

Unified Payments Interface (UPI)

Unified Payments Interface (UPI) is a system that powers multiple bank accounts into a single mobile application (of any participating bank), merging several banking features, seamless fund routing & merchant payments into one hood. It also caters to the “Peer to Peer” collect request which can be scheduled and paid as per requirement and convenience.

With the above context in mind, NPCI conducted a pilot launch with 21 member banks. The pilot launch was on 11th April 2016 by Dr. Raghuram G Rajan, Governor, RBI at Mumbai. Banks have started to upload their UPI enabled Apps on Google Play store from 25th August, 2016 onwards.

Participants in UPI

- Payer PSP
- Payee PSP
- Remitter Bank
- Beneficiary Bank
- NPCI
- Bank Account holders
- Merchants

Steps for Registration:

- User downloads the UPI application from the App Store/Banks website
- User creates his/her profile by entering details like name, virtual id (payment address), password etc.
- User goes to “Add/Link/Manage Bank Account” option and links the bank and account number with the virtual id

Generating UPI – PIN:

- User selects the bank account from which he/she wants to initiate the transaction
- User clicks one of the option -

Change M-PIN

In the case of 3(a) -

- User receives OTP from the Issuer bank on his/her registered mobile number
- User now enters last 6 digits of Debit card number and expiry date
- User enters OTP and enters his preferred numeric UPI PIN(UPI PIN that he would like to set) and clicks on Submit
- After clicking submit, customer gets notification (successful or decline)

In the case of 2(b) -

- User enters his old UPI PIN and preferred new UPI PIN (UPI PIN that he would like to set) and clicks on Submit
- After clicking submit, customer gets notification (successful or failure)

Performing a UPI Transaction:

PUSH - Send Money

PULL - Request Money

A. Financial Transactions: UPI supports the following financial transactions viz.

Pay Request: A Pay Request is a transaction where the initiating customer is pushing funds to the intended beneficiary. Payment Addresses include Mobile Number & MMID, Account Number & IFSC and Virtual ID

Collect Request: A Collect Request is a transaction where the customer is pulling funds from the intended remitter by using Virtual ID.

B. Non-Financial Transactions: UPI will support following types of non-financial transactions on any PSP App viz.

- Mobile Banking Registration*
- Generate One Time Password (OTP)
- Set/Change PIN
- Check Transaction Status
- Raise Dispute/Raise query

* Mobile Banking Registration is possible only if the mobile number (which is to be registered) is registered with the Issuer Bank for SMS Alerts/mobile alerts.

UPI can be accessed on all platforms viz. Android / iOS – The Apps have been developed by members on Android 4.2.2 and above/iOS 8.1 and above platforms.

[An introduction to NPCI and its various products](#)

National Payments Corporation of India (NPCI), an umbrella organisation for operating retail payments and settlement systems in India, is an initiative of Reserve Bank of India (RBI) and Indian Banks' Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007, for creating a robust Payment & Settlement Infrastructure in India.

Considering the utility nature of the objects of NPCI, it has been incorporated as a “Not for Profit” Company under the provisions of Section 25 of Companies Act 1956 (now Section 8 of Companies Act 2013), with an intention to provide infrastructure to the entire Banking system in India for physical as well as electronic payment and settlement systems. The Company is focused on bringing innovations in the retail payment systems through the use of technology for achieving greater efficiency in operations and widening the reach of payment systems.

The ten core promoter banks are State Bank of India, Punjab National Bank, Canara Bank, Bank of Baroda, Union Bank of India, Bank of India, ICICI Bank Limited, HDFC Bank Limited, Citibank N. A. and HSBC. In 2016 the shareholding was broad-based to 56 member banks to include more banks representing all sectors. In 2020, new entities regulated by RBI were inducted, consisting of Payment Service Operators, payment banks, Small Finance Banks, etc. The shares were allotted pursuant to issuance of equity shares on private placement basis in compliance to the applicable provisions of the Companies Act, 2013.

RuPay

RuPay is an Indigenously developed Payment System – designed to meet the expectation and needs of the Indian consumer, banks and merchant eco-system. RuPay supports the issuance of debit, credit and prepaid cards by banks in India and thereby supporting the growth of retail electronic payments in India.

RuPay is well poised to explore innovative payment opportunities such as Contactless – offline and online to drive adoption of low value payments. All RuPay Cards will now have the functionality of NCMC which can enable low value contactless payments (like transit, toll, parking, retail) using Offline technology.

The alliances with international network partners (Discover Financial Services, Japan Credit Bureau and China Union Pay) provides valuable access to global acceptance footprint and offer world class payment solutions to RuPay cardholders.

IMPS

With Immediate Payment Service (IMPS), India has become the leading country in the world in real time payments in retail sector.

NACH

National Automated Clearing House (NACH), an offline web based system for bulk push and pull transactions. NACH provides electronic mandate platform to register mandates facilitating paper less collection process for the corporates and banks. It provides for both account based and Aadhaar based transactions.

ABPS

Aadhaar Payment Bridge (APB) System is helping the Government and Government agencies in making the Direct Benefit Transfers for various Central as well as State sponsored schemes.

AePS

To access these funds at door step & drive the financial inclusion in India, Aadhaar enabled Payment System (AePS) has been introduced. Since inception it has become instrumental to increase accessibility of basic banking services in underserved areas. To extend the convenience of biometric to merchant payments, BHIM Aadhaar has been launched by Hon'ble Prime Minister Narendra Modi.

NFS

National Financial Switch (NFS) is the largest network of shared Automated Teller Machines (ATMs) in India facilitating interoperable cash withdrawal, card to card funds transfer and interoperable cash deposit transactions among other value added services in the country.

UPI

Unified Payments Interface (UPI) has been termed as the revolutionary product in the payment system.

Bharat Bill Payment System

Bharat Bill Payment System is offering one-stop bill payment solution for all recurring payments with 200+ Billers in the categories Viz. Electricity, Gas, Water, Telecom, DTH, Loan Repayments, Insurance, FASTag Recharge, Cable etc. across India.

NETC

National Payments Corporation of India (NPCI) has developed the National Electronic Toll Collection (NETC) program to meet the electronic tolling requirements of the Indian market.

It provides an electronic payment facility to customer to make the payments at national, state and city toll plazas by identifying the vehicle uniquely through a FASTag. FASTag are Radio-Frequency Identification (RFID) stickers which are affixed on the vehicle windshield and enable the driver to make toll payments electronically while the vehicle is in motion without stopping at the Toll plazas by saving Fuel and Time.

With these products the aim is to transform India into a 'less-cash' society by touching every Indian with one or other payment services. With each passing year we are moving towards our vision to be the best payments network globally.