F. no. HQ-13043/1/2025-AUTH-I HQ (Comp:18668)

Unique Identification Authority of India

(Authentication and Verification Division)

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Dated: 15 Sep 2025

To

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

Subject: Introduction of L1 Compliant Iris Authentication Registered Devices in Aadhaar Authentication Ecosystem

Unique Identification Authority of India (UIDAI), in collaboration with biometric device vendors, STQC, and C-DAC, is improving the Aadhaar Authentication Ecosystem's security and efficiency. They are upgrading from L0 compliant Iris Authentication Registered Devices to L1 compliant devices, reaffirming UIDAI's commitment to providing strong and secure authentication processes.

Key Features of L1 Compliant Iris Authentication Registered Devices:

- 1 Device Security with Level 1 Compliance: Signing and encryption of biometric data are performed within a Trusted Execution Environment (TEE), ensuring that host OS processes or users cannot access the private key or inject biometrics. Private key management is fully contained within the TEE.
- 2 Secure System Design: Aligned with the key objectives of the UIDAI RD Service Specification (latest version).
- 3 Implementation of RD Service and Management Client: Compliant with the latest RD Service Specification.
- 4 Iris Liveness Check: Implementation of liveness detection with Fake Iris Detection (FID)
- Standardized and Certified Device Driver: Provided by biometric device vendors, this driver (exposed via SDK/Service) encapsulates biometric capture, user experience (e.g., preview), and signing and encryption within the TEE. The driver forms the encrypted PID block before returning to the host application.

6 Detailed Specifications: Refer to the document "Aadhaar Registered Devices - Technical Specification Version 2.0 (Revision 7) January 2022" (attached as annexure) and latest API

Specifications

Action Required:

1 Transitioning from L0 to L1 registered devices: L0 iris authentication devices will gradually

be phased out. Once L1 iris registered devices are available, all future purchases of iris

authentication devices must comply with L1 specifications. While L0 devices will remain

operational for now, any deployed L0 devices with expired or non-renewed STQC

certificates must be removed. A separate notification will be released to announce the sunset

date for L0 Iris registered devices.

2 Application Modifications: AUAs and KUAs need to update their authentication applications

and backend servers to accommodate L1 compliant iris-registered devices and the latest

Aadhaar Authentication API specifications. Technical teams should be made aware of these

updates and carry out thorough testing to ensure seamless compatibility.

3 Phase-Out of Expired Devices: AUAs/KUAs need to identify and remove L0 iris devices

with expired STQC certificates by December 31, 2025, as authentication services on these

devices will no longer be supported after this date.

UIDAI encourages all partners to actively adopt L1-compliant iris devices to enhance the security

of the Aadhaar Authentication Ecosystem.

This issues with the approval of the competent authority.

(Pratik Choudhary)

Deputy Director

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Copy for information to:

1 DG, STQC

2 DDG (Tech Centre, UIDAI)