISO 19794-2 compliant and raw image ISO 19794:4 compliant?	
<b>Other</b>		
14.	Has USB Plug & Play capability?	
15.	Platen IP standard (Ruggedness)	
16.	Operating System Compatibility	
<b>PoC Participation:</b>		
17.	No. of devices being brought for PoC	
18.	No. of technical manpower that can support integration & on-field troubleshooting	
19.	Mechanism for upkeep, storage, management & troubleshooting of devices on-field	