Aadhaar Based Payment Services

Hello, I am Dr. Deepankar Roy. I am with the National Institute of Bank Management, Pune, India.

This payment system is developed and operated by National Payments Corporation of India (NPCI).

Two variants of Aadhaar based Payment Services

- Distribution of Electronic Benefit transfer (crediting the bank accounts of the beneficiaries as identified from the UID (unique identification) number – eliminating thereby payment leakages) called Aadhaar Payments Bridge
- Providing basic financial services (cash deposit, balance enquiry, cash withdrawal and remittance) at low cost access devices (called Micro-ATMs) maintained at Business correspondents in an inter-operable way called Aadhaar Enabled Payment Service

Aadhaar Payment Bridge –

Aadhaar Payment Bridge Solution (APBS) will be used to:

- EBT(electronic benefit transfer) Credit disbursements based on UID number.

- To sub-serve the goal of Government of India (GOI) and Reserve Bank of India (RBI) in furthering Financial Inclusion by way of processing government disbursement using Aadhaar number.

- To support various Schemes like NREGA (National Rural Employment Guarantee Act), Social Security Pension, Handicapped Old Age Pension etc. of any Central or State Government bodies, to send financial details to the beneficiary using Aadhaar number.
Aadhaar Payment Bridge – Features

- Pre supposes that all Government beneficiaries would have Aadhaar linked account number.
- Government Department can send file containing IIN (Issuer Identification Number), Aadhaar No., transaction reference no. and Amount. With the incorporation of Mapper, IIN number need not be included in transaction file.
- APBS will receive the disbursement payment instruction from the Government Departments through Sponsor Bank – (Banks has ability to convert in the required format).
- The bank identifier would be used to route transaction to the destination bank – the destination bank will maintain the linkage to Aadhaar number and bank account for seamless credit to customer account.
- Enriched MIS (management information system) to participants.
- Secure Clearing and Settlement.
Aadhaar Enabled Payment System

Aadhaar Enabled Payment System (AEPS) is a bank led model which allows online financial inclusion transaction at Micro-ATM through the Business correspondent of any bank using the Aadhaar authentication.

This system is designed to handle both ONUS and OFFUS requests seamlessly in an effective way by enabling authentication gateway for all Aadhaar linked account holders.

Services Offered

- Balance Enquiry
Cash Withdrawal

Cash Deposit

Aadhaar to Aadhaar Fund Transfer

Best Finger Detection (BFD)

Mini Statement (Proposed)

**NPCI Role in AEPS**

Channelizing government benefits/subsidies to beneficiary account in a transparent and secured manner, thereby also providing an easy to use, safe and secured payment platform to avail those benefits by using their fingerprints.

NPCI acts as an Authentication Service Agency (ASA) by directly connected to UIDAI (Unique Identification Authority of India) to extend Aadhaar based payment services.

Gateway Authentication Services for ONUS Aadhaar enabled financial inclusion transactions for banks which wish to connect to UIDAI systems through NPCI (This service is optional for banks and they can connect directly to UIDAI).

Switching, clearing and settlement activity for OFFUS Aadhaar based financial inclusion transactions.
AEPS: Intra-bank transaction Flow

Customer Inputs:
1. AADHAAR Number
2. Amount
3. Finger Print Data

Biometric and Encryption Standards are Prescribed by UIDAI
The RuPay Debit Aadhaar Card

Key Features:

- India’s first domestic card scheme with Aadhaar
- First of its kind unique product— ATM + PoS¹+ MicroATM Card
- Use at any NFS² ATM & MicroATM for Cash withdrawal, Cash Deposit, Balance Enquiry, Funds transfer to any other Aadhaar number
- Use at PoS to avail RuPay³ scheme based purchase transactions

¹ Point of sale
² National Financial Switch
³ RuPay
Acts as a usual ATM card when entered in any of the NFS ATMs using PIN\(^4\) issued by the bank.

When swiped on MicroATM goes through the AEPS system where biometrics is used to authenticate the transaction with UIDAI authority.

Acts as a normal PoS based transaction while swiped on a PoS(PIN)

Value Proposition:

- Interbank operability = wider reach

- Biometric verification = Secure

- Multiple Channel Access

\(^3\) RuPay is an Indian domestic card scheme conceived and launched by National Payments Corporation of India (NPCI).

\(^4\) Personal identification number