

NPCI/2018-19/AePS/014

6th March, 2019

To,

Member Bank — Aadhaar Enabled Payment Systems

Subject: 1) Best Practices to reduce Technical Declines

2) Best Practices to reduce Biometric Mismatch

Objective: This circular intends to explain the best practices and measures required to be taken in AePS ecosystem to reduce the technical decline count and improving the customer serviceability at the field level.

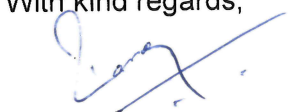
To meet the above objective, we suggest banks/ end customers to adopt the following best practices:

Sr. No.	Proposal/ Development	For detailed process, refer
1	Best practices to be followed to reduce technical declines	Annexure-I
2	Best practices to reduce the count of biometric mismatch	Annexure-II

Other key requirements:

- **Robust Infrastructure:** A major bottleneck in the widespread usage for AePS and BHIM Aadhaar are due to technical declines. Hence, to increase the usage of AePS & BHIM Aadhaar, it is recommended that all AePS members should improve their system capacity (switching capacity, network bandwidth & server/DB capacity, application capacity etc.) to match the volume of transactions they are processing. We request you to ensure that your Bank's system should have 150 transactions per second (TPS) & process 0.5 million transactions per day. If system utilisation at bank end reaches 60% of the existing TPS, then bank must take proactive action to increase the capacity accordingly. We request you to ensure that your systems i.e. Production (PR), Backup system & Disaster Recovery (DR) systems are in sync and DR should be ready in case of any issue in Production/Primary system.
- **Minimum hops between beneficiary switch & CBS:** It is advised that all members should have minimum hops between issuer switch and CBS so that the request & response messages reach to the source & destination within the TAT and helps in avoiding declined transactions. All members are requested to take a note of the above and ensure to put in place proper processes so as to reduce the declines and increase approval ratio.

With kind regards,



Ram Sundaresan

SVP & Head - Operations

Annexure I

NPCI has issued a circular number NPCI/2018-19/AePS/004 in the month of Sept, 2018 advising banks to undertake scheduled downtime activities only during non-peak hours i.e. 00:00 to 05:00 hours. It improves the approval rate as most of the customer initiated AePS transactions are performed during day time.

Further, based on our experience and also after discussing with major issuer banks which had high technical declines, we have identified below measures which reduces timeout scenarios to a large extent. Please find below such best practices to be followed by banks to reduce technical declines:

- To reduce timeout (declined by response code 08) scenario, additional/separate Issuer & Acquirer port may be configured at bank's switch level to handle peak volume.
- Bank must send AePS transactions as per latest AePS Specifications to reduce instances of transactions declined due to format error.
- Additional GL accounts may be configured to minimize Account lock declines at issuer end.
- Banks should ensure that scheduled maintenance activity should be done during non-peak hours.
- Banks should conduct DR Drills once in every six months to have a readiness for Business continuity. DR drills should be conducted during non-peak hours (between 00:00 hours and 05:00 hours).
- Bank may consider availing multiple link (through service providers) connectivity between NPCI & Bank's DC (both PR and DR).
- If the primary link is down bank can consider routing the transaction internally through DR.
- Banks to implement latest Response Code as per NPCI circular/ specification issued from time to time.

We have observed that technical declines have reduced substantially after implementing above suggested changes by some of the issuer banks.

Annexure II

Biometric mismatch (RC U3) has been the major contributor for declines in AePS. We are highlighting few best practices to reduce the declines due to biometric mismatch at field level and which in turn will enhance the serviceability for end consumers. Banks are advised to share the below guidelines to their business correspondents and customers:

Sr. No.	Do's	Don'ts
1	Clean the Finger and Finger print scanner before performing the bio-metric authentication based transaction.	Using greasy, sweat and dry finger while performing the bio-metric authentication based transaction.
2	Micro ATM Application deployed in production must support dual/fusion finger authentication. It improves success percentage	Performing transaction while the hands are painted (e.g. Mehndi, Tattoo etc.)
3	Best Finger Detection must be performed before authentication to identify the best finger and henceforth customers should be advised to use the same finger to perform transactions.	Using the same finger once the transaction got declined with response code: U3
4	Correct Aadhaar number is entered.	
5	Ensure proper placement of finger on scanner.	
6	Micro ATM scanner must be of standard 1.5.1 & STQC certified.	

