To,

All UPI Members - Banks, PSP's & Third Party Applications

Madam / Dear Sir,

Subject: Aadhaar OTP Authentication in lieu of Debit Card for Customer Onboarding on Unified Payments Interface (UPI)

Unified Payments Interface (UPI) was launched on 25th August 2016, and has since gained scale. With a view to further expand the user base by offering simplified onboarding, a new option for onboarding users on UPI is being introduced, whereby a customer can be authenticated on the basis of the customer's Aadhaar with OTP. Customers who either do not have a debit card, or whose debit card is not active, can easily set or reset his or her UPI PIN with this option.

This enablement would go a long way in increasing inclusion of customers across the country to digital payments, since Aadhaar number is now available with almost all Indian citizens. Also onboarding using Aadhaar with OTP acting as the second factor of authentication opens up a safe, secure and convenient alternative onboarding channel thereby increasing digital footprint. With this roll out, the customer would have the choice to use Aadhaar with OTP for authentication in lieu of Debit card. Annexure – A of this circular provides the detailed flow of the onboarding process using Aadhaar authentication and OTP. In this architecture, NPCI shall connect to Unique Identification Authority of India (UIDAI) on behalf of customer's bank to seek authentication, and validation of Aadhaar OTP will be done as per UIDAI Guidelines.

UPI members shall continue to comply with two factor authentication guidelines of RBI and also ensure the following

1. PSP/Banks should ensure that the facility of UPI on-boarding using Aadhaar with OTP is made available only if the UPI application is being used on mobile having Aadhaar registered mobile number and same mobile number is registered with bank.

2. Issuer banks shall verify Aadhaar holder's mobile number, in addition to OTP authentication. In case of authentication failure appropriate error should be displayed to Aadhaar holder.

UIDAI's Aadhaar authentication charges shall be applicable as per the provisions of Aadhaar (Pricing of Aadhaar Authentication Services) Regulations, 2019 as amended from time to time. All Banks, PSPs, and TPAPs shall ensure compliance with the rules, regulations and guidelines issued by UIDAI as applicable in this regard.

UPI members shall comply with the provisions of this circular by 15th December 2021.

SD/-
Yours Faithfully,
Praveena Rai
Chief Operating Officer

Annexure A

Detail flow – Set or Reset UPI PIN using Aadhaar with OTP

a) Customer selects the option of Aadhaar with OTP and provides his/her consent to set or rest UPI PIN.

b) Issuer bank returns the Account Number and Aadhaar number from Core Banking System, if customers Aadhaar is linked to bank account. If customer's Aadhaar is not linked, issuer bank shall respond that no Aadhaar is linked to bank account.

c) UPI forwards the last 4 digit of the Aadhaar number received from issuer bank to the Payer UPI application in masked format. Payer UPI application requests the customer to enter the last 4 digits of the customer's Aadhaar number.

d) Payer UPI application validates the last 4 digits of Aadhaar number entered by the customer with the number forwarded by UPI from issuer bank. If the numbers match, the Payer UPI App confirms to UPI, and UPI in turn requests UIDAI to send the Aadhaar OTP to the customer's registered mobile number stored in UIDAI's database/ repository.

e) UPI sends Request OTP to Issuer bank post receiving a success response from UIDAI. Issuer Bank shall send OTP to customer's mobile number.

f) Customer will enter both Aadhaar OTP and Issuer OTP on his UPI App received on his registered mobile number. Post which the customer enters new UPI PIN which the customer wants to set, & confirm the same. Payer PSP will share the above details to UPI for validation.

g) UPI will forward the details of OTP (Aadhaar OTP) and mobile number to UIDAI for authentication. UIDAI shall authenticate OTP, and send the authentication flag ="Y", if both the UIDAI registered mobile number on which the OTP has been sent by UIDAI, and the one sent in the API are same.

h) However if authentication flag = "N", either due to OTP validation failure or due to mismatch of mobile numbers NPCI shall decline the onboarding transaction.

i) Post a success response is being received for Aadhaar OTP validation from UIDAI, UPI shares the Issuer bank OTP to Issuer bank along with the new UPI PIN requested by customer and UIDAI's OTP validation success response.

j) Now issuer bank verifies the issuer bank's OTP and confirms to UPI with a success or failure response. Based on the issuer bank's final confirmation, the new requested UPI PIN is set/ reset successfully.