



RuPay

The word 'RuPay' is written in a large, light purple, sans-serif font. To the right of the text is a stylized arrow pointing to the right, composed of three overlapping triangular shapes in orange, green, and blue.

RuPay- Product Manual

Version 3 – 14 September, 2017

Document Control

Sr.	PG version number	Summary of Change	Change Month & Year
1	Version 1	Initial Manual featuring RuPay Debit Card Product	April, 2012
2	Version 2	Addition of Prepaid	June, 2014
3	Version 3	Addition of RuPay Image Card, RuPay Virtual card and Bharat QR	September, 2017



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A. Objective of the document

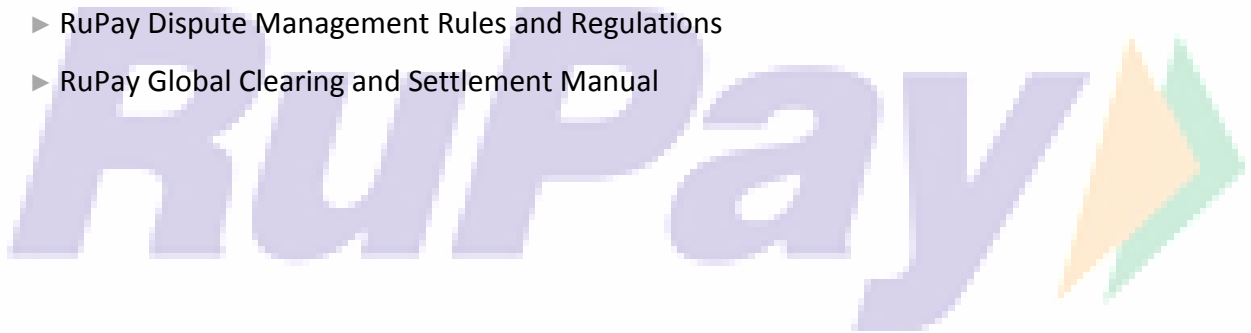
The objective of this manual is to introduce the member banks to RuPay card scheme debit products and guide the issuing banks in the implementation process. Further this document suggests the best practices and risk management aspects related to RuPay debit products.

The terms NPCI and RuPay have been used interchangeably in this document and refer to the card scheme entity promoted by NPCI. NPCI owns the RuPay card scheme and NPCI is the decision maker with reference to all matters.

B. References and publications

The list of documents which have been referred in this document are given as under:

- ▶ RuPay Card Marks and Specifications
- ▶ RuPay IIN Maintenance Manual
- ▶ RuPay Bylaws
- ▶ RuPay Implementation Guidebook
- ▶ RuPay Dispute Management Rules and Regulations
- ▶ RuPay Global Clearing and Settlement Manual



1.0 Introduction

The Indian Payments industry has witnessed a marked shift from traditional to electronic form factors. Payment forms like Cards, IVR, Mobile payments are rapidly becoming the preferred modes of transactions. Card payments in particular are becoming extremely popular in India. From customer convenience to reduction in expenditure for banks in processing cash, cheques and reduction in manual intervention, cards offer numerous advantages over the traditional means.

1.1. Card Payments

1.1.1. About Cards

With a wide variety of categories like credit cards, debit cards and the recently introduced prepaid cards, card products are available for a wide variety of customers. Even within product categories, variants with different product features and benefits are being used by the customers.

Debit cards, especially, are proving to be the key to modern retail banking, enabling customer's access to their accounts 24 hours a day. The Indian customer is considering them as a secure and effective mode of exchange.

Prepaid products / instruments comprises of prepaid cards, mobile wallets, internet prepaid accounts / cards, virtual cards, and prepaid paper vouchers. It is estimated that the prepaid market stood

1.1.2. Players in cards business

Also, many banks and non-bank financial institutions are creating alliances to market new products, features and services (often co-branded), thereby improving marketing efficiency and choice to consumers.

Issuing Banks

Several Indian Banks also provide instant debit cards to all new accounts directly at the time of account creation, in order to get a greater share of the card market. However there are a few challenges that these banks face for card issuance:

- ▶ Lack of awareness about operational framework for card transactions
- ▶ Lack of acceptance infrastructure is also viewed as a major challenge for banks in the card payments space.
- ▶ High costs related to switch and acceptance infrastructure set up, processing, issuance, card management, etc.

Acquiring Banks

With increasing card transactions, the merchant acquiring business is expected to attract high revenues. This would prompt the newer players to increase their capabilities to conform to the benchmarks and existing players to improve efficiency, cut costs and scale rapidly. Existing service providers however are constrained by

- ▶ Scalability issues especially in non-urban areas
- ▶ Building and maintaining low cost operating models for non-urban areas
- ▶ Infrastructure challenges

- ▶ Low margins and capital intensive investments
- ▶ Compete for the same set of limited customers
- ▶ Reliance on banks to develop and increase the acceptance infrastructure

Third Party Services providers

There is a trend in the industry towards disaggregating the payments value chain as specialists and non-bank participants like technology / system providers, transactions processing firms, etc. have emerged. Third party processors manage functions for the bank like

- ▶ Card generation, card issuance, fulfilment & dispatch
- ▶ Pin mailer generation & dispatch
- ▶ Bank / product configuration
- ▶ Product-wise fee management and Card Accounts Management
- ▶ Develop and launch new card products (like co-branded /dual cards)
- ▶ End-to-end scheme compliance management
- ▶ Integrating to other third party applications
- ▶ Card account management

Payment Gateways/Aggregators

India has witnessed a boom in the e-commerce business in the past few years, primarily due to the increasing penetration of computers and internet; increase in consumer usage, adoption and awareness. These companies enable payment through cards – credit, debit, prepaid cards and also enable payment through bank accounts and other payments instruments like mobiles / virtual cards.

The number and the range of websites (from matrimonial sites to gaming portals) are varied and are increasing; new merchants have been entering the online payments space which has led to the increase in transaction number and value happening online. These aggregators process around \$500 million annually, with a 35% expected year-on-year growth.

1.1.3. Developments in Card Payments

The payments industry is going through a gradual process of Electronification. Various entities have been responsible and have played an important role contributing to the shift to Electronification. Traditional players like banks and existing card associations have been actively pushing electronification by introducing new product variants and increasing the acceptance infrastructure.

- ▶ The existing Cards base in India is increasing to meet the increasing demand in both Personal and Corporate Markets.
- ▶ Cards have seen the rise of value added services like Issuer Fraud Detection, Extensive Online MIS, Address Verification, card recovery, PIN Translation/Management, DCC support, Scheme loyalty rewards, Data Mining/Auditing, Travel & Private medical insurance.
- ▶ Both, payment schemes and banks, have realised the need for shifting to Chip and PIN technologies from the preferred Signature based cards to address security concerns

- ▶ Upcoming technologies like contactless, biometric are prevalent in several countries and are offered for specific usage.
- ▶ Speed of the payment process has beefed up with newly introduced virtual wallets that can hold people's card account information for faster checkouts at online shopping sites and real-world stores
- ▶ Contactless Cards and Micro Tags are also becoming popular as they save time and effort, but they are only used for small transactions at travel and shopping outlets because of security concerns
- ▶ Newer attempts to increase acceptance among domestic users by rolling out programs like ATM based mobile Top-ups and e-debit programs
- ▶ Government Tolls and Tax payments are the emerging trends in card payments along with other potential merchant categories like education.

1.2. Partnering with NPCI

1.2.1. About NPCI

The National Payments Corporation of India (NPCI) is a pioneer organisation in the field of retail payments in India .It is a body promoted by RBI and has presently ten core promoter banks (State Bank of India, Punjab National Bank, Canara Bank, Bank of Baroda, Union bank of India, Bank of India, ICICI Bank, HDFC Bank, Citibank and HSBC). It has been incorporated as a Section 8 company under Companies Act and is aimed to operate for the benefit of all the member banks and their customers.

NPCI would function as a hub in all electronic retail payment systems which are ever growing in terms of varieties of products, delivery channels, number of service providers and diverse Technology solutions.

The dynamic constitution of the committees of NPCI enable it to understand the needs of financial institutions of India better, leading to newer and better products and services in the coming times.

1.2.2. Contribution of NPCI to the value chain

NPCI has been working towards the growth of retail payments in India since its inception in 2009. NPCI already offers payments solutions for ATMs (NFS), mobile payments (IMPS), Cheques (CTS), and is expected to offer electronic funds transfer (ACH). In addition, it also offers Aadhaar linked cards which banks can issue to customers for usage at ATMs and Micro ATMs. The broad level objectives of NPCI can be summed up in the following points:

▶ Assist in Electronification of cash payments

NPCI would endeavour to strengthen the issuance and acceptance infrastructure in India to increase penetration of cards and overall cards usage. It will work closely with banks / financial institutions to ensure that the current under banked / unbanked consumers are brought into the ambit of banking and financial services. Issuance of electronic form factors like cards will help drive adoption of payment through mediums other than cash

► **Create common platform for all banks & payment forms/channels**

Facilitating an infrastructure allowing banks & financial institutions (irrespective of size, location and customer base) to offer electronic payment options to their customers through multiple channels including POS, mobile, ATM, IVR, Aadhaar etc. & routing, & settling these transactions.

1.3. Introducing RuPay

RuPay, a new card payment scheme launched by the National Payments Corporation of India (NPCI), has been conceived to fulfil RBI's vision to offer a domestic, open-loop, multilateral system which will allow all Indian banks and financial institutions in India to participate in electronic payments.

1.3.1. The RuPay Card

The name RuPay is derived from the words 'Rupee' and 'Payment'. Since "RuPay" is also the name of the Indian currency in Hindi, the word is expected to strike an immediate chord with the nation's populace. The RuPay card is introduced by NPCI in order to tap into the tremendous growth witnessed by cards. The functionality of the products has been designed, to enable banks, to reduce the costs of cash, cheque and manual processes. It also aids in convincing customers to access their funds at channels like POS and ATMs by using the most accessed channel – the branch.

1.3.2. The RuPay Brand

The entire RuPay brand has been created to position itself as a secure and stable yet competent entity with a strong Indian flavour.

RuPay's logo, which consists of the word RuPay written in blue, alongside orange and green arrows on a white background, indicates a nation on the move and a service that matches its pace.

The colours orange, green and white, which also symbolize the Indian flag, connote RuPay's proud Indian identity. The bold and unique typeface grants solidity to the whole unit and symbolizes stability.

1.3.3. Benefits of RuPay Cards

The Indian market offers huge potential for cards penetration despite the challenges. RuPay cards will address the needs of Indian consumers, merchants and banks. The benefits of RuPay Debit card are the flexibility of the product platform, the high levels of acceptance, and the strength of the RuPay brand - all of which contribute to an increased product experience as detailed below:

► **Lower cost and affordability**

Since the transaction processing will happen domestically, it would lead to lower cost of clearing and settlement for each transaction. This will make the transaction processing cost affordable and will drive usage of cards in the industry.

► **Customized product offering**

RuPay, being a domestic scheme is committed towards development of customized product and service offerings for Indian consumers.

► **Protection of information related to Indian consumers**

Using RuPay cards will mean that the customer transaction data will reside in India. The will ensure the sanctity of data related to Indian consumers.

► **Provide electronic product options to untapped / unexplored consumer segments**

There are under penetrated / untapped consumer segments in rural areas that are not exposed to financial services. RuPay could provide electronic payment option to these consumer segments by offering various product variants which are affordable by banks.

► **Inter-operability between payment channels and products**

RuPay card is uniquely positioned to offer complete inter-operability between various payments channels and products. NPCI currently offers varied solution across platforms including ATMs, mobile technology, cheques etc and is extremely well placed in nurturing RuPay card across these platforms.



RuPay

2.0 RuPay Debit Product Offerings

RuPay endeavours to provide a secure system and useful product propositions to its customers by leveraging its domestic infrastructure. The core building blocks of RuPay product and services would be simplified operational framework and transparent pricing model.

The RuPay Debit card offers great utility, as it allows the cardholders to access their funds from their account as well as make secured payments for purchase of goods and services at merchant locations.

Following system related practices are prevalent in the Indian market:

- 1) Debit products using dual messaging system (DMS).
- 2) PIN based cards which allow only online transactions and follows Single message system (SMS)

NPCI has developed a solution which is well equipped to handle both the single message and dual messaging systems. However it would offer Pin based products on the SMS platform for the member banks to provide enhanced security and superior product experience for the cardholders.

2.2. Product Features

The RuPay debit card product features can be viewed in the light of the following major aspects:

- ▶ Acceptance
- ▶ Transaction types
- ▶ Card design features

2.2.1. Acceptance

Widespread acceptance is critical for any payments scheme to survive and grow in the marketplace. It is the acceptance channel which determines the actual usage of the cards at the merchant establishments. RuPay is developing its own domestic network and exploring options for an international acceptance network.

POS Acceptance: POS terminals currently contribute to ~90% of the total card transactions in India. The acceptance infrastructure is gradually growing in urban locations and expanding into tier 3, 4 and rural locations. RuPay's objective is to ensure pan-India geographical coverage of POS terminals for RuPay cards. All RuPay cards would be accepted across the entire POS network in India.

ATM Acceptance: The RuPay Debit card can be used at ATMs with access to all the basic services like Cash Withdrawal, Balance Inquiry and PIN change which would be provided by all issuer ATMs. Apart from this Issuer defined functionalities like Transfer of Funds, prepaid Mobile recharge, bill payments and service requests may also be extended to the customers. Basic

services like Cash withdrawal and balance enquiry will be provided at the Non Issuer ATMs as well along with value added services as per NFS network.

Ecommerce Acceptance: The RuPay debit cards will be accepted over channels like ecommerce as well. In addition to providing world class service on existing channels, NPCI intends to rapidly integrate channels like mobile and IVR for acceptance of debit cards. All RuPay products will have two-factor authentication across all channels to ensure optimum security for the cardholder.

2.2.2. Transaction Types

The RuPay Debit card supports the following transaction types

▶ **Purchase:**

RuPay debit card can be used by cardholders for any purchase transactions across Merchant Establishments

▶ **Purchase with Cash Back**

This facility would be made available for member banks. RuPay cards can be used for cash back options at all POS terminals enabled for cash at POS.

▶ **Online funds transfer**

This refers to card to card transfers through ATM or other channels. Money can be transferred from one card to another card through ATM or any other channel

▶ **Refunds**

RuPay debit cards will support transaction refunds originating at the merchant locations

▶ **Tips/Surcharging**

Transactions like tips and surcharging can also be performed on RuPay Debit Cards

▶ **Cash at POS**

Cardholders can use their RuPay debit cards to withdraw instant cash at POS terminals subject to limit prescribed by RBI regulation.

▶ **ATM Cash withdrawals:**

RuPay cardholders will enjoy the facilities of withdrawing cash from any ATM across the country with the help of NPCI's card network.

▶ **ATM PIN Change**

PIN change facility will be offered to cardholders across all issuer ATMs.

▶ **ATM Balance Enquiry**

RuPay cardholder can check its account balance at any ATM location in India

2.2.3. Card design features

RuPay Card is the industry standard for mass-market and entry level consumer cards. It gives issuers the control and opportunity to create a program that fits their customers' needs.

▶ **Primary Account Number Length**

The account number is an issuer-assigned number that identifies an account in order to post a transaction. The RuPay Debit card supports 16 to 19 account numbering structures giving the issuers the flexibility to manage accounts of their customers.

► **IIN Range**

The Bank Identification Number, also known as the BIN, or the Issuer Identification Number, also known as the IIN, is used interchangeably. Currently RuPay, who is an authorized block holder has been assigned the below IIN's by ABA. The IIN is the first 6 digits of the card number. Member banks will be expected to request for an IIN issuance from NPCI.

► **Card Identification (Other than Logo)**

Please refer the "RuPay Card Marks and Specifications" document for details on card identification related information.

► **Embossing**

Embossing will be an issuer option as embossing may be necessary for offline transactions which RuPay will not facilitate. RuPay gives the issuer the freedom to use embossing of cards as a means to improve the aesthetic value of cards.

► **Use of X2X/Online Service Code**

Service codes are three-digit values which issuers encode in the magnetic-stripe of a card. These codes are used to convey instructions to merchant terminals on how a card should be processed."X2X" indicates that a transaction must be sent online for authorization always. Since RuPay card will allow only online transaction the service code usage will be X2X always.

► **Cardholder Verification Data (CVD)**

The CVD is a 3-digit number printed on a card for security purposes. RuPay debit products will support CVD information at the back of the card to ensure that the magnetic card information is encoded by the issuer bank only. RuPay allows two options for placement of the CVD- directly on the card plastic in the standard white area to the right of the Signature Panel or on the Signature Panel. The first option improves the durability of the CVD feature on the card and is the RuPay recommended solution.

2.3. Other Product aspects

2.3.1. Simplified Pricing

The major aspects of RuPay pricing structure can be suggested in the following points:

Key features of pricing approach:

- 1) RuPay aims to provide simplicity in the areas of pricing and define a clear pricing structure. This will ensure member banks can understand the RuPay billing and pricing and are comfortable with the same.
- 2) Pricing for member banks based on tier structure to ensure that the pricing is standard for all banks that fall within a particular tier / category based on business volumes, reach, consumer base, overall transaction size.

- 3) A pricing approach which would encourage the banks to increase their card issuance as well as acceptance network. This would contribute to the growth of acceptance ecosystem in the country.
- 4) A menu based pricing option for value added services wherein member banks could choose and pay additional charges for specific services and offerings based on their requirements.

Price points:

The major price points suggested by NPCI are as follows:

► **Authorization Charges**

These charges are meant to recover the expenses for authorizing a transaction over the network. This will be a flat fee per transaction. For business declines the charge for authorization will be applicable. The members will be charged different authorization charges based on tiered structure.

► **Arbitration/Compliances Charges**

In case a dispute doesn't get resolved between member banks, the final step will be arbitration process. RuPay will be charging its members to recover the costs involved in managing the entire arbitration process.

► **Retrieval Request Charges**

The issuers raise a retrieval request to the acquirers for seeking transaction related information. In case the acquirer passes on the required transaction related information to the issuer, the issuer is charged a fee and the same is passed on to the acquirer

2.3.2. Enhanced Technology features

► **Complete Web based architecture**

Member banks will not have to develop file based interface since NPCI offers a complete web based architecture for its product and services.

► **Processing of advanced features**

Certain advanced features like surcharging may be difficult to implement in SMS platform. However RuPay platform provides the security and efficiency of SMS platform along with features such as processing of adjustment file to enable Tip and Surcharge processing.

► **Simplified file structure**

RuPay provides very Simplified File Structure which will enable the member's banks in case of future up gradations

- There are less than 30 fields in presentment or CB records
- XML and Field Separator Files Structure for clearing will enable greater flexibility and seamless future product rollout

► **Comprehensive and flexible Interchange and Fee computation**

RuPay provides a extremely comprehensive Interchange and fee computation system. Any member would be able to clearly identify and compute the different aspects of interchange and pricing as per the processes and systems implemented by RuPay.

► **User friendly reporting**

RuPay systems provide XLS and PDF based comprehensive reporting which are both user friendly and easy to comprehend.

► **Informative message formats**

The message formats have been defined keeping future enhancements in mind. The additional fields defined in the message formats provide the option of carrying more data and can be enabled for MIS or Value Added Service



3.0 RuPay Prepaid

3.1. Product Offerings

The RuPay Prepaid card operates on the same core premise; a positive balance is loaded into an account associated with a card and drawn down through purchase and cash withdrawal activity. RuPay Prepaid card is payment instrument that facilitates purchase of goods and services against the value stored on the card. The value stored on the prepaid card represents the value paid for by the cardholder. RuPay Prepaid offers the following 2 variants of prepaid products namely,

1. RuPay Prepaid Consumer cards
2. RuPay Prepaid Corporate cards

The above mentioned RuPay Prepaid products can be issued to the customers under the following three main categories:

3.1.1. Closed system instrument

These are payment instruments generally issued by business establishments for use at their respective establishment only. These instruments do not permit cash withdrawal or redemption.

3.1.2. Semi-Closed system instrument

These are payment instruments which are redeemable at a group of clearly identified merchant locations/ establishments which contract specifically with the issuer to accept the payment instrument. These instruments do not permit cash withdrawal or redemption by the holder

3.1.3. Open system instrument

These are payment instruments which can be used for purchase of goods and services and also permit cash withdrawal at ATMs and POS

Issuers may issue Rupee denominated RuPay prepaid cards under any of the above category and such RuPay prepaid card can be used for purchase of goods and services at any card accepting merchant locations (point of sale terminals), e-commerce and also permit cash withdrawal at ATMs and POS in India.

The RuPay prepaid card Issuing Banks must follow the guidelines issued by Reserve Bank of India for issuance and operation of prepaid payment instruments in India. Hence all entities issuing RuPay prepaid card shall comply with the latest Reserve Bank of India directives and guidelines for issuance and operation of prepaid payment instruments in India from time to time.

The RuPay prepaid card offers great utility, as it allows the cardholders to access their funds from their pre-loaded card account as well as make secured payments for purchase of goods and services at merchant locations.



Aspects	Permissions
Cash withdrawal facility at ATM	Permitted, except on RuPay Gift prepaid card

Cash withdrawal facility at POS	Permitted, except on RuPay Gift prepaid card Maximum cash withdrawal permitted per day per prepaid card is @ ₹ 1,000/-
Cash withdrawal limit / POS (POS / e-Com) transaction limit	As per the product offering designed by the bank
Purchase (POS / e-Com) transaction	Permitted
Re-loading	RuPay Prepaid cards may be reloadable or non – reloadable.
International usage	Not permitted on Rupee denominated RuPay Prepaid cards.
Card type	Un-embossed
Personalisation	May be Personalised / Non-Personalised
Validity of the card	As per the product offering designed by the bank in compliance with RBI prepaid guidelines from time to time.
Currency	Indian Rupee only
Load (Minimum / Maximum)	As per the product offering designed by the bank in compliance with RBI prepaid guidelines from time to time.
Mode of loading, re-loading and refund of amount	As per the product offering designed by the bank in compliance with RBI prepaid guidelines from time to time.
Service Code	X2X (for detailed service code, refer to latest version of RuPay Card Marks and Specifications)

For each targeted customer segments, banks are required to create a value proposition around the RuPay prepaid offering. This will help them deliver quality service to its customers with risk controlled acceptance. Moreover the banks can always provide add on services and benefits to the cardholders to enhance their card usage experience.

► **RuPay Brand Mark – Prepaid Cards**

Please refer the “RuPay Card Marks and Specifications” document for details on card identification related information RuPay logo should contain “PREPAID” as a source of funds identifier. The card design should also contain the product name identifier either “Consumer” or “Corporate” on the front face of the card.

LOGO	
STAGED	NON STAGED
	

► Product Name

The product name is a name for the card program platform being offered by an issuer to a cardholder; for example, General Purpose card, Gift Card, Payroll, Youth Card, EBT etc.

On RuPay Prepaid card use of product name is mandatory. When used following requirement must be meet.

- 1) The RuPay Prepaid Product name identifier must be used only on a card for that respective RuPay Prepaid Product. Example: Consumer / Corporate.
- 2) Colour that contrasts with the card background colour must be used.
- 3) The product name identifier must not be placed over the RuPay Brand Mark and its clear space area.
- 4) A font style of “Aharoni” with a minimum type size of 16 points must be used.

Product Nomenclature:

Product Type	Product Name (Identifier)	Sub Product Type
RuPay Prepaid	Consumer	Gift / Youth / GPR / Campus / University / Inward Remittance / Govt Disbursement / Payroll / Insurance
RuPay Prepaid	Corporate	Travel / Reimbursement / T&E

► Business Case

The issuer may decide which optional charges to apply to RuPay prepaid cards. The range of fees and charges may include some or all of the following:

- Account set up
- Initial load
- Reloads
- Secondary or multiple card issuance
- ATM usage - Cash withdrawal / Balance enquiry
- Lost or stolen card replacement
- Annual or “maintenance” charge

3.2. Cost Assumptions

► Systems Up gradation costs

Banks will incur costs related to systems up gradation in order to support RuPay Prepaid Cards. The systems cost can be amortised over a fixed period by issuer as per their internal policy.

► Operating Cost

There will be operating costs involved in processing transactions, authorizations and others. The major components of the technical operating costs will be following:

- Payout to NPCI(authorization)=RuPay charges*no of authorisations
- Payout to Prepaid Vendor

► Card personalization and Packaging Costs

The member would incur some costs in personalization of the RuPay cards and designing the packaging aspects of the card before it is delivered to the customer.

► Support Services Expenses

The member will be using support services to manage the operations of RuPay cards. The expenses would include the following:

- Operations Staff Cost
- Call Centre Cost
- Email support and call blocking support charges
- SMS alert

► Additional Services Cost

Members may prefer providing additional services like discounts at movie halls or restaurants to make the value proposition of RuPay prepaid card attractive.

► Fraud provisioning

There has to be provision due to losses caused due to frauds on the portfolio in terms of a contingency fund or insurance program.

3.3. Revenue Assumptions

► Issuance Fees

Issuers can charge a onetime issuance fees during the issuance of RuPay Prepaid cards. However Issuers may choose to exempt the issuance fees for certain premium segment of customers.

Income from Issuance= (Issuance Fees)*(Cards issued in a particular year)

► Interchange

Issuers receive interchange fees on the total sales volume of transactions done on the cards issued.

Income from Interchange= (Interchange rate)*(Total value of transactions)

► Inactive account and breakage

A very small amount left unused on a prepaid card is known as breakage.

Issuers have to decide

- What will be the time span before the card (having no transaction) will be treated as dormant
- What balance will be treated as breakage

► Other Fees

Other fees can emerge as a revenue stream for the issuers. These may include the following:

- ATM transaction fees: Issuers may choose to charge the customers for using an ATM to its customers. They should consider the competition and regulatory scenario in India.
- Surcharges: Banks may receive part of the surcharge charged to customers in select merchant sectors like fuel and railways.
- Lost and stolen card Charges: These charges may be charged to the customers so that they maintain due care in handling the RuPay Prepaid card.
- Initial Load & Reload: The issuer can decide fees for initial load and subsequently reload on RuPay prepaid account.

3.4. RuPay Prepaid Program Details Form (RPPDF)

RuPay Prepaid Program details form (RPPDF) (as appended in Annexure A) is a document that an issuer must submit to RuPay as a part of initial discussions towards launch of RuPay Prepaid card.

For every RuPay prepaid program, the issuer must complete and sign a RuPay Prepaid Program Details Form (RPPDF), and must submit it to RuPay for approval prior to implementation. Issuers must return completed RPPDFs, signed by a duly authorized corporate officer, by e-mail, fax or by mail as specified on the RPPDF.

4.0 RuPay Image Card

Image portrays visual perception of an individual. Image of individual's choice / theme on a card helps cardholder to associate him/her with the card more closely.

A. Guideline for RuPay Image Card

- i. **Image Requirement:** Issuer Banks may allow its customers to choose from various images provided by the Bank for card background or allow the customers to supply an image for the card background for their RuPay branded card.
- ii. **Resolution of Image:** The image provided by the cardholder to the Bank should be hi – resolution image. Bank is responsible for the quality of the image that is provided to the card manufacturing /personalisation vendor. Image provided should be minimum 300 dpi and in .jpeg format.
- iii. **Clear space tolerances:** Clear space guidelines around RuPay logo as specified in the RCMS guidelines are permitted a tolerance of plus or minus 0.5mm for the RuPay Image Card,
- iv. **Card Printing:** Card printing can only be done at RuPay empanelled card manufacturing/ personalisation vendor premises. Image has to be transmitted onto the card printing machinery through SFTP mode only.
- v. **Image transmission:** Image transmission from Bank to RuPay empanelled card manufacturing/ personalisation vendor should be in a secure and encrypted mode.
- vi. **Tagging of Image:** Each image should be tagged with the personalised / embossa data through image id / reference number. Image id / reference number should tally / matched with personalised / embossa data through a proper mechanism before printing.
- vii. **Certification:** The machine / software used for printing the RuPay Image Card should be certified by RuPay certification bureau.
- viii. **Shredding of card:** If any card is found to be defective or image of the card is unclear/blurred/pixelated post printing or does not adhere to RCMS & clear space tolerance for image card then the same should be destroyed with standard destruction mechanism.
- ix. **Base Plastic:** The base plastic must have only Bank and unstaged RuPay Logo without IIN, source of fund identifier or mandatory text/ legends. Post personalisation there should be a clear space of 2mm around RuPay Logo. Tolerance limits are prescribed in clause B (iii) above. The base card inventory along card back may be approved as per existing card design approval process.
- x. **RuPay Logo Procurement:** Vendors must procure the open files of the latest RuPay logo from the RuPay Card Design Approval team.

B. Card Design Approval Process for RuPay Image Card

- i. Review of the card design (Commonly known as 'PDF or email proof') is submitted by card manufacturing vendor to RuPay Card Design approval team only with unstaged RuPay logo on card front and complete card back. Card manufacturing vendor of Member banks are required to submit the PDF proof via email to RuPay Card Design approval team at rupay@npci.org.in.
- ii. NPCI team will coordinate with Card manufacturing vendor for any modifications (if required).
- iii. On ascertaining that card artwork conforms to RuPay Card Marks and Specifications current version, NPCI confirms to Card manufacturer by way of email advising permission for production.
- iv. NPCI reserves the right to communicate its observations/ feedback/ rejection at the post production stage if any discrepancy in cards vis-à-vis is approved communication is observed.
- v. The standard turnaround time for the approval of RuPay Image Card is 3 working days from the day of receiving the card design. Where card design is received post 1830 hrs. on a given day the TAT is 3 working days starting the next working day.

C. If a customized image/image is to be put in the background on a RuPay card (card face), the following points are to be taken into consideration:

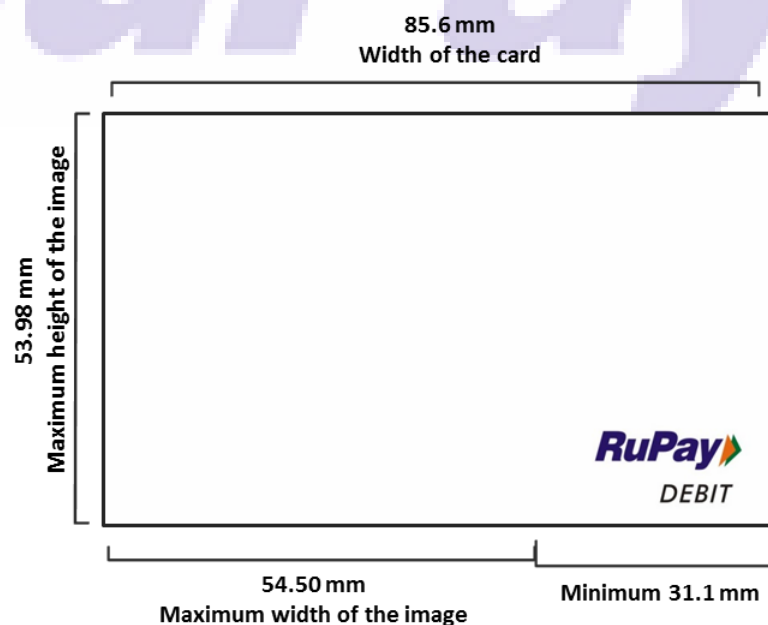
- I. Any card specifications/placement specifications mentioned in latest version of RuPay Card and Marks Specifications should not be altered/ compromised.
- II. Any image which can lead to non-acceptance of the card at any of the acceptance points (ATM, PoS, e-commerce, Micro-ATM, BC, etc.) cannot be used.
- III. Any printing or process that interferes with the required security features of the card should not be practice.
- IV. Image content on RuPay Cards should not contain:
 - i. Political or religious images/photo
 - ii. Logos, designation, password or authentication statements
 - iii. Illegal or terrorist groups

- iv. Socially unacceptable groups
- v. Socially obscene material
- vi. Marks, text or Trade Name related to competitor organizations
- vii. Copyright/Trademark material
- viii. Public figures/celebrities/famous personalities, etc.
- ix. Phone numbers (e.g. - STD code, landline number, mobile number, fax number, etc.)
- x. URL address/email id/website links, etc.
- xi. Currency symbols, national emblem, national flag, maps/flag of countries, etc.
- xii. Any image which can bring disregard to NPCI/RuPay

Issuer Bank cannot hold NPCI/RuPay liable for any losses, expenses incurred as a result of use of any design/image/photo or any other material.

Image dimensions on an Image RuPay Card:

1. In case RuPay logo is not clearly visible on the card front due to the colour of the image background, Issuer Banks have an option to use the image/photo on the card front not exceeding 53.98mm in height and 54.50mm in width. Rest all specifications will remain unaltered as per RuPay Card and Marks Specifications. These specifications apply to all RuPay branded Debit, Prepaid and Credit cards.



5.0 RuPay Virtual Card

A) Virtual Cards an overview:

Industry at large and consumers alike associate a certain quantum of risk to physical Plastic card. Further it is necessary to find ways to mitigate same thereby ensuring liability due to theft / counterfeiting / phishing and other fraudulent means is minimised. Preloaded Card program is a solution where a physical card is not issued, but a Preloaded Virtual Card is communicated to the account holder for ecommerce purchases alone. Pre-loaded Virtual card numbers must be communicated through a secured available means as guided by RBI.

B) RuPay Virtual Card Guidelines:

1) Card-Not-Present (CNP) usage only

In case of Virtual pre-loaded cards, cardholders must limit the usage to electronic commerce. The issuer must clearly disclose this at the time the customer applies for a virtual card, and in cardholder terms and conditions.

2) Disposable account type

Virtual pre-loaded accounts may be issued with a predefined validity. Issuers should determine appropriate expiration dates and provisions that affect possible forfeiture of balance. The unused balance would be transferred back to the account or paid to the customer as per rules defined in the cardholder terms and conditions by the issuing bank.

3) Cardholder notifications

The issuer must notify the account holder / purchaser, in a safe and secure manner, of the program details covering usage of the virtual card and provide confirmation of the following account elements:

- I. Card holder name
- II. Card number
- III. Expiration date
- IV. Card Verification Data (CVD2)
- V. Load value

In case a graphic image is created by bank to be sent to the customer or intended beneficiary (in case of virtual gift card) then the account elements must be displayed on the card image front.

4) Currency

Domestic use only. Valid for payment in INR in India only.

5) Card Validity

Issuer can define the validity period of RuPay Virtual Card as per bank policy and RBI guidelines from time to time.

6) Issuer Liability

- 6.1 It is the Issuer's responsibility to decline authorization requests that are not Electronic commerce.
- 6.2 All transactions on the RuPay Virtual Card must be processed through RuPay Pay Secure and must be 2FA.

7) Card Design

In case a graphic image is created by bank to be sent to the customer or intended beneficiary (in case of virtual gift card) then the account elements must be displayed on the card image front.

To differentiate the virtual card from other financial card the virtual card would not be issued in a physical form.

A onetime card design approval needs to be sent to RuPay for Card Design Approval. It is Issuer responsibility to ensure that the graphic representation must be in line with the specifications mentioned in latest version of RuPay Card Marks and Specifications. Depending upon the product variant launched by bank the RuPay source of funds logo i.e. RuPay Debit or RuPay Prepaid may be used.

8) Minimum and Maximum Amount

Issuer can define the minimum and maximum amount threshold as per the Bank Policy and RBI guidelines issued from time to time.

9) Card Acceptability

At any ecommerce merchant outlet that accepts RuPay Card.

10) Usage Frequency

Bank may decide the usage frequency as per the Bank's internal policy.

11) Number of virtual cards per customer

Bank may decide the number of virtual cards that may be issued per customer per day / specified time period as per the Bank's internal policy.

12) IIN

Bank may use their existing IIN for virtual card or may apply for new IIN.

13) Interchange & Pricing

Depending on the variant i.e. RuPay Debit/Prepaid Classic, Platinum or Corporate, the RuPay Interchange and pricing will be applicable.

6.0 Bharat QR

6.1. QR Code

QR code is the digital form of barcode inscribed with details about a product or a company. It can be used to seek information, learn about something or pay for items bought by scanning the QR code via camera sensor.

6.2. Bharat QR

Bharat QR is a QR based payment solution which represents a new channel of initiating and accepting payments between buyers and sellers (or consumers and merchants) using the mobile phone.

This solution has been jointly set up by NPCI, Visa and MasterCard which is capable of digitizing a payment transaction between consumers and merchants by setting up an ecosystem where a Quick Response (QR) code is used as the form factor to represent the payee (merchant) for accepting payments.

These QR Codes are deployed at merchant locations for customer-initiated retail transactions and allows the customer to be in control of initiating & authenticating the payment to merchant without providing the merchant any of his/her credentials.

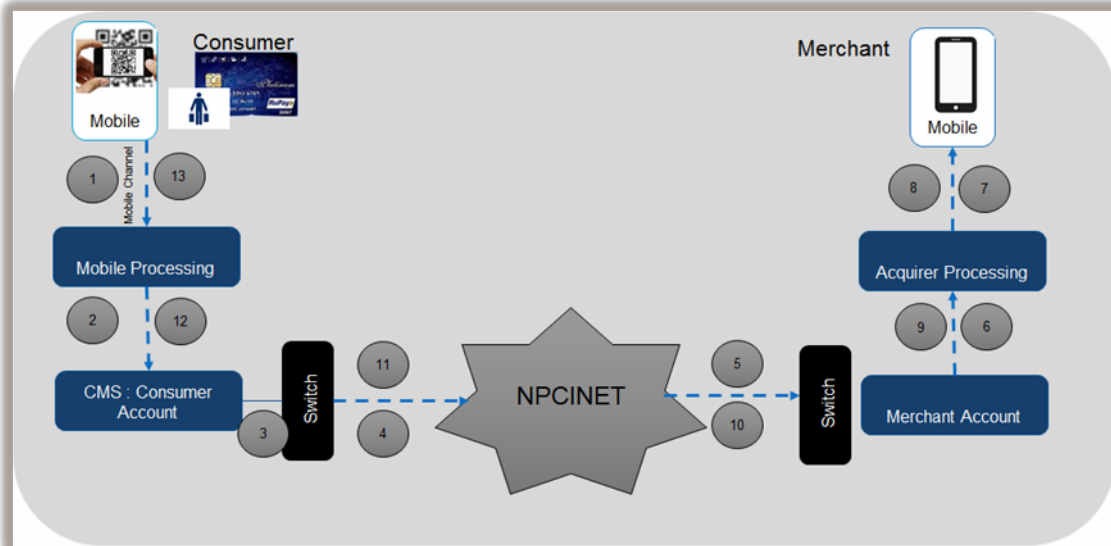
Bharat QR works as an alternate channel of payment, where cardholder have to download his/her bank's Bharat QR enabled mobile app & scan the Bharat QR code at Merchant store and select cards to make payment. Once the payment is successful both cardholder and merchant receive notification in mobile application for successful transaction.

In comparison to other QR codes in market, Bharat QR code has lots of additional data elements like merchant name, address and Merchant Bank information. Bharat QR code is much more widely acceptable and secure than other QR codes. In Bharat QR code, Cardholder of RuPay, Visa, MasterCard and Amex can scan Bharat QR code for payment, which is not possible in other QR code solution.

6.3. Bharat QR Solution

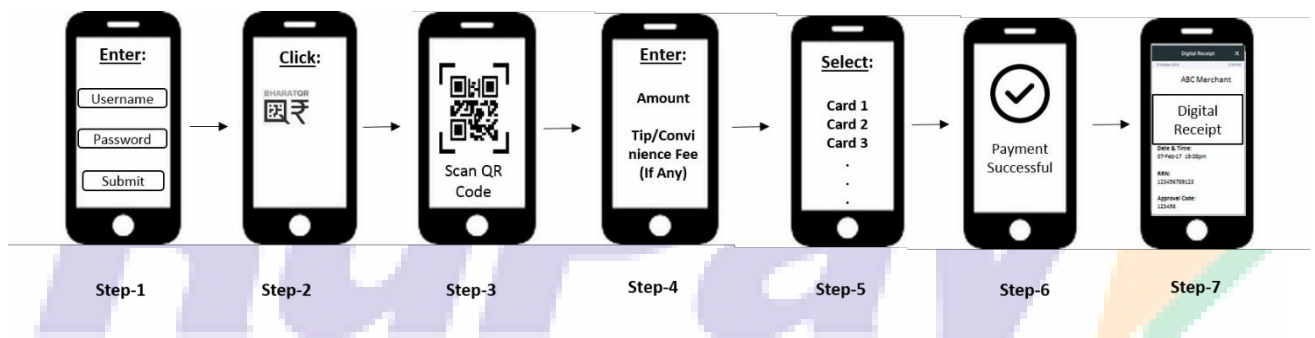
Issuer bank mobile application will scan the QR code displayed at the merchant location to capture all the merchant identification data and secure the funds through the linked card account. The issuer bank switch will then route the OCT message to the appropriate card network.

Basis the Merchant PAN, NPCI would route the transaction to the respective acquirer banks for credit to merchant account and provide notifications to merchant either through SMS or in-app notification. After successful credit to the merchant account, the Acquirer will send a positive response to NPCI, which will be forwarded to the Issuing bank.



6.4. Bharat QR Transactions

The below mentioned steps needs to be followed for purchase via Bharat QR:



Step-1: Download & open Bharat QR enabled mobile application. Enter username & password for login.

Step-2: Click on pay by Bharat QR option given on the home screen.

Step-3: Scan merchant Bharat QR code.

Step-4: Enter amount to be paid along with tip/convenience fee (if applicable).

Step-5: Select RuPay card for payment.

Step-6: Receive payment confirmation message.

Step-7: Receive digital receipt.

7.0 Debit Business Case considerations

7.1. Building the business case

There is a basic distinction in the manner a customer views a credit card and the debit card. RuPay debit card taps in these behavioural elements of human psychology like not endorsing credit of any form and adhering to secured pin based transactions.

Segmenting Customer Base

The issuers are recommended to segment the consumer segments for their RuPay card products in India. A suggested approach for the segmentation can be the following:

- ▶ Urban Customer /Rural customers
- ▶ High exposure / low exposure to Financial services
- ▶ High net worth/Affluent/Mass affluent customers

The members can target their preferred segment of customers after categorizing into different buckets. An informed and well thought out approach should be taken by the issuer to target the segment with the appropriate RuPay product offering.

Product Positioning

RuPay debit card will allow the customers to access their banks accounts through any ATM as well as allows them to shop at merchant outlets. Further the cards are pin based which will instil a security comfort in the minds of the customers. Issuers can build their value proposition along these points to build a distinctive product positioning in the minds of the cardholder.

Market scenario mapping

The members are recommended to do a market mapping in order to build a strong business case for their debit cards portfolio. The market mapping would include competitor benchmarking, regulators view, customers' expectation and the banks position vis-a-vis the market.

Geographical considerations for Issuance

Issuers of RuPay cards need to figure out a long term strategy of card issuance. Since bank branches serve as the prime source of service delivery, geographical considerations play a major role in shaping the issuance strategy.

Card Issuance Assumptions

- ▶ **Debit Card numbers and growth rates:** The members need to plan the debit card issuance targets for the next 5 years. This will enable the bank to potentially plan its profit and loss statement for the coming years.
- ▶ **Number of debit card transactions:** The total number of RuPay debit cards transaction across channels (POS/ATM/other channels) needs to be estimated

- Number of debit card transactions on POS
 - Number of debit card transactions on ATMs
 - Number of debit card transactions on e-commerce/IVR
- ▶ **Value of RuPay Card transactions:** The total value of RuPay debit cards transaction across channels (POS/ATM/other channels) is also crucial in preparing a business case for RuPay cards since several revenue and expense considerations are linked to this parameter.
- Value of debit card transactions on POS
 - Value of debit card transactions on e-commerce/IVR
 - Average Ticket Size (for transactions across merchant locations)

Cost Assumptions:

The cost head for the banks can be clubbed under the following heads:

- ▶ **Systems Up gradation costs:** Banks will incur costs related to systems up gradation in order to support RuPay cards. The systems cost can be amortised over a fixed period by issuer as per their internal policy
- ▶ **Operating Cost:** There will be operating costs involved in processing transactions, authorizations and others. The major components of the technical operating costs will be following:
- Payout to NPCI(authorization)=RuPay charges*no of authorisations
 - Payout to NPCI (assessment)=RuPay charges*total value of transactions
 - Administrative charges paid to NPCI
- ▶ **Card personalization and Packaging Costs:** The member would incur some costs in personalization of the RuPay cards and designing the packaging aspects of the card before it is delivered to the customer.
- ▶ **Marketing & loyalty Costs:** Banks will incur marketing costs in promoting RuPay debit cards. NPCI encourages the banks to come up with their own loyalty program. The expenses towards loyalty programme should also be taken into account
- ▶ **Support Services Expenses:** The member will be using support services to manage the operations of RuPay cards. The expenses would include the following:
- Operations Staff Cost
 - Call Centre Cost
 - Email support and call blocking support charges
- ▶ **Additional Services Cost:** Members may prefer providing additional services like discounts at movie halls or restaurants to make the value proposition of RuPay debit card attractive.

- ▶ **Fraud provisioning:** There has to be provision due to losses caused due to fraud delays.

Revenue Assumptions:

Issuers can always consider providing additional services and charging additional fees other than what is offered by RuPay. The major sources of revenue for an issuer are as follows:

- ▶ **Interchange:** Issuers receive interchange fees on the total sales volume of transactions done on the cards issued.

$$\text{Income from Interchange} = (\text{Interchange rate}) * (\text{Total value of transactions})$$

- ▶ **Issuance Fees:** Issuers can charge a onetime issuance fees during the issuance of RuPay debit cards. However Issuers may choose to exempt the issuance fees for certain premium segment of customers.

$$\text{Income from Issuance} = (\text{Issuance Fees}) * (\text{Cards issued in a particular year})$$

- ▶ **Annual Fees:** Issuers can choose to charge annual fees to its customers. However Issuers choose to waive off annual fees for some of its customers segments.

$$\text{Income from annual fees} = (\text{Issuance Fees}) * (\text{Chargeable Cards base})$$

- ▶ **Other Fees:** Other fees can emerge as a revenue stream for the issuers. These may include the following:

- ATM transaction fees: Issuers may choose to charge the customers for using an ATM to its customers. They should consider the competition and regulatory scenario in India.
- Surcharges: Banks may receive part of the surcharge charged to customers in select merchant sectors like fuel and railways.
- Lost and stolen card Charges: These charges may be charged to the customers so that they are they maintain due care in handling the RuPay debit card.

- ▶ **RuPay Incentive Support:** Member banks will receive marketing and support incentives from NPCI from time to time. While the source of revenue may be non- continuous and variable, it must be judiciously used by the issuers to promote usage.

- ▶ **Profitability:** The profitability of a debit card needs to be viewed in light of the factors associated with the account it is linked to. Thereafter the revenue and costs of the debit card can be considered to arrive at the profitability for the card.

7.2. Key Considerations for card launch

7.2.1. Member eligibility considerations:

- ▶ The applicant must be a member of RuPay by execution of membership agreement with RuPay
- ▶ The applicant membership class should be either of the below
 - A Principal Member (as defined in the RuPay Bylaws)

- An Associate Member (as defined in the RuPay Bylaws)
- ▶ The applicant should intend to issue cards with the RuPay mark within the next 12 months. If member is not using the assigned IIN post 12 months of assignment date, RuPay can levy non usage fee to the member.

7.2.2. IIN Requirements

Before issuance of RuPay card, member institution must submit an application to NPCI for an IIN. Post receipt of IIN application form NPCI will assign one unique Issuer Institution Number to the member institution.

- ▶ The first 6 digits of the card will represent the IIN. The member will have given the option to configure a range from 000 to 999. The range column comprises of the 7th, 8th and 9th digit of the card number
- ▶ Country of issuance, card account length and products enabled for fields in the IIN activation form, are the same for the entire IIN range (i.e. from 000 to 999). Post initial activation these three fields cannot be updated.
- ▶ Issuer can raise request (activation/updation/deactivation) for the complete IIN range (i.e. from 000 to 999) at one time or can raise request for part of the range (e.g. from 000 to 009 for one card type and 010 to 019 for another card type) by using the same activation/updation form
- ▶ Every specified range needs to be described by all of the 4 parameters (Card Product ID, Card Type, and Card Variant & card technology)
- ▶ An issuer can have different ranges within an IIN for the same card type (for e.g. range 010 to 019 & range 100 to 110 could be activated for the same set of 4 parameters that describe a card type)

For more details on IIN management, please refer the “RuPay IIN Maintenance Manual”.

7.2.3. Card Design Requirements

All RuPay Debit cards must meet the requirements for the NPCI acceptance marks. The RuPay Brand Mark must appear on RuPay cards in one of the following ways:

- ▶ The RuPay Brand Mark staged on a standardized white background
- ▶ The RuPay Brand Mark without the standardized white background (non-staged)

The account number, expiration date and cardholder name/identifier must not interfere with the card's functional or security features.

It is important to note that a card sample must be submitted to RuPay for approval before the product is launched. Issuers may seek the advice of NPCI representatives on the best time to do this during the project life cycle.

For further details on the card design requirements please refer the “RuPay Card marks and specifications”

7.2.4. Issuer Responsibilities and Cardholder Liability

Issuers must draft and provide the cardholders with the terms and conditions guide which will reflect the cardholder and issuer liabilities in the event of lost/stolen cards. Issuers must seek legal advice on the law requirements while drafting the terms and conditions.

Apart from this, issuers must:

- ▶ Develop procedures to support cardholders in case of lost/stolen cards.
- ▶ Establish an assistance centre for emergencies for cards of each type.
- ▶ Issuers must provide a manual to the cardholders outlining the dos and don'ts of card safekeeping.

For further details, issuers may refer to the manual, "RuPay Implementation Guidebook"

7.2.5. Issuer Pricing

The responsibility for setting up customer pricing for RuPay debit cards programs lies solely with the issuing bank itself. Further the bank issuing RuPay Cards to its customer must determine all fee structures and terms and conditions of its own RuPay program.

7.2.6. Marketing and Promotion Considerations

Developing effective communication and promotional activities at the time of launch is an important first step in educating the consumer and having them activate the debit card at the POS for the first time. Members should plan the following activities:

Product Design and Card Issuance

Issuers must plan and implement all the requisite features and benefits of the debit card that they intend to launch in the market. The features and benefits must be clearly explained in the Cardholder's agreement. The issuer must also make decisions regarding the methods of card issuance and the distribution channels which will be used for the purpose.

Education Program

While issuing cards, Issuers must ensure that detailed instructions on card usage are provided to the cardholders. A manual containing specific Do's and Don'ts must be provided to the cardholder. Cardholder education program must not be viewed as a one-off activity and regular campaigns must be undertaken. An effective tool is an incentive campaign that is designed to both educate and incentivize the cardholder to use the card at POS.

Activation Program

Issuers must attempt to reduce the time lag between card issuance and card activation. Card activation targets must be planned and tracked effectively. Issuers must involve the Branch staff in their attempts to increase activation. Issuers must send constant reminders of the features and benefits of the RuPay Debit card. For detailed information on Best Practices for Activation, refer Section 5 of this Manual.

7.2.7. Cardholder Communications

Issuers must develop and provide Cardholder communication materials. Cardholder communication materials are important for all RuPay Debit products. The following recommendations must be considered while developing the communication materials:

- ▶ Promotional campaigns must not be designed as one-off campaigns. Cardholder communication must be a regular exercise and must be increased during promotional offers and festivals.
- ▶ Cardholder information must be designed to encourage customers to increase usage of debit cards at POS.
- ▶ Cardholder communication must include security precautions that cardholders must exercise to prevent fraud.
- ▶ The communication material must include contact details for queries and emergencies.

7.2.8. Customer Service

Issuers must ensure that customer service support is available in the following Customer Service Functions:

- ▶ Fraud Detection
- ▶ Dispute resolution
- ▶ Card product information
- ▶ Lost/Stolen cards
- ▶ Card cancellation

7.2.9. Reporting to be done to NPCI

Onus Transactions

- ▶ Participant members to report all successful onus transaction through a file upload process
- ▶ This data is to be submitted by members as per the file format provided by RuPay (Please ref “RuPay Global Clearing and Settlement Manual”–Onus file format)

This data shall be used by RuPay for computing volume based assessment fees and for MIS purpose only.

7.3. Performance reporting to NPCI

Issuers must send quarterly reports to NPCI with details on the performance of Debit cards. These reports must include the following details:

- ▶ Total number of RuPay Debit cards sold
- ▶ The RuPay cards bifurcated by product type
- ▶ Number of RuPay cards sold during the period which have been activated

A sample of the tracking report is attached in the Annexure - II

7.3.1. Dispute Resolution

To protect cardholder rights, issuing institution can raise dispute on questionable transactions with acquirer through retrieval request/charge back process. For details on dispute settlement guidelines for different types of issuers; kindly refer the “RuPay Dispute Management Rules and Regulations”

7.4. Transaction Processing Factors

RuPay Debit Program has developed a support framework to enable transactions. The following are the key transaction considerations:

- ▶ Authorization processing
- ▶ Clearing and settlement processing

7.4.1. Authorization processing

Authorization is a process through which a card issuer approves or declines a card transaction. Before a transaction is presented for clearing and settlement, it needs to be authorized by the issuer. The steps involved in an authorization are enumerated below.

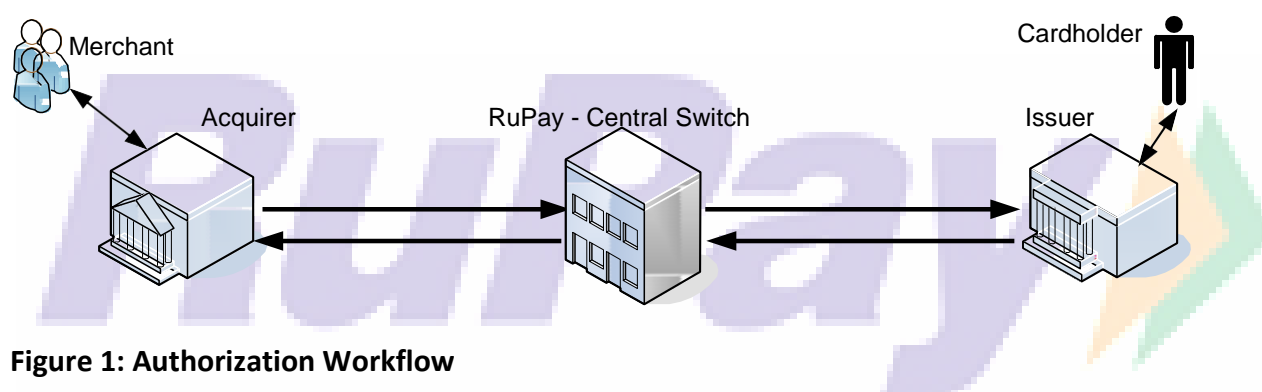


Figure 1: Authorization Workflow

- ▶ A customer makes a purchase at merchant location and provides his/her card (which is swiped on POS) or provides the required card details (for card not present transactions)
- ▶ The merchant sends the authorization request to the acquirer processor
- ▶ The acquirer processor routes the transaction to the RuPay Payment network (Central Switch)
- ▶ RuPay (Central switch) routes the transaction to the issuer
- ▶ The Issuer authorizes i.e. approves or declines the transaction and sends the response back to RuPay (Central Switch)
- ▶ RuPay then forwards the authorization response received from the issuer to acquirer processor
- ▶ The acquirer processor then sends the authorization response to merchant
- ▶ On receipt of the response, the merchant completes the transaction with the cardholder.

7.4.2. Clearing and settlement

Clearing and settlement requirements must comply with the regulations laid down by RuPay. Issuers must refer the “RuPay Global Clearing and Settlement Manual” for detailed descriptions of clearing and settlement regulations set by RuPay.

The following are the key features of the RuPay Global Clearing and Settlement system:

- ▶ It's a web based system. All clearing and settlement functionalities for both the acquirer and issuer are available on a user friendly web user interface (Web UI)
- ▶ It supports the Maker-Checker concept as one of the core principles of authorization. The principle of maker and checker means that for each transaction performed on the System, there must be at least two individuals necessary for its completion. One individual may create a transaction; the other individual shall have to be involved in confirmation or authorization of the same to complete the transaction
- ▶ It supports both SMS and DMS transactions
- ▶ Besides the web UI functionality, RGCS also supports file based processing for many message types
- ▶ RGCS supports XML based file format, which makes it easier to handling clearing data and shortens the turnaround time that would be required for any system/message specification changes/up gradations
- ▶ File formats are designed to minimize the amount of data exchange between members
- ▶ The incoming files generated by the RGCS system provide additional transaction wise details like fee, settlement amounts which help in reconciliations etc
- ▶ All file exchanges are done via a secure and encrypted close loop ecosystem

Issuers must ensure that they have connectivity to the NPCI Net and must be aware of the file and message specifications for Clearing and Settlement. Refer the “RuPay Global Clearing and Settlement Manual” for details.

7.5. Project Plan for Implementation

This section focuses on the decisions that the issuer will have to make as a part of the Implementation Plan for RuPay Debit cards. The plan will entail the steps in the project, the support required and suggestions for resolving issues and queries. This plan will help you, as an issuer, to evaluate the impact of the RuPay Debit card on your institution.

7.5.1. Establishing an Implementation Team

RuPay card issuers need to create an initial plan for implementation of the project management by creating a team. This team should consist of individuals from different areas within the institution. While each financial institution may have a different approach in implementing RuPay debit products within their team, the descriptions below describes the functional details of implementation member for RuPay debit cards.

Project Team Functional Responsibilities

Project Manager

The role of the project manager is to oversee the overall project and monitor the project responsibilities. The project manager is also in charge of defining the product based on the business case, planning the product rollout and ensuring customer support mechanism.

Vendor management for outsources processes

Evaluation of vendors is crucial in implementing a cards program. The team for vendor management should ensure that all the potential activities which might require outsourcing are listed and potential vendors for the same are identified. Moreover the team should manage the vendors in day to day implementation activity.

Audit

The audit team must ensure that all functional product requirements meet the institution's operational standards and service level agreements and that all data processing requirements meet the institution's auditing standards.

Branch Administration

The Branch Administration team must ensure that the RuPay Debit cards issued are supported operationally at the branch level, including branch sales, new account processes, and forms development to support the product.

Customer Service

The customer service should be responsible for developing procedures for handling customer inquiries about RuPay cards. Further the team should create processes to support RuPay cardholders with an enhanced level of customer service related to card usage, card features, account maintenance, lost and stolen cards and disputes with merchants.

Finance/ Accounting

The finance function should review expenses and revenue allocations for the product and monitor the profit and loss for the program.

Legal and compliance

The legal team would be responsible for local and national laws and regulations and other legal requirements affecting the financial institution and customers with regard to the RuPay card program. There can be several areas of legal and compliance concern like:

- ▶ RuPay Business features and enhancements
- ▶ Card features including card design, issuance and cardholder terms and conditions disclosures
- ▶ Customer communications like email and SMS, rewards program, periodic statement requirements
- ▶ Enhanced billing resolution support, error resolution, cardholder liability for unauthorized use of the card, Issuer liability issues

Marketing, Advertising and Public Relations

The marketing team will be responsible for promoting RuPay Debit cards to customers. Another major aspect of the role of the marketing team is to manage any outside agencies that produce

the card design, marketing materials, applications, forms, designs, training materials, product brochures, customer disclosures, and website materials.

Risk and Fraud Management

The risk and fraud management functions is expected to establish fraud prevention policies, controls and monitoring programs both for freshly issued cards and established account relationships. Additionally, this is also expected to look into suspected fraudulent activity.

Training

The training team has to be responsible for penetration of awareness related to RuPay debit products across all project functions including branches, customer service, and support functions. The team has to ensure trainings and material developments for the program.

7.5.2. Key Implementation Plan Activities

One of the early activities in planning the implementation of a RuPay Debit program is the development of a project plan. The implementation plan broadly considers the major milestones and issues and general sequence and timing of events. Please refer annexure – I to check the steps which the issuer may consider for project implementation.



8.0 NPCI Support

NPCI products and services offering have been crafted based on member bank expectations, market research, global best practices and RBI guidelines. NPCI would be supporting the member banks in various initiatives to help them sustain and grow cards business. It aspires to build synergy in the ecosystem by collaborating with the member banks leading to rapid growth of the cards ecosystem in India.

8.1. Market Research

Understanding the market scenario is important in the cards industry since consumer purchase behaviour majorly influences the business environment. Therefore NPCI will be conducting market research from time to time to meet the objectives of studying consumer insights.

NPCI commissioned a market research survey to be carried out across India to understand the current behaviour and perceptions of end users (consumers) of debit cards and the merchants who may be expected to accept payments. The study was carried out across India in 2 phases – qualitative depth interviews in 10 cities, followed by quantitative interviews in 15 cities using a structured questionnaire for both the segments. For details of the research results please refer the market research in the annexure – III.

8.2. Consumer Communication

RuPay would help the banks in devising their consumer communication approach by providing them with marketing support templates. The member banks needs to focus appropriately on the consumer communication at various stages of the product lifecycle.

For example, new cardholders should be given a welcome pack with the RuPay Debit card.

The welcome pack must meet two objectives:

- ▶ To provide information about the benefits and features of the RuPay Debit card to the cardholder
- ▶ To motivate the cardholder to activate and to increase the usage of the RuPay Debit card

A sample content list for the welcome kit is attached in the annexure – IV.

8.3. MIS and analysis

Reporting and tracking are an important part of the RuPay Debit Implementation process. RuPay provides a number of reports to member banks to facilitate day to day operations efficiency. Please refer the “RuPay Global Clearing and Settlement Manual” for details on these reports.

However in order to achieve business objectives by efficient decision making, periodic analytics and interpretation will crucial for the member banks. NPCI would also be providing customized MIS and analysis related to product and portfolio aspects to the member banks to assist them manage their cards business better.

8.4. Support in implementation

NPCI would be supporting the member banks in implementing RuPay cards.

- ▶ NPCI intends to support and assist the member banks in implementing any enhancements to existing systems like EMV or new technology

- ▶ The technical support team of NPCI would help the member's technology team in testing the cards implementation and help remove any bottlenecks in the way of smooth transition.
- ▶ Members will also receive support from NPCI team to ensure certification of their, systems and processes.

8.5. Marketing Incentives Support

RuPay will run specific promotions and incentive programs to increase activation rates, enhance consumer penetration and increase usage and spends on RuPay cards. For RuPay branding, the focus would be on establishing the RuPay brand, creating awareness amongst the consumer segments and other financial institutions on a continuous basis to ensure brand reinforcement and recall.

RuPay will work in collaboration with member banks to create an efficient structure for branding and marketing efforts in the interest of the payments industry.

8.6. Vendor Management

The member banks take the help of several vendors for processing their activities. This includes activities such as procurement of plastic, setting up the necessary infrastructure for card maintenance & storage, certifications, personalization, issuance and transaction processing. NPCI will be helping the issuing banks by empanelling the third party service providers and ensuring that the certifications and technical standards are adhered to by the vendor. This would lead to benefits for members including lower costs, faster customizations and time-to-market.

8.7. Training

NPCI believes that awareness regarding card business across the member organization will benefit the ecosystem in the long run. In order to facilitate the same, RuPay will be providing support to the member banks in order to help them train their operations, technology and business staffs. Also, specialized training modules would be provided to the member banks which would help in carrying bank wide training programme. The branch training module in section 5.5 of this manual can give the members an overview of the best practices in training their branch staff.

8.8. Consulting services

RuPay will be providing support to the member banks to optimize results of their card business. These services include assistance with payments strategy, new product development and roll-out, migration & up-gradation programs, benchmarking and market studies. Once the member banks start issuing RuPay cards, the next step would be growth of cards issuance and usage. At this stage a combined effort from the scheme (NPCI) and member banks would ensure desirable results towards growth of ecosystem.

9.0 Best Practices

9.1. Issuance

Issuers expend significant resources to launch a debit card acquisition and issuance campaign. However they must start co-ordinated programs to activate the RuPay Debit cards at POS and must aim to reduce the time lag between issuance and activation.

Following are some of the best practices that a member bank, may implement to ensure effective issuance:

- ▶ Collect customer information, segment and target customers and allocate resources for various segments.
- ▶ Interact with customers to get a better understanding of their requirements and queries.
- ▶ Use client interactions to provide information on the features and benefits of the RuPay Debit card.
- ▶ Repeat and reinforce activation messages

The following are the stages at which the issuer must make attempts to implement the best practices recommended in the document:

- ▶ Pre-issuance – Preparing the communication material and training the branch staff prior to the issuance of the cards.
- ▶ Issuance – Providing the RuPay Debit card with the Welcome Pack to the new cardholder. Cardholder education is an important part of this
- ▶ Post-issuance – During this stage the issuer must make attempts to encourage activation of the issued cards.

9.1.1. Pre-issuance

During this stage, issuers must create a plan to build support the issuance stage and set a goal for the issuance of the cards. Once the goals are defined, issuers must set the objectives and communicate them to the different stakeholders who are a part of the issuance process.

Pre-issuance activities should focus on clearly defining objectives, understanding customers' current behaviour, considering customer objections to usage, and matching the appropriate courses of action to customer segments.

9.1.2. Issuance

Card issuance may be done either at branch or by mail. Each of these issuance methods provides unique activation opportunities and can be employed with either new or existing customers.

Card issuance at Branch

The Branch provides an opportunity to have face-to-face interaction with customers. The greatest opportunity for in-branch issuance exists with new account openings. This also provides the customer with immediate access to the card, which may positively impact activation.

- ▶ Branch personnel must be trained so that they can provide information regarding benefits and features of the RuPay Debit card.
- ▶ The RuPay Accelerator must be selected to ensure that Educated and informed personnel can engage in more direct dialogue with customers.
- ▶ The product attributes should be reinforced with in-branch marketing.

Direct Mail Issuance

In case the issuer decided to deliver the card to the cardholder; the issuer must include material with information about the benefits and features of the RuPay Debit card. It must also contain information on how and where to use the card and contact details for cardholder queries.

9.1.3. Post Issuance

The Issuer should concentrate on the post issuance phase to ensure that cards issued get activated. Some initiatives to be undertaken by Issuers would include:

- ▶ Expediting the account opening process
- ▶ Training and rewarding branch personnel
- ▶ Tracking the activation targets
- ▶ Enhancing the account opening process
- ▶ Proactively communicating the benefits and features of the RuPay Debit card at various customer interactions

9.1.4. Customer communication approach

It is of utmost importance to create the right message at the time of card issuance, irrespective of the form of delivery. If the customer is required to collect their card at the branch, the opportunity must be utilized to communicate the features, benefits and POS functionality and resolve any queries related to the RuPay Debit Card. The following two practices can be used during issuance:

- ▶ New card presentation folder
- ▶ Dedicated staff to answer questions and uniform customers

New Card Presentation Folder

This folder will convey the features and benefits of the RuPay Debit card. The card will be used to provide information and encourage customers to use this card at POS. The Welcome pack must contain information about the features and benefits of the RuPay Debit card.

Card Services Counter

Card issuers must set up a counter at their branches with dedicated staff to explain the features of the RuPay Debit card to new cardholders. The staff manning these counters must be trained to convey the features and benefits of the card to the cardholders. The card services staff can use and direct new cardholders to the new card presentation folder for complete card benefits and usage information.

9.2. Activation

The initial issuance material is not sufficient to initiate activation for most of the cardholders. So members must make attempts to provide additional information and incentives to cardholders

- ▶ Focus on pre-issuance planning. This critical planning stage can help set the structure and systems to ensure activation
- ▶ Set up a tracking mechanism to track the progress of cards issued and activated on a regular basis.
- ▶ Use customer segmentation to identify customers most likely to activate and customers you are willing to spend money to activate
- ▶ Target the most profitable customer relationships in an effort to increase the number of services used and improve retention.
- ▶ Set up a customer service helpline that can resolve cardholder issues and queries.
- ▶ Target a message and integrate the message across multiple channels
- ▶ Designate a RuPay Debit Accelerator in every bank branch
- ▶ Issuers may use multiple channels to propagate the usage of the RuPay Debit cards. Since cardholders frequently use Debit cards at ATMs; issuers may use this channel to motivate cardholders at POS.

Issuers that take a comprehensive approach to activation and consider it a long-term effort will likely see the greatest results.

9.2.1. Collaterals for Card Activation and Usage

Cardholders must be encouraged to use the RuPay Debit card at POS and not merely to withdraw cash at ATMs. This can be achieved in the following manner:

- ▶ The ATM delivery channel can be used to communicate the features and benefits of the RuPay Debit card to the cardholder.
- ▶ Information on the functionality of the RuPay Debit card can be conveyed along with the monthly card statements.
- ▶ Promotional offers and rewards on card usage must be created and effectively communicated to the cardholders
- ▶ The branch must be used as a channel to communicate information regarding card activation and usage

The issuers can develop a program that uses an integrated approach towards leveraging the existing infrastructure and channels of the bank in order to encourage cardholder's usage. This can be done by using several initiatives:

- ▶ ATM messaging, ATM receipt messaging and promotional offers
- ▶ Direct mail offers to promote activation and usage
- ▶ Statement inserts and Internet banking messaging
- ▶ Phone banking messages about the features and benefits of a RuPay Debit card
- ▶ Activation letters to targeted cardholders

- ▶ In-branch displays
- ▶ Partner programs encouraging POS usage
- ▶ Newsletters/magazines published by the bank

The ATM plays an important role in re-educating the cardholder. ATM screen messages, promotions, take-ones and wobblers can work to educate the cardholder that their RuPay Debit card can also be used at POS.

- ▶ **ATM Screen Message:** Issuers must use the ATM screen as a tool to propagate usage of the RuPay Debit card at POS. Messages with instructions for usage, benefits of RuPay Debit card and merchant offers must be displayed.
- ▶ **'Pick a Brochure' at the ATM:** Issuers may place a stand with brochures at ATM so that while customers complete their transactions, they can pick up brochures containing information about the RuPay Debit card. The brochure may contain information about the key features and benefits of the RuPay Debit card.
- ▶ **Message at the back of the ATM Receipt:** Customers receive a receipt with they withdraw cash from an ATM. Printing key messages on the back of the ATM receipt along with contact details of issuer provides a perfect opportunity to create awareness and interest in the RuPay Debit program.
- ▶ **RuPay promotional messages on ATM displays:** Issuers should work on ATM display materials that inform existing cardholders about using RuPay Debit for POS transactions. Issuer should brief their marketing communication services provider to customize the materials for use in their branches also.
- ▶ **Information on a card:** To incentivize the cardholders, it is recommended that issuers include merchant offers on the leaflet. Issuers may also repurpose this card as a postcard or statement insert.

9.3. Usage

In order to ensure sustaining profitability, it is essential that the cardholder continues using the card at merchant locations. Issuers should work on building usage habit with every cardholder and a continuous source to support usage marketing. The financial institutions can follow the below mentioned best practices to grow debit card usage:

- ▶ Effectively plan and track key performance metrics
- ▶ Segment the customers and target high-potential cardholders
- ▶ Identify and market select merchant offers
- ▶ Provide information about the loyalty programs
- ▶ Promote debit for bill payments and Internet purchases
- ▶ Use incentive marketing with relevant rewards

- ▶ Try to encourage usage in newer channels like Card not present (CNP), recurring and upcoming payments.

Members might follow a three step methodology to improve card usage:

- ▶ **Planning** – It is important to do a proper planning to understand its strengths and identify areas for improvement
- ▶ **Promoting** - This exercise is aimed to communicate the customer regarding the need and utility of debit card usage
- ▶ **Marketing** - Marketing needs to be done targeted to specific customer segments that utilize the financial institution's resources

Planning

A debit card marketing campaign requires a different approach to that used for credit cards. Debit cards are generally considered to be immediate payment option just like cash and cheque. Because the card is easy to use, the debit card is always a convenient payment option - a tangible benefit to the customer.

Issuers should set goals that will help them successfully track the card usage related trends and better manage the business. Some of the indicative measures for tracking the same are as follows:

- ▶ **Active cards** - The percentage of cards in the portfolio that were used for a purchase transaction in the past month are termed as active cards
- ▶ **Activation Rate**- This metrics measures the new card activations done on the cards portfolio.
- ▶ **Total monthly sales transactions** - The gross count of debit transactions at the point-of-sale in a given month.
- ▶ **Total quarterly sales transactions** - The gross count of debit transactions at the point-of-sale in a given quarter. This metrics is essential for understanding usage impact due to campaigns which last for a quarter
- ▶ **Total monthly sales** - The value of debit card purchases in a given month. This can show the impact of a usage campaign. This metric is primarily used to evaluate the overall performance of the portfolio.
- ▶ **Total quarterly sales** - The value of debit card purchases in a given quarter. This metric is depicts the overall performance of the
- ▶ **Year-over-year sales growth** - The percentage growth in sales volume for a given month as compared to the sales volume in the same month of the previous year.

Promoting

Promotion of RuPay branded debit cards depends on the overall understanding that an issuer has of the spending patterns of the cardholder.

The promotional objective of issuers should be three-fold:

- ▶ Understand the usage behaviour of the consumers
- ▶ Identify the merchant categories as usage opportunities for low volume users,

- ▶ Identify new merchant categories for medium-to-high volume users.

Marketing

Finally the most important aspect in enhancing the usage behaviour of the customer over RuPay cards is to market it properly. The chances of growing debit card usage can be over variety of channels and categories. Issuers should work out a coherent plan and creative communication techniques to change consumer behaviour and increase usage in all RuPay debit card segment.

9.4. Retention

Cardholder retention must be viewed as an ongoing activity and not a one-off practice. Issuers must focus on every customer interaction opportunity to ensure continued cardholder satisfaction.

The following are the best practices to improve cardholder retention:

- ▶ Develop proactive retention strategies and programs
- ▶ Create activities that build loyalty
- ▶ Portfolio Analysis and segmentation to target high-attribution cardholders
- ▶ Create efficient information reporting and tracking techniques
- ▶ Identify warning signals of potential attrition
- ▶ Effectively plan for an account recovery

9.4.1. Extrinsic Focus

Certain aspects of the debit retention program lie outside the issuer's organization and involve analyzing the customer base, customer segments and the debit issuer's operating environment.

- ▶ **Evaluating the current situation:** Performing a situation analysis helps issuers realize their debit retention goals by identifying and evaluating key factors of the competitor's environment relevant to debit card usage. This could be portfolio trends like annual spend, frequency of usage and account balances, organizational strengths and weaknesses, and the demographic profiles of their card base.
- ▶ **Portfolio Analytics and Segmentation:** To emerge into profit-driven organization issuers must focus on proactive programs, because they help maintain profitability more efficiently.

Metrics useful in assigning customers into actionable quadrants are:

- POS card usage
- ATM usage
- Direct deposit
- Account revenues

Further flagging individual accounts according to deposit balance, average monthly spend; revenue contributions and merchant category usage can allow a product manager probe deeper in account details.

- ▶ Debit card retention plans should also work together with activation and usage inducement strategies.

- ▶ Financial institutions should always target retention programs toward their most profitable customers.
- ▶ The debit product is such that the attrition can be mapped to card or the account associated with the card. Therefore it is more important from the issuer banks perspective to segment debit cardholders to improve retention.
- ▶ The best way for issuers to retain customers is to make their debit card indispensable to the customer - to create customer loyalty.
- ▶ **Consumer Communications Programs:** Regular communication with cardholders ensures that the right information reaches the cardholder and also reminds the cardholder about the benefits of his RuPay Debit card. This builds a lasting, mutually beneficial relationship between the issuer and the cardholder. A good retention communication program is one that meets customer profitability goals.

9.4.2. Intrinsic Focus

The most critical aspect of any debit card retention plan is ensuring that the plan is integrated into all functions of an organization.

- ▶ **Information Reporting and Tracking-** Customer and competitor information should be systematically and effectively reported to the organization decision centres with good cross-reference capabilities among products and divisions. Retention plan performance should be evaluated and compared against attrition numbers.
- ▶ **Early Warning Systems-** Cardholder usage and behaviour provide clues to potential attrition. The sooner a bank notices the usage and behaviour change and takes action, the more it increases the chances of saving a debit card account.
- ▶ **Planning For Account Recovery-** The account recovery process must be initiated when a cardholder calls the issuer to close their account with the issuer or to cancel their debit card in case they are dissatisfied with resolution of their issues. Issuers must train the call centre team to be prepared to deal with such instances. Issuers may also develop reward programs for the team members who manage to retain such customers.

9.5. Branch Staff education and Training

This section will help the issuers plan their individual branch training programs. The branch training program needs to be designed to acclimatize and motivate the branch staffs (as the key drivers in the program), with the assignment of a "RuPay Accelerator" in every branch.

The objectives of developing a branch training program are to:

- ▶ Help communicate to the cardholders that the RuPay Debit can be used for purposes other than just withdrawing cast from ATMs.
- ▶ Train staff on the features and benefits of the RuPay Debit card.
- ▶ Track targets and milestones and also motivate and reward the staffs on successes.

The RuPay Branch training program has to be developed in a manner that the branch staff can answer all cardholder questions and be able to confidently sell the proposition of RuPay Debit. RuPay has suggested the concept of a ‘RuPay Accelerator’ to encourage active participation of branch staff in the program. Other ways to incentivize and motivate the staff are:

- ▶ RuPay guide
- ▶ Staff progress tracker
- ▶ RuPay Accelerator
- ▶ Staff Incentive Program
- ▶ Quick Reference Card
- ▶ Feedback Form

Regular feedback from the staff is beneficial to the issuer in two ways: Firstly, it enables the issuer to get a better understanding of the customer’s requirements and secondly, it makes the staff feel more included in the program. The branch staffs needs to be able to:

- ▶ Understand the features and benefits of the RuPay Debit card.
- ▶ Proactively interact with customers at branches to gain better insights into their needs
- ▶ Use the information and communication material to motivate cardholders use the RuPay Debit card at POS.
- ▶ Resolve cardholder queries.
- ▶ Be able to connect the features to the benefits of the RuPay Debit card.

RuPay guide

There needs to be some kind of written communication which will guide the banks and provide detailed information on different aspects including product features and cardholder benefits. A PowerPoint presentation with the following mentioned approach would be suitable for passing on the information:

- ▶ Outline of contents of presentation
- ▶ Product offering, benefits to cardholder and benefits to bank
- ▶ Samples of the RuPay Debit card
- ▶ Samples of cardholder communication
- ▶ Delivery channels used to service the cardholder
- ▶ Card issuance processes
- ▶ Launch plan and Staff incentive program (if any)
- ▶ Summary

Staff performance tracker

In order to incentivize branch staff, regular targets and milestones can be set individually or collectively. Regular tracking of such targets will ensure that the program is on track and goals are being achieved. It is recommended that this tracker should be updated on a weekly basis and displayed at all branches where the program is running.

RuPay Accelerator

A RuPay Accelerator is a trusted staff member that overtly encourages staff to learn about the RuPay Debit program and is a point of reference for all questions pertaining to the financial institution's RuPay Debit program. Creating a "RuPay Accelerator" not only provides an opportunity for someone to take on additional responsibilities, but also provides issuer with the opportunity to let staff know how important this program is to the senior management of their organization.

In summary, the RuPay Accelerator is:

- ▶ A product specialist
- ▶ The person that motivates employees on RuPay Debit
- ▶ The person that conducts internal training
- ▶ The person that drives product initiatives
- ▶ The person that consistently monitors RuPay Debit performance
- ▶ Driven by key performance metrics and is focused on ensuring success

Staff Incentive Programs

Staff incentive programs must be designed to motivate the branch staff participation in the program. Some suggested approaches are:

- ▶ Individual staff incentives (Monetary rewards for the best achiever, Merchandize (e.g. shirts, caps, sports bags))
- ▶ Collective incentives (Branch award presented by CEO, Guest speaker (sports personality, celebrity) at branch meeting)

In order to ensure continued success of the issuer Branch Training Program, it is recommended that issuers must first appoint a "RuPay Accelerator" in every branch. The "RuPay Accelerator" will make sure that branch staff are trained and supported, cardholder communication materials are handed out and displayed properly, the progress of the campaign is tracked and feedback from the staff is collected.

Quick Reference Card

Branch staff must be given a quick reference card which can help them. It should lay out the key features of the product and should also provide a comparison of similar products from competitors or other existing products that your bank supports. The quick reference card should be provided to all frontline staff to use both as an educational resource and as a friendly reminder of key points of the RuPay Debit card.

Feedback Form

A feedback form gives the branch staff an opportunity to provide feedback on the performance of the RuPay program. It enables the management to gain perspectives on initiatives that are successful in delivering results and at the same gives the management an opportunity to eliminate those that are not yielding the desired results.

10.0 Risk Management

10.1. Defining Card Risk

A card risk is defined as any externality that can have a potential adverse effect on the cash flows, revenues and overall profitability of the card scheme and all its member institutions. An issuing member is exposed to risk associated with the following:

- ▶ Authorization
- ▶ Card/PIN production and issuance
- ▶ Lost /Stolen card processing
- ▶ Fraud activity
- ▶ Data Security
- ▶ Customer misuse of accounts

The objective of RuPay's risk management section is to enable member institutions to reduce their exposure to risks associated with card payments in order to ensure that their brand, profitability and integrity are preserved.

10.2. Operational processes linked to Risk Management

There can be several day-to-day processes linked with risk management. Mostly cardholder acquisition and pin issuance are the major components in operational risk management.

10.2.1. Cardholder Acquisition

Cardholder acquisition is the first step in the payment process and thus it is essential that due care is taken that preventive measures against fraud are implemented at this stage. The issuer should follow the guidelines mentioned below to reduce risk of losses due to application frauds.

- ▶ Ensure Know Your Customer (KYC) norms are met during for the cardholder's account before issuance of card.
- ▶ Effective application fraud screening practices must be implemented. For e.g. comparing application data with bank customer data and credit bureau reports.
- ▶ Decline direct-mail applications that have been substantially altered or submitted by anyone other than the intended party.
- ▶ Implement "closed-loop" feedback process involving all members of the payment chain to identify characteristics of fraudulent applications and develop preventative measures for the same.

10.2.2. Card/PIN issuance and distribution

RuPay may require all cardholders to be distributed a PIN along with the card. The PIN is mandatory for transactions at ATM networks and may be required at POS terminals.

Issuers should ensure that the PIN is secured in such a way that no person other than the cardholder knows it and is able to access it. The most effective way to prevent fraudulent usage of cards intercepted midway before reaching the actual cardholder is Card Activation.

10.3. Card design security features

Card Verification Data (CVD)

- ▶ Ensure that CVD is verified in all authorization requests
- ▶ Obtain certification of CVD processing, which will ensure that the matching approach and authorization response processing are in order
- ▶ All CVD mis-matches and the reason for same (acquirer error, bad magnetic stripe, counterfeit card etc.) must be reported.

Expiration Date

- ▶ The expiration date must be clearly mentioned on the card which may be used by merchants as a security feature.
- ▶ Verify expiration dates from authorization requests and decline most requests with mis-matched expiration dates to reduce key-entered counterfeit.

Hologram

The card must bear the RuPay hologram as an additional security feature.

Signature Panel

The card should contain a tamper-evident signature panel, which must be duly signed by the cardholder. The card should not be accepted without the signature.

Refer to the “RuPay Card Marks and Specifications” document for further details.

10.4. Card/Account issuance approval

The following Best Practices can be followed to curb fraudulent card issuances

- ▶ Effective application fraud screening practices must be implemented eg: comparing application data with Bank customer data and credit bureau reports. Collection and verification of supplier references and adapting the process to high-volume processing.
- ▶ Decline direct-mail applications that have been substantially altered or submitted by anyone other than the intended party.
- ▶ Implementation of a “closed-loop” feedback process to identify characteristics of fraudulent applications. Development of preventative measures with the support of transaction processing groups.
- ▶ Ensure Know Your Customer (KYC) norms are met during for the cardholder’s account before issuance of card.

10.5. Cardholder Authorization

The following controls can be implemented against exposure to risks due to cardholder authorization:

- ▶ Setting reasonable daily limits for both ATM and POS transactions
- ▶ Create checks to ensure that all authorization systems including internal and external systems are working from similar balance information
- ▶ Regular testing of the authorization system

- ▶ Access to authorization data should be provided only to the relevant personnel and should be monitored.

10.6. Merchant acceptance

Although most of the interaction of the merchants happens with the acquirers, the product owning banks needs to take due care from their side to ensure risk mitigation on the merchant acceptance side. The issuer should have a clear view of the spending pattern of its customers. The issuer should keep a track of its portfolio by understanding transactions processed through card present and card not present transaction processing merchants.

- ▶ **Acceptance Fraud Risk:** This risk is generally linked with products & services or the transactions of the merchant
- ▶ **Acceptance Business Risk:** This type of risk is linked to the time frame of the delivery of goods and services.

10.7. Fraud detection

The primary aim of a fraud monitoring system is to identify fraudulent transactions early on so that suitable action (eg: blocking accounts) can be taken to prevent further fraud. Cardholder activity is generally monitored using a number of methods.

- ▶ **Rule Based Alerts:** The most common method is a rules-based system which outlines “normal” cardholder spending behaviours based on previous spending patterns.
- ▶ **Statistical models:** Another method uses advanced monitoring systems like Statistical models and behaviour scoring models.
- ▶ **Retroactive Fraud Analysis:** It is also an effective method to benchmark existing fraud systems to industry standards. Analysis is conducted to identify the reason for fraud occurrence and determine ways to prevent such a fraud.

10.8. Fraud prevention and control

Even though it is not possible to completely eliminate fraud losses for RuPay, it is possible to control the fraud exposure for RuPay and its member institutions. A few useful tools and practices for Issuing banks to manage and control frauds are presented below:

- ▶ **Cardholder Risk Identification Service:** NPCI has developed the CRIS to equip an issuing member with an enhanced ability to identify emerging fraud patterns and initiate control programs as soon as possible.
- ▶ **Staff Awareness and Education:** The staff, especially the fraud control personnel must be educated about frauds and trained in the relevant skills and areas of expertise. These would help improve the effectiveness of the whole fraud control operations of the issuer.

- ▶ **Cardholder Awareness and Education:** One of the most basic tools for reducing fraud losses is cardholder awareness. Issuers must take steps to educate cardholders on the importance of safeguarding their cards and receipts and promptly reporting cards lost or stolen.

10.9. Resolve cardholder dispute effectively

To facilitate the RuPay members in raising and resolving a dispute on a transaction which has previously been cleared by RuPay, RuPay has defined the rules and guidelines for the dispute management process. RuPay dispute management process captures the following stages of transaction processing and dispute process.

- 1) Presentment
- 2) Retrieval Request (RR)/ RR fulfilment/ RR non fulfilment
- 3) Chargeback/ Chargeback acceptance/ Chargeback re-presentment
- 4) Pre-arbitration/ Pre-arb acceptance/ Pre-arb non-acceptance
- 5) Arbitration Case
- 6) Pre-compliance/ Pre-comp acceptance/Pre-com non-acceptance
- 7) Compliance Case
- 8) Good-Faith/ Good-Faith acceptance/ Good-Faith decline

For further details of the dispute management processes, please refer “RuPay Dispute Management Rules and Regulations”

10.10. Lost/Stolen card reporting

Quick and effective steps taken from the issuer bank can help prevent a majority of fraud related to stolen cards or identity theft. Fraud risk can be mitigated by implementing the following safeguards to the card management operations:

Account Takeovers: Account takeover fraud occurs when an unauthorized person commits fraud by obtaining a card for an existing account. The issuers should take due care in ensuring that the cardholder verification is conducted properly and information related to customers is managed properly to avoid any account takeovers.

Lost or Stolen Reporting and Card Blocking

- ▶ Ensure that customers are provided with the ability to call and report a lost/stolen card 24 hours per day.
- ▶ Lost/Stolen reporting must be a primary menu selection and given the highest-priority in the IVR (Interactive voice response) to avoid delays in lost/stolen cards tracking and account blocking procedures
- ▶ Ensure that the first point of contact (FPOC) at customer service call centres is able to take lost/stolen card reports and block cards.
- ▶ Ensure that after the card has been blocked, it is determined whether fraud has already occurred.

11.0 Annexures

11.1. Annexure I - Issuer Implementation Checklist

We have created the following implementation checklist which details the requirements for the implementation of the RuPay Debit program. Following is the list of tasks which must be followed for successful implementation:

Tasks:

- 1) Design the product, features and benefits of the RuPay debit cards. Determine the product options and product features.
- 2) Decide transaction processing strategy.
- 3) Develop plans to
 - ▶ Set objectives for RuPay Implementation
 - ▶ Set pricing (cardholder annual and transaction fees)
 - ▶ Understand cardholder liability and issuer responsibilities
 - ▶ Develop a marketing and promotional strategy to increase the usage of the RuPay debit card at various channels. Separate programs may be developed for penetration, activation, usage and retention. Issuers may also develop loyalty programs.
 - ▶ Implement a risk management framework
- 4) Issuers may develop and submit a card design to RuPay for approval.
- 5) Work with NPCI to determine IIN requirements for the product options. Issuers may refer to the RuPay IIN Maintenance Manual to get a clear understanding of the requirements and forms for IIN maintenance.
 - ▶ Develop cardholder agreement and communication materials.
 - ▶ Communicating the cardholder zero liability policy and any requirements the issuer has relating to notification of lost/stolen cards etc.
- 6) Establish internal procedures for the following:
 - ▶ Train employees on the features and benefits of the RuPay Debit card.
 - ▶ Devise a training program for merchants to enable them understand the features of the RuPay Debit card.
 - ▶ Product marketing for employees/merchants
 - ▶ Customer Service
 - ▶ Implement Risk Management policies and processes
 - ▶ Develop and implement performance tracking and reporting procedures
 - ▶ Support NPCI in their attempt to update their research on merchant and/or cardholder

11.2. Annexure II - Performance reporting

Following is a sample template for performance reporting. Issuers may use this template to send quarterly reports to NPCI.

Registered Address

Name of the applicant (hereafter known as member)	
Membership Number	
IIN Number	
Address	
City	
State	
PIN code	
Telephone number	
Email ID	

Contact details

Contact person and designation	
Telephone number	
Email id	

Mailing Address (If different from Registered Address)

Address	
City	
State	
PIN Code	
Telephone Number	
Email ID	

Membership Type

Kindly tick the appropriate membership type of the institution:

Principal Membership	
Associate Membership	
Participant Membership	

Performance Summary

Total Number of cards issued this quarter	
Number of activated, out of the cards issued this quarter	
Number of Cards sold by Product e.g. RuPay Classic or any other product:	

11.3. Annexure III - Key takeaways from market research

Though consumer awareness about debit cards is high, it does not always translate into high usage because of apprehensions about security of the transaction.

- ▶ Indian consumers prefer to use debit cards over credit cards as it is perceived to be safer and more transparent over credit cards.
- ▶ Currently consumers use signature based cards; however given a choice they would use PIN based cards as it is perceived to be safer than signature based cards
- ▶ 96% of consumers use debit cards at ATMs and 83% consumers use debit cards at POS indicating a high awareness and usage of debit cards on POS terminals. However, debit cards are used only by 6%-7% of Indian consumers for online shopping transactions, indicating debit card usage for online transactions is very low
- ▶ Most consumers are not aware of value added services offered on cards.

Both merchants and consumer have favourable opinion on the attributes of upcoming RuPay card such as wide acceptability and zero liability.

- ▶ Merchants perceive cash as a convenient mode of accepting payments.
- ▶ Those merchants, who accept cards, perceive the benefits in terms of increased footfalls, while merchants who don't accept cards, are dissuaded by the perceived hassles of maintaining the card terminal.
- ▶ Merchants are also apprehensive about fraudulent transactions and therefore, favour better security measures in any new card payment system, preferring PIN based security over Signature based transactions

Overall, increased card usage may be driven by educating the consumers and merchants of its benefits to them and by taking clear steps to increase security and safety of card based transactions, while communicating the same.

11.4. Annexure IV- Consumer Communication - Welcome pack

New cardholders should be given a welcome pack with the RuPay Debit card. The welcome pack must meet two objectives:

- 1) To provide information about the benefits and features of the RuPay Debit card to the cardholder
- 2) To motivate the cardholder to activate and to increase the usage of the RuPay Debit card

Issuers may include the following in the sample welcome pack for cardholders:

- 1) A welcome letter
- 2) The RuPay Debit card
- 3) The PIN
- 4) Instructions to activate the RuPay Debit card
- 5) Usage Guide
- 6) Banker's Terms and Conditions

Welcome Letter

The welcome letter must be customized for the customer. It must contain the following information:

- ▶ Account Number
- ▶ Debit Card number
- ▶ Daily cash withdrawal limit
- ▶ Daily transaction limit at merchant establishments
- ▶ Approximate time limit for PIN delivery(if it is not included in the welcome pack)
- ▶ Contact details for customer care
- ▶ A list of the contents of the welcome pack

The RuPay Debit card

The RuPay branded Debit card will be included along with the kit itself. Issuers may use innovative ways to improve the aesthetic standards for presenting the customers with the debit card.

The PIN

Issuers must include the PINs in the welcome pack. The PIN numbers must be sealed in a secure manner such that only the cardholder can view it. Issuers must include the instructions for PIN activation, usage and security in the welcome pack.

Instructions to activate the RuPay Debit card

Issuers must provide clear and detailed instructions for card activation. The Branch staff must be trained to assist the cardholders activate their new cards. In case the card is sent to the customer by mail delivery; the instructions must include a helpline contact for assistance with card activation.

Usage Guide

The usage guide must include several components:

- ▶ What is a debit card?
- ▶ A description of the physical features of the card, including details about the card number, name, validity dates, RuPay logo, electronic signs, magnetic strip, signature panel, customer service number and PIN.

- ▶ Zero Liability Clause
- ▶ Applicable charges for the debit card
- ▶ Process and policy for applying for an additional card
- ▶ Guidelines for usage at different channels: Merchant ; ATM ; Issuer ; Non-issuer ; Ecommerce; IVR
- ▶ Dos and don'ts to protect cardholders from Debit card fraud
- ▶ Phone Banking numbers
- ▶ Terms and Conditions for usage
- ▶ List of Merchant offers
- ▶ Loyalty Programs offered by the issuer
- ▶ Frequently Asked Questions

Bank's Terms and Conditions

The issuer Bank must communicate the terms and conditions of using the debit card to the customer through the welcome kit itself.

11.5. [Annexure A- RuPay Prepaid Program Detail Form \(RPPDF\)](#) **RuPay PREPAID PROGRAM DETAILS FORM (RPPDF) (TO BE SUBMITTED BY BANK TO NPCI)**

MEMBER DETAILS

1. BANK NAME: _____
2. CONTACT NAME: _____
3. PREPAID PRODUCT NAME: _____
4. MAILING ADDRESS: _____

5. PHONE NO. _____
6. FAX: _____
7. EMAIL ADDRESS: _____

RuPay PREPAID PROGRAM DETAILS:

A. **Type of IIN:**

- 1) Consumer Corporate
- 2) Classic Platinum No Frill Platinum

II) Prepaid IIN information-

- Existing prepaid IIN New prepaid IIN

III) IIN number-



IV) IIN range (s) _____ to _____

V) Does it (IIN) facilitate only card present transactions? Yes No

RuPay

VI) Product is based on SMS DMS

VII) Card validity/duration _____

VIII) Personalised Non Personalised

IX) Reloadable Non Reloadable¹

X) EMV Chip Card Yes No

XI) Type of Prepaid product:

RuPay Prepaid Consumer:

<input type="checkbox"/> General Purpose Card	<input type="checkbox"/> Gift Card	<input type="checkbox"/> Payroll Card	<input type="checkbox"/> EBT
Others (Please Specify) _____			

RuPay Prepaid Corporate:

<input type="checkbox"/> Reimbursement Card	<input type="checkbox"/> Travel Card	<input type="checkbox"/> T&E
Others (Please Specify) _____		

Gift cards may be non-reloadable only i.e. use and throw

LOAD PARAMETERS:

I) Channel for re-loads (tick more than one, as applicable)

Branch Online ATM Third party

II) What are the methods of redemption?

Branch Online ATM Third party Merchant Establishment

¹ RuPay Prepaid Consumer Gift cards are non-reloadable.

III) Are you using a third party for card distribution and marketing? Yes No

IV) If Yes, please provide details of third party _____

V) Who is the card manufacturer? _____

VI) Who is the target audience/Customer?

VII) How will the cards be distributed?

Issuer's branches Retailer Internet Other (please specify)

PROGRAM:

I) Tentative or planned launch date (day, month and year) _____

II) Number of cards to be issued (cumulative total)?

Year 1	Year 2	Year 3

III) Is a PPI involved in the project : **YES / NO**

IV) Name of PPI : _____

V) Processed in-house or via Third party processor In-house Third party

If third party, please provide details of processor _____

Signature:

Name:

Date:

Section to be completed by NPCI:

Reviewed By:

Approved By:

Comments by the Reviewer (if any):-

