

NPCI/UPI/OC-107/ 2020-21

April 01, 2021

To,

All Members in Unified Payment Interface (UPI)

Dear Sir/Madam,

Subject: Change in nomenclature of Retrieval Reference number (RRN) in UPI to avoid duplicates.

**Background:** For each UPI transaction, a 12 digit Retrieval Reference Number (RRN), which serves as a unique transaction identifier, is generated by the initiating PSPs. The extant RRN construct is defined as below:

RRN construct: YDDDHHSSSSS where:

Y-Year

DDD-Julian Date

HH-Hour

SSSSS-STAN Number

Trace no. limit is 1 million per hour per PSP

Basis the above RRN nomenclature, there is a limit of 1 million unique RRNs which can be generated within an hour by a single Payer /Payee PSP. With the UPI volumes increasing, it is observed that during peak hours, the number of transactions initiated by a PSP exceeds the hourly maximum cap of 1 million as per the extant RRN logic. Duplicate RRNs results in transaction declines and also reconciliation related issues at beneficiary banks end.

Revised RRN Nomenclature: In view of the above, the current RRN nomenclature to be revised wherein 'HH' to be replaced with Trace number 'SS' to accommodate 100 million unique RRNs in 24 hours from a single Payer /Payee PSP. Basis the revised RRN construct, Payer/Payee PSP shall have the capability of generating 76 million additional RRNs.

The revised RRN construct is defined as below:

RRN construct: YDDDSSSSSSS where:

Y-Year

DDD-Julian Date

SSSSSSSS-STAN Number

Trace no. limit is 100 million



The PSPs / Banks wherein the hourly transactions are exceeding 1 million are advised to implement the revised RRN construct to avoid duplicity. Further, PSPs / Banks to remove checks, if any, against 'HH' of the RRN construct. In case, Banks / PSPs have validation on HH in RRN, please ensure that the same is removed before May 31, 2021.

Members may bring the content of the Circular to the notice of their constituents concerned.

Yours Sincerely,

Saiprasad Nabar
Chief – Online Product Operations & Technology