## F. No. HQ-13021/1/2021-AUTH-I HQ

<u>भारत सरकार</u> <u>इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी मंत्रालय</u> भारतीय विशिष्ट पहचान प्राधिकरण (यूआईडीएआई) (अधिप्रमाणन विभाग)

> यूआईडीएआई मुख्यालय भवन, तीसरी मंजिल, बंगला साहेब रोड, काली मंदिर के पीछे, गोल मार्केट, नई दिल्ली– 110001.

> > दिनांक: 31.05.2022

То

All AUA/KUAs, ASAs, Biometric Device Vendors in Aadhaar Authentication Ecosystem

Sub: Upgrade of existing L0 Fingerprint Authentication Registered Devices to L1 Compliant Fingerprint Authentication Registered Devices in Aadhaar Authentication Ecosystem.

Dear Partners,

Please refer UIDAI Letter HQ-13021/1/2021-Auth-1 HQ dated 25.04.2022. UIDAI along with biometric device vendors, STQC, and, C-DAC has worked on upgrade from existing L0 compliant Fingerprint Registered Devices to launch of L1 compliant Fingerprint Authentication Registered Devices in the Aadhaar Authentication Ecosystem.

2. The key features of L1 compliant Fingerprint Authentication Registered Devices are:

- a) Device security with Level 1 compliance of the signing and encryption of biometric is implemented within the Trusted Execution Environment (TEE) where host OS processes or host OS users do not have any mechanism to obtain the private key or inject biometrics. In this case, management of private keys needs to be fully within the TEE.
- b) Secure system design in line with the key objectives of the UIDAI RD Service specification (latest version).
- c) Implementation of RD Service and Management Client in line with RD Service Specification (latest version).
- d) Additional fingerprint liveness check with FMR-FIR Single PID block implementation. All the L1 registered devices will be rolled out in FMR+FIR Single PID block capture capability only.



- e) A standardized and certified device driver provided by the biometric device vendors. This device driver (exposed via an SDK/Service) encapsulates the biometric capture, any user experience while capture (such as preview), and signing and encryption all within TEE. The device driver must form the encrypted PID block before returning to the host application.
- f) The detailed specifications for L1 compliant registered device are available in the document "Aadhaar Registered Devices – Technical Specification Version 2.0 (Revision 7) January 2022" (attached as annexure).
- g) All the details with regards to Aadhaar Authentication API for L1 compliant registered devices are available in "Aadhaar authentication API specification version 2.5 (Revision-1) January-2022" (attached as annexure).

**3.** The use of L0 devices will be discontinued over a period of time and therefore all future procurement of fingerprint authentication devices may preferably be done as per L1 compliant specifications and guidelines.

4. It is hereby clarified that currently authentication shall continue both in L0 and L1 devices, however, all the old & deployed L0 devices (where public device certificates issued by STQC have expired and have not been renewed) need to be phased out of the authentication ecosystem. Directions for old & deployed L0 devices as well as final sunset date of L0 devices are being issued separately.

5. AUA/KUA's will also require modification in their authentication application as well as backend servers to support the L1 compliant registered devices. Therefore, it is suggested that the respective AUA/KUA/ASA's technical teams should be ready for upgrade to the latest L1 registered device specifications. The revised RD and API specifications have already been circulated vide this office letter 11020/198/2017-UIDAI (Auth-1)/1 dt 14.01.2022. The same are attached for ready reference.

This issues with the approval of competent authority.

(Sanjeev Yadav) Director (Auth-1)

Copy for information to:

- 1. DG, STQC
- 2. Sh. Anup Kumar, DDG (Tech Centre, UIDAI)