

NPCI/2017-18/ RuPay/ 040

March 13, 2018

## MOST CRITICAL

To,

All Issuing Member Banks and Issuer Authentication Servers (IAS) - RuPay

Dear Sir/ Madam,

## Subject: Change in response of "Auth\_Result" Parameter - "Error Code"

- RuPay has established a strong presence in card space in the country. These RuPay cards are
  accepted at all ATMs in the country and on all POS and ecommerce merchants. In our continued
  efforts to ensure secure payment platform and avoid any possibility of 'Man in Middle' attack,
  we propose Banks to implement changes suggested below.
- 2. In existing PaySecure platform, we have two API calls between PaySecure to Issuer Authentication Server (IAS) vendors, i.e., "Auth\_Initiate" and "Auth\_Result". "Auth\_Initiate" allows PaySecure to begin the Cardholder Authentication process with the issuer authentication server based on the card holder details (Card number, Expiry Date & CVD2) captured at the merchant / acquiring PG's end, for checking Card Status and Mobile no availability at bank IAS system.
- 3. If "Auth\_Initiate" API is successful then PaySecure will open Issuer OTP Page and OTP get validated successfully by Issuer Authentication Server and return the status to PaySecure. After successful validation of the OTP, "Auth\_Result" API call will be triggered to securely query the result of authentication.
- 4. In all our suspected transactions, post validating OTP, Issuer is responding with status "ISSUER100", which means 'OTP is invalid', but we received in PaySecure system response code as "ISSUER000", which means 'Authentication Successful'. Further to this, it was also observed that for "Auth\_Result" calls, IAS is responding in parameter for 'Status' tag as "Failure", but for the 'Error Code' tag IAS is sending value of "0/00", which means successful. Hence, PaySecure is continuing with transactions to proceed for Authorization leg.
- 5. It may be noted that as per "RuPay- eCommerce Issuer Integration Guide Version 1.2", dated 01 August 2013 (Page # 45 & 46), clearly highlights the expectations from IAS vendors w.r.t responses for the two calls "Auth\_Initiate" and "Auth\_Result" mentioned above.
- 6. In case of all suspected transactions, it was observed that the IAS vendors of all impacted Banks were responding to "Auth\_Initiate" calls correctly by declining the transactions with 'Invalid OTP' error code, however, NPCI PaySecure systems were not getting such transactions as 'Invalid OTP' error code, instead, the transactions were received with successful response. Due

to this successful response, as per PaySecure flow, "Auth\_Result" calls were made to IAS vendors and it is here that the responses given by the IAS vendors were not as per the specifications.

- 7. We have validated the logs submitted by the IAS vendors on behalf of few member Banks and found logs for responses of "Auth\_Initiate" calls to be the issue. It is observed that for all fraudulent transactions, "Auth\_Initate" calls were responded by the IAS vendor as "Issuer100", which means 'OTP invalid', however, NPCI PaySecure system received these responses with response code "Issuer000", which means successful. This could have been possible only if there is "Man in Middle" (MIM) attack.
- 8. While there are appropriate rules implemented by all Banks and their vendors, to curb frauds and bring transparency & control, we request all Banks and vendors to respond to any such "Auth\_Result" call from Paysecure to IAS where IAS has recorded the OTP validation result as anything other than "ISSUER000" with 'Error Code' in response as '96' (System Error). This would be monitored at PaySecure for necessary course correction.

We request members to take a note of the same and bring the contents of this circular to the implementation at the earliest. Do advice if any support is required from our end. For any queries please feel free to contact Mr Neelesh Gupta (neelesh.gupta@npci.org.in/9082741856).

Yours Faithfully,

Vishal Anand Kanvaty SVP – Product & Innovation