ANYTIME, ANYWHERE BILL PAYMENT

Agenda

> About BBPS
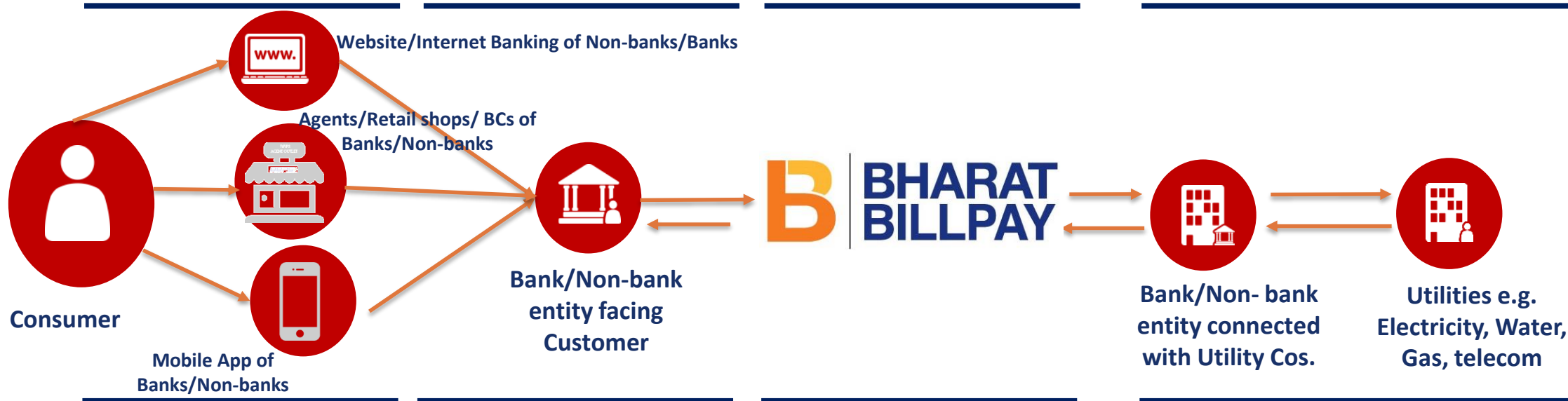
> Key participants

> System design

Bharat Bill Payment System

Bharat Bill Payment System (BBPS) is a Reserve Bank of India (RBI) conceptualised system which offers integrated, accessible and interoperable bill payment services to consumers across geographies with certainty, reliability and safety of transactions.

It offers bill payment services to consumers through network of agents/retail shops/bank-branches and digital channels like Internet banking of banks, Mobile app of banks etc. allowing multiple payment modes like Card, UPI, AePS, Wallet, Cash and provides instant confirmation. It will facilitate a less cash society through migration of bill payments from cash to electronic channel

Website/Internet Banking of Non-banks/Banks

Agents/Retail shops/ BCs of Banks/Non-banks

Consumer

Mobile App of Banks/Non-banks

Bank/Non-bank entity facing Customer

BHARAT BILLPAY

Bank/Non- bank entity connected with Utility Cos.

Utilities e.g. Electricity, Water, Gas, telecom

1. Consumer (Payer) uses a channel for payment

2. Bank/Non-bank debits the account, collates information and transmits to BBPCU

3. BBPCU undertakes settlement between BBPOUs and passes the bill information and payment message

4. Utility connected Bank/Non-bank entity sends information to Utilities and credits accounts

BBPS -Salient Features

Interoperable	BBPS will be an integrated platform connecting banks and non-banks in bills aggregation business, Billers , payment service providers and retail bill outlets
Accessible	Facilitate seamless payment of bills through any channel : Digital and physical
Cost-effective	Most cost-effective for entire ecosystem – Flat fee charge vs current ad valorem
Integration	BBPOUs will have to connect only to BBPCU to get access to all the billers. Utility companies just need to connect to maximum two BBPOUs to enable all customers to pay bills.
Complaint Management	Standardised system to handle customer grievances for both ON-US and OFF-US transactions
Dispute Management	Facilitate BBPOU's to raise and resolve disputes relating to transactions that have passed through the BBPS system
Clearing & Settlement	Multiple Clearing & Guaranteed Settlements between different parties, standardised TAT
Standardisation	Standardisation of processes for entire BBPS ecosystem
Brand Connect	Single and trusted brand connect and BBPS Assurance

Payment Options

NPCI
भारतीय राष्ट्रीय भुगतान निगम
NATIONAL PAYMENTS CORPORATION OF INDIA

Payment Channels

Internet | Internet Banking| Mobile | Mobile Banking |POS | MPOS | KIOSK | ATM | Bank Branch | Business Correspondents | Agents

Payment Mode

Cash | Credit Card | Debit Card | IMPS | Internet Banking | Account transfer | Prepaid Card | Wallet| UPI |AEPS

Payment Options

Full | Minimum | Excess | Part | Penalty | Multiple

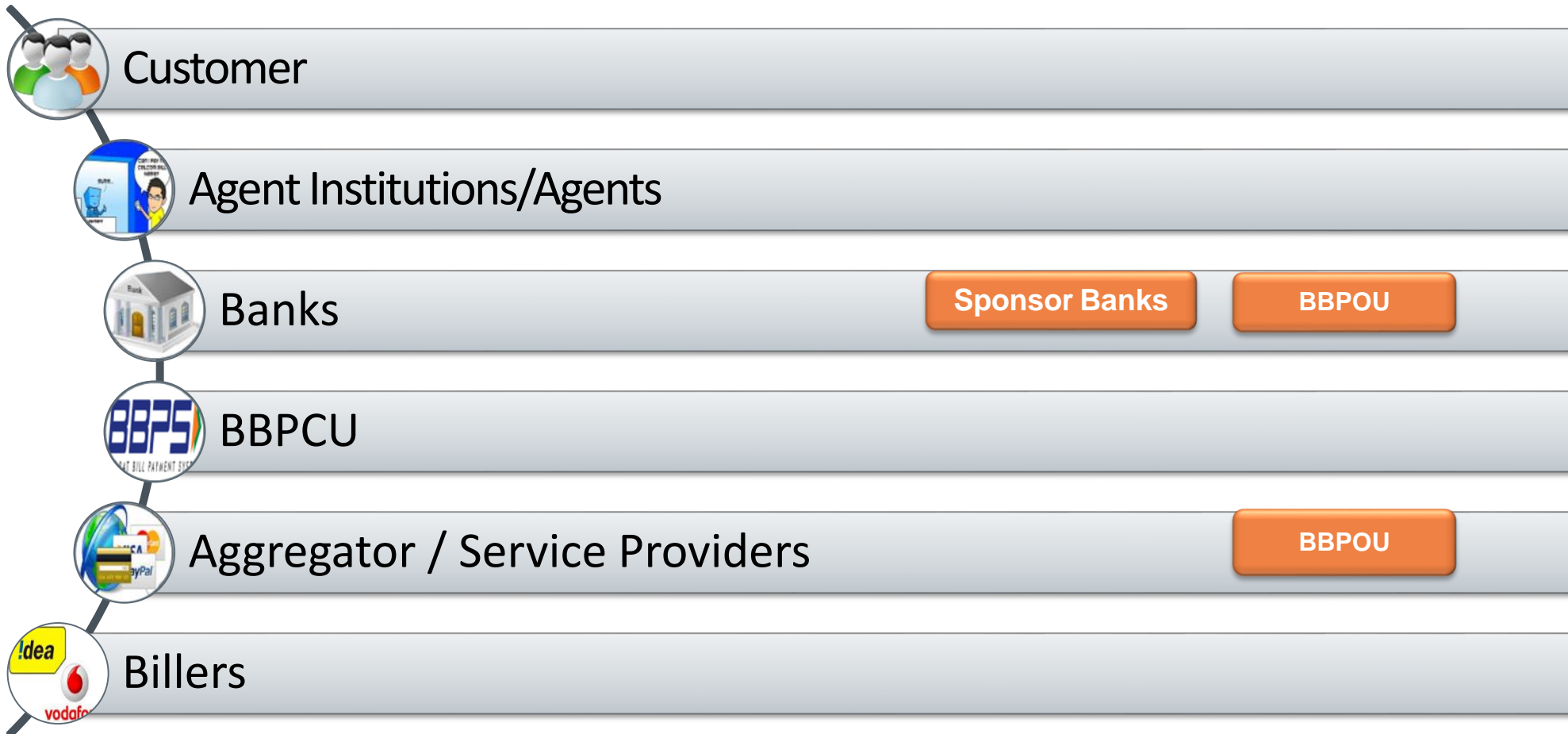*For more information, contact us on bbps@npci.org.in*

Agenda

> About BBPS

> **Key participants**

> System design

System Participants

Customer

Agent Institutions/Agents

Banks   **Sponsor Banks**   **BBPOU**

BBPCU

Aggregator / Service Providers   **BBPOU**

Billers

BBPS – Two-tiered Structure

BBPCU (NPCI)

Bharat Bill Payment Central Unit (BBPCU) will be the single authorized entity operating the BBPS

BBPOUs (Banks and Non-Bank Entities)

Bharat Bill Payment Operating Units (BBPOUs) will be the authorised operational units. Below are the type of BBPOUs:

CUSTOMER OU
BBPOU's engaging only with customers
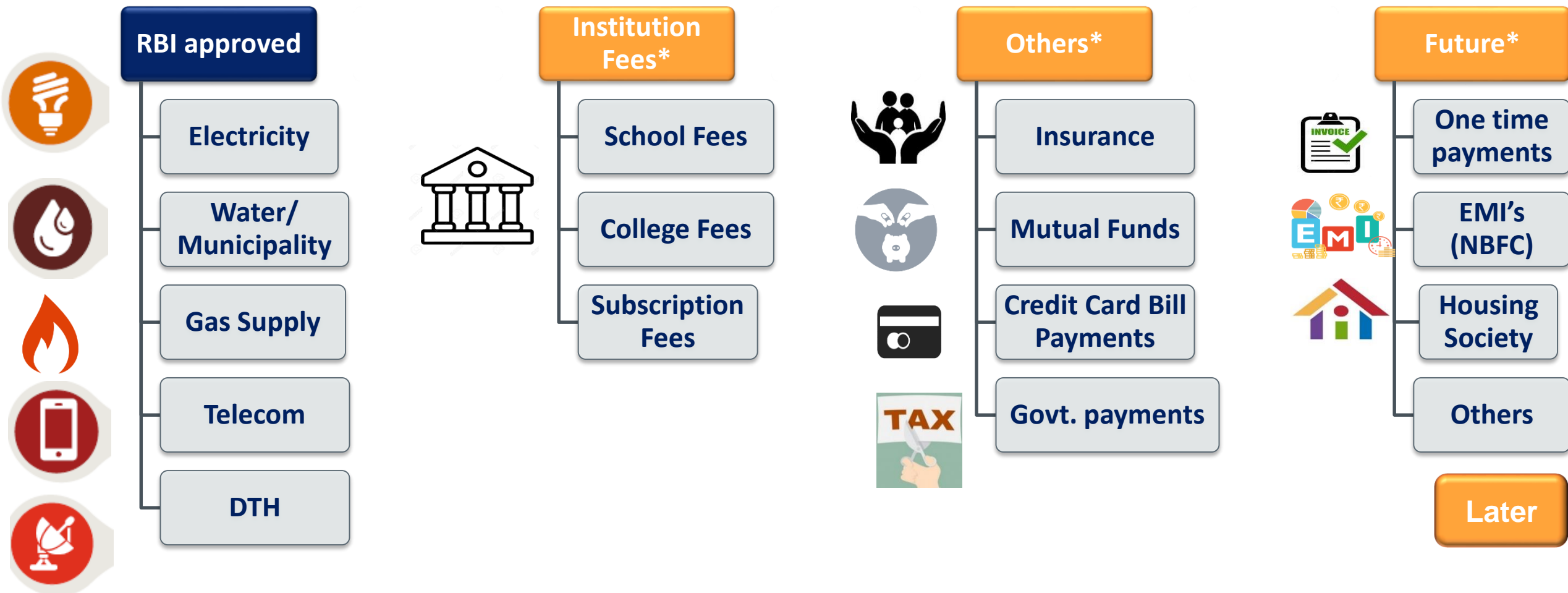
BILLER OU
BBPOU's acquiring only Billers

BOTH (CUSTOMER OU AND BILLER OU)
BBPOU's managing both customer and Biller

Biller Categories in BBPS

Following services along with core utilities may be incorporated in BBPS

RBI approved
- Electricity
- Water/ Municipality
- Gas Supply
- Telecom
- DTH

Institution Fees*
- School Fees
- College Fees
- Subscription Fees

Others*
- Insurance
- Mutual Funds
- Credit Card Bill Payments
- Govt. payments

Future*
- One time payments
- EMI's (NBFC)
- Housing Society
- Others

Later

* Later category expansions are subject to RBI approval

Types of Billers

Online Mode

- Biller is connected online to respective BBPOU

- All the communications is happening on real-time basis

- BBPOU will confirm the bill payment only after getting confirmation from respective biller.

Offline Mode (A)

- Biller is not connected to the BBPOU on real time basis

- Provides a file of expected bills on regular basis to respective OU

- BBPOU will confirm the bill payment basis the bill information dump provided by the respective biller

Offline Mode (B)

- The biller does not require a Bill Fetch or is not connected to the BBPOU on a real time basis.

- In this scenario, the BBPOU receives all the bill payment requests for that particular biller without any validation.

Settlement for all the above type of transactions takes place as per the "Settlement Cycle"

For more information, contact us on bbps@npci.org.in

Benefits to Participants

Benefits to BBPOU

- Single integration and recon to have access with multiple billers
- Expand reach to customers through OFF-US business
- Potential to offer value added services like online presentment
- Standard interface, Interchange
- Timely and Guaranteed Settlement
- Dispute Management

Benefits to Biller

- Cost-effective platform
- Improved liquidity position due to faster settlements
- Low entry barriers for small billers or ones confined to small geographies
- Billers will have plug and play connection options with flexibility (only 2 standard APIs)
- Lower CAPEX and OPEX due to reduced and efficient connections

Benefits to Customer

- Control: Payment of bills via one-platform
- Accessibility: Facility of paying bills digitally (Internet, Mobile etc.) as well as physical outlets.
- Convenience, Time saving, Uniform experience and flexibility of payment channels
- Reliable service with high degree of trust and security
- Transparent pricing with instant payment confirmation
- Unified Grievance Handling

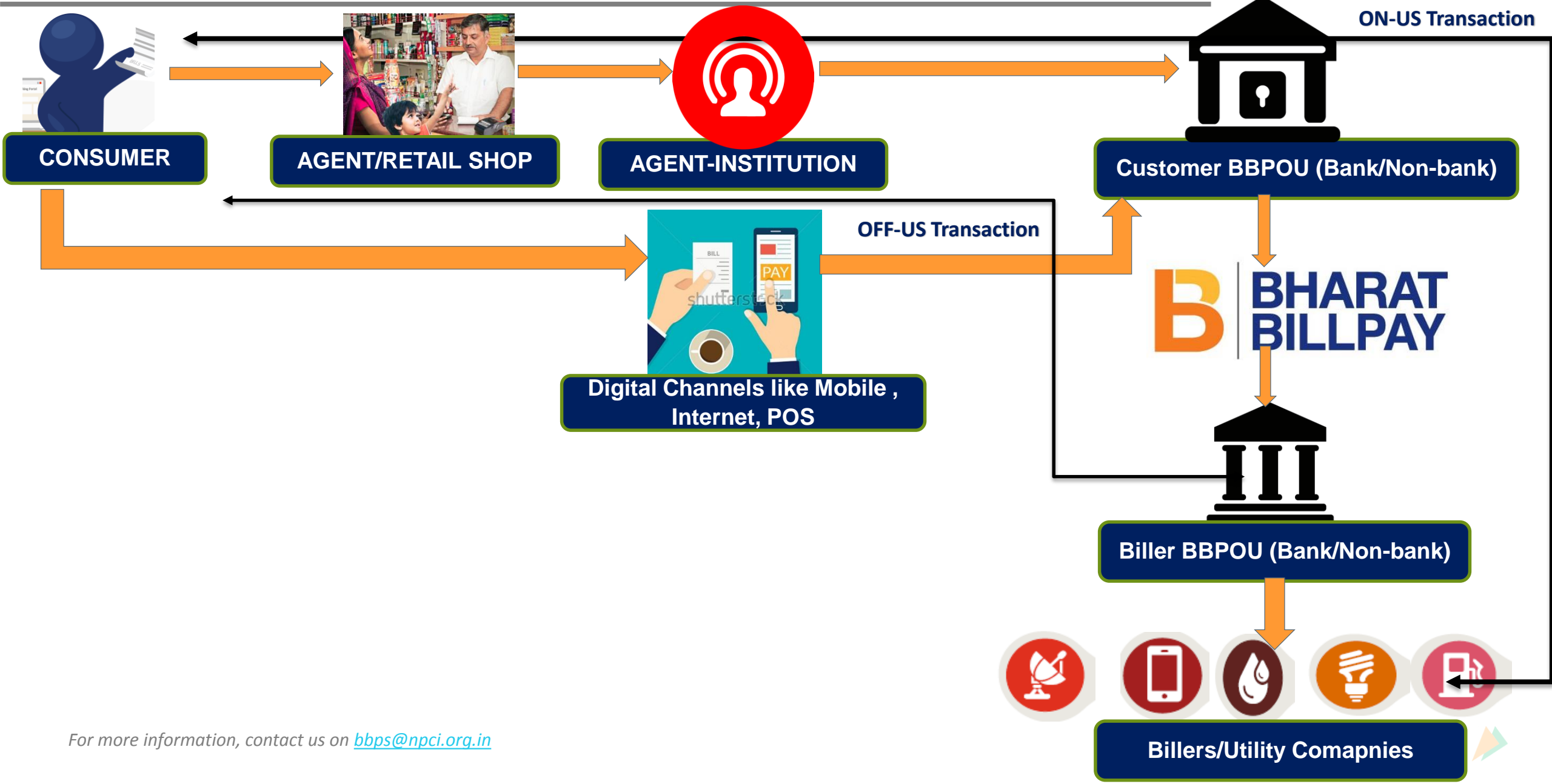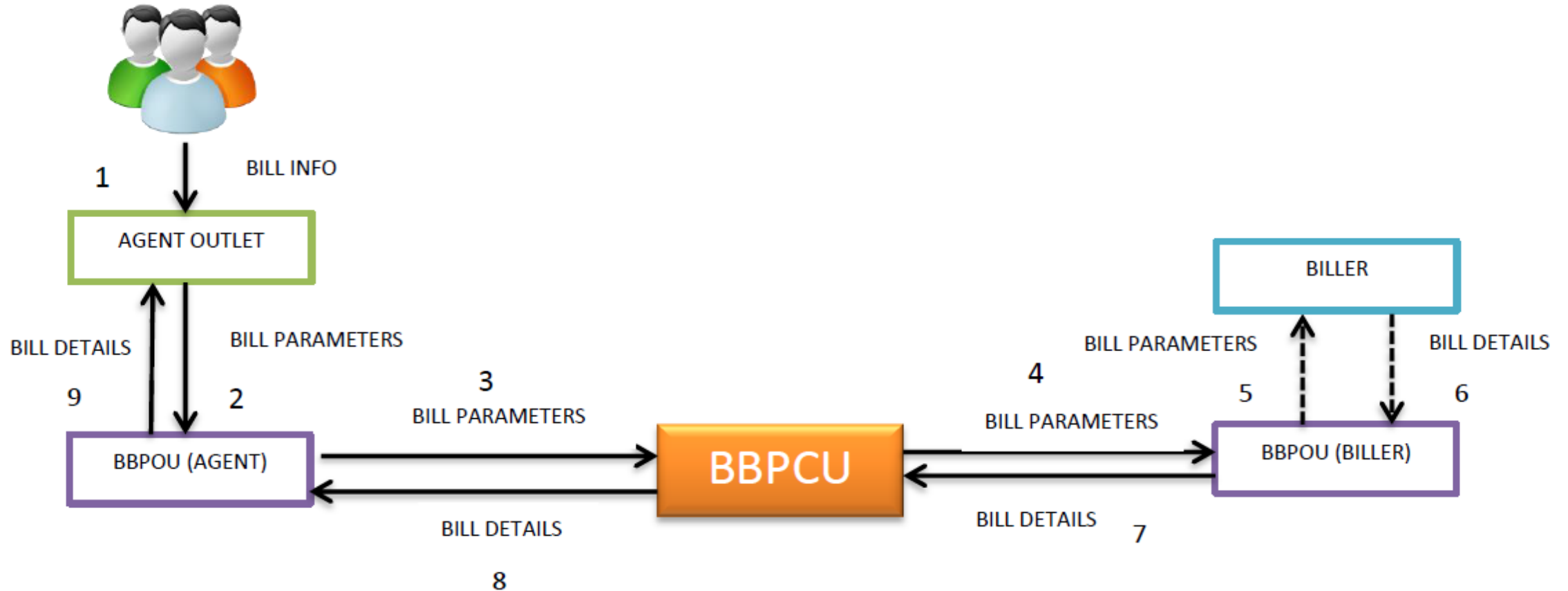# Agenda

> About BBPS

> Key participants
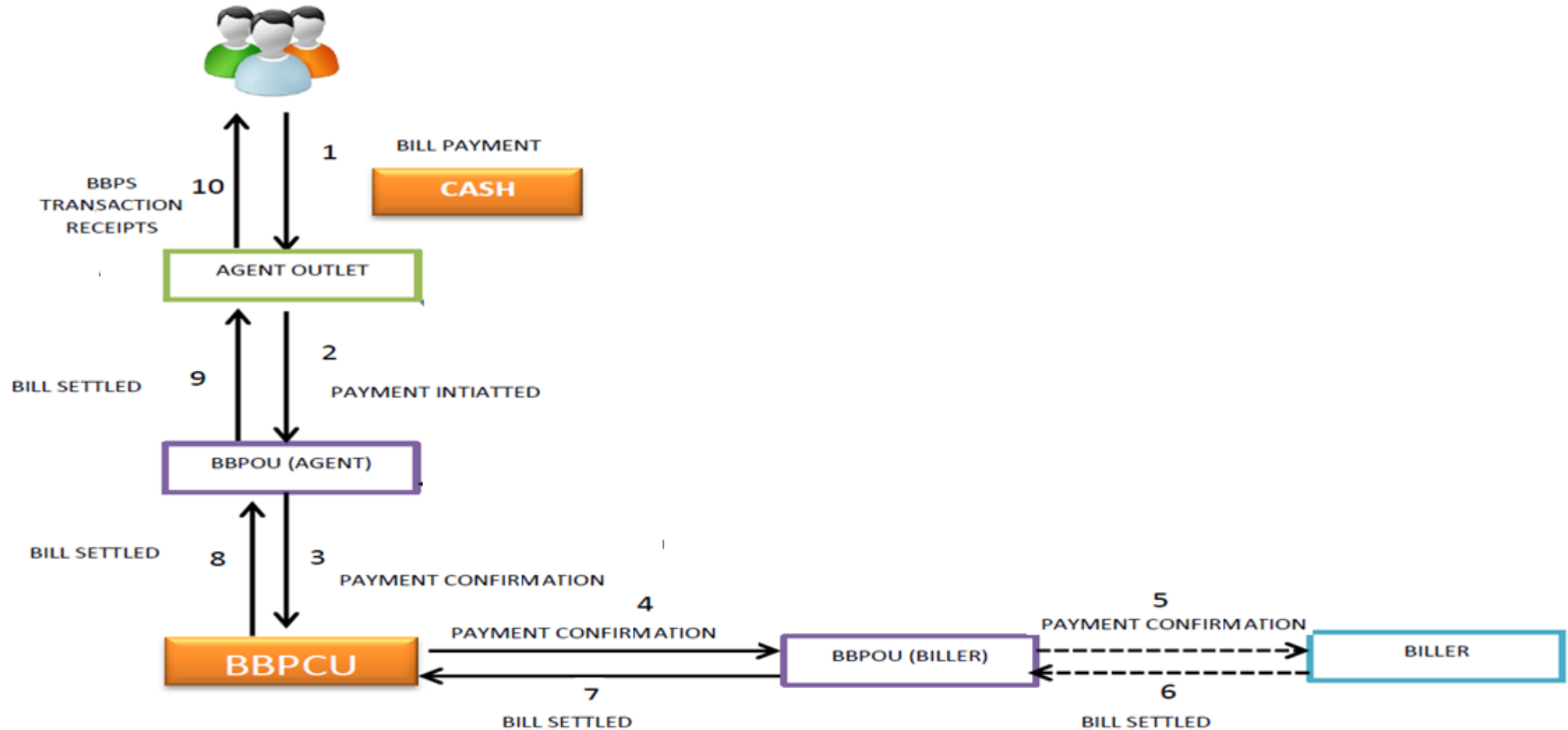
> **System design**

ON-US & OFF-US Transaction

NPCI
भारतीय राष्ट्रीय भुगतान निगम
NATIONAL PAYMENTS CORPORATION OF INDIA

ON-US Transaction

CONSUMER

AGENT/RETAIL SHOP

AGENT-INSTITUTION

Customer BBPOU (Bank/Non-bank)

OFF-US Transaction

Digital Channels like Mobile , Internet, POS

BHARAT BILLPAY

Biller BBPOU (Bank/Non-bank)

Billers/Utility Comapnies

For more information, contact us on bbps@npci.org.in

Transactional Flow – Payment Confirmation

* Illustrative Cash Mode

For more information, contact us on bbps@npci.org.in

Key Parameters of Bill Fetch API

Bill Fetch Request (Initiated by the Customer-BBPOU)	This API will enable the user to input certain parameters as required by the biller to fetch bill information. *Customer identification parameters at the biller can be more than one and the system is capable of supporting the same.*
	Key Parameters include : <Initiating Channel>, <Agent Details>, <Biller Information>, <Bill Details>, <Customer details>
Bill Fetch Response (Initiated by Biller-BBPOU)	This request will enable the biller to provide output parameters as a response to bill fetch request. *Biller can respond with multiple amount field, additional fields regarding bill and any other information as desired by the biller*
	Key Parameters include: <Customer Information>, <Bill Information>, <Charges & Fees>.

* All input and output parameters will be configured at biller level at the time of Biller Onboarding

Key Parameters of Payment Message API

Payment Request (Initiated by the Customer-BBPOU)	This request will enable the user to provide parameters defining the payment request details as per biller configuration.
	Key Parameters include: <Channel>, <Payment Mode>, <Biller & Bill Information>, <Customer Information>
Payment Response (Initiated by Biller-BBPOU)	This request will enable the biller to confirm the payment parameters.
	Key Parameters include: <Bill Information>, <Transaction Status>

* All input and output parameters will be configured at biller level at the time of Biller Onboarding
** Bill Payment Request API includes all details of the previous Bill Fetch Response*

Key Parameters of Online Specs

Diagnostic

Diagnostic message is a confirmation from the BBPOU to BBPCU that the respective BBPOU is in active status and available for receiving and processing bill payment transaction

BBPOU will be triggering the diagnostic API at a desired time-frame, continuous failing of these ping requests will mark the BBPOU inactive and transaction will not be processed at BBPCU end.

Acknowledgment

An acknowledgement message is a confirmation sent in synchronous mode from the recipient to the sender of a message and will be a part of each leg of the payment transaction message.

Reversal

Failure to receive an acknowledgement from any participant in BBPS for a bill payment transaction will result in a reversal where the entire transaction will be reversed and an intimation will be sent to the origination point to return the amount to the customer through the same payment mode.

The initiating party is the entity which has initiated a leg of the bill payment transaction but has not received its acknowledgement.
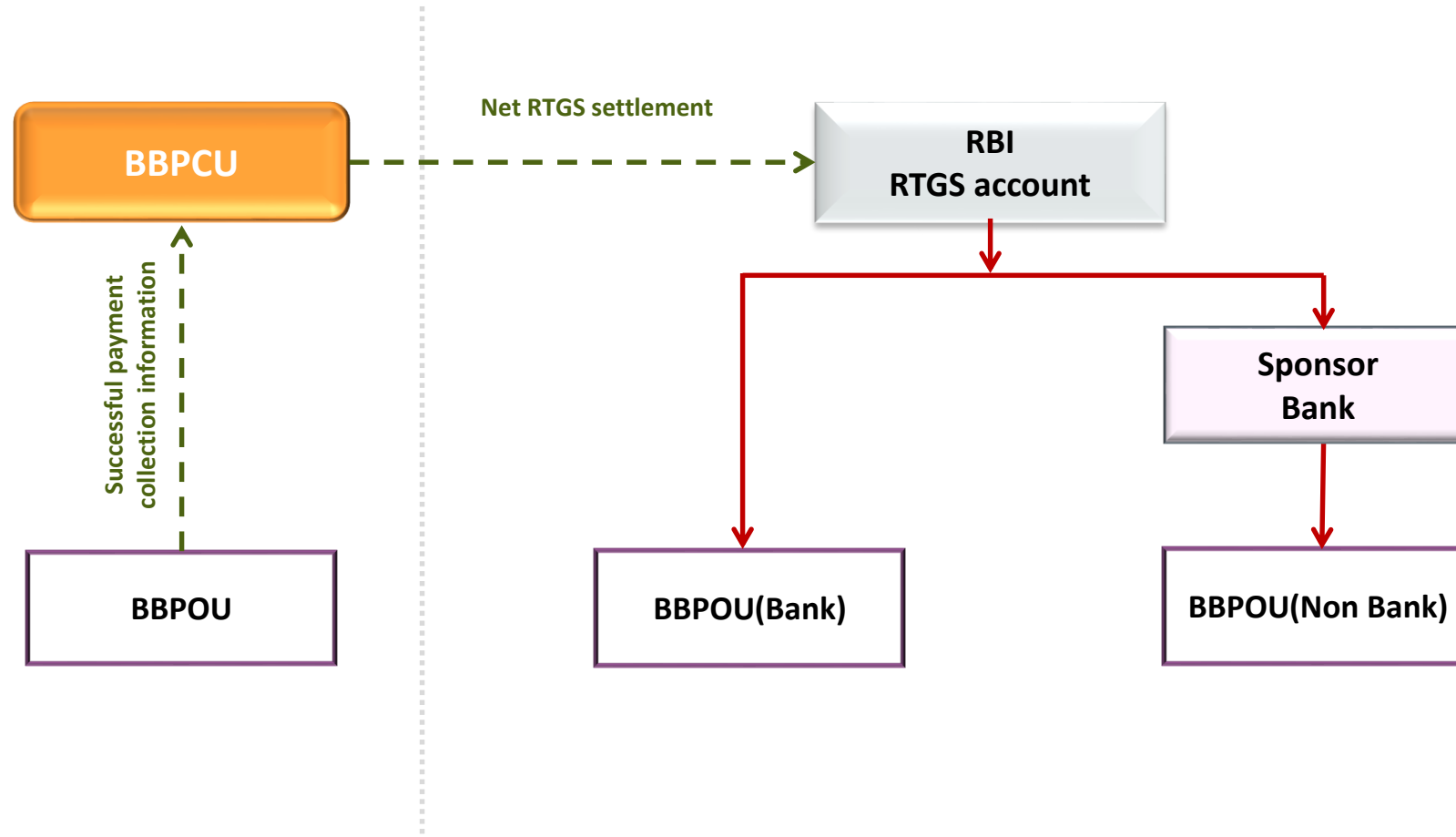
Settlement Flow

Other Features

- Clearing & Settlement

- Bill Presentment and Deferred Payments

- Complaint Management System

- Dispute Management System

- Velocity monitoring and Net Debit Cap

- Settlement Guarantee Fund (SGF) Mechanism

- Fraud & Risk Management (FRM)

- Refund Mechanism

- Admin Section – BBPOU CANVAS

- Reporting & MIS

- Bulk Upload Feature

- Management of Master Data Management (MDM)

Complaint Management System (CMS)

- BBPCU shall put in place a centralized end to end complaint management system for all ON-US and OFF-US transactions.

- Customer can register complaints at:
    - Any BBPOU portal or agent outlet/branch
    - Centralized BBPCU website

- Two kinds of complaints are envisaged for BBPS:
    - Transaction-based complaint
    - Service-based complaint
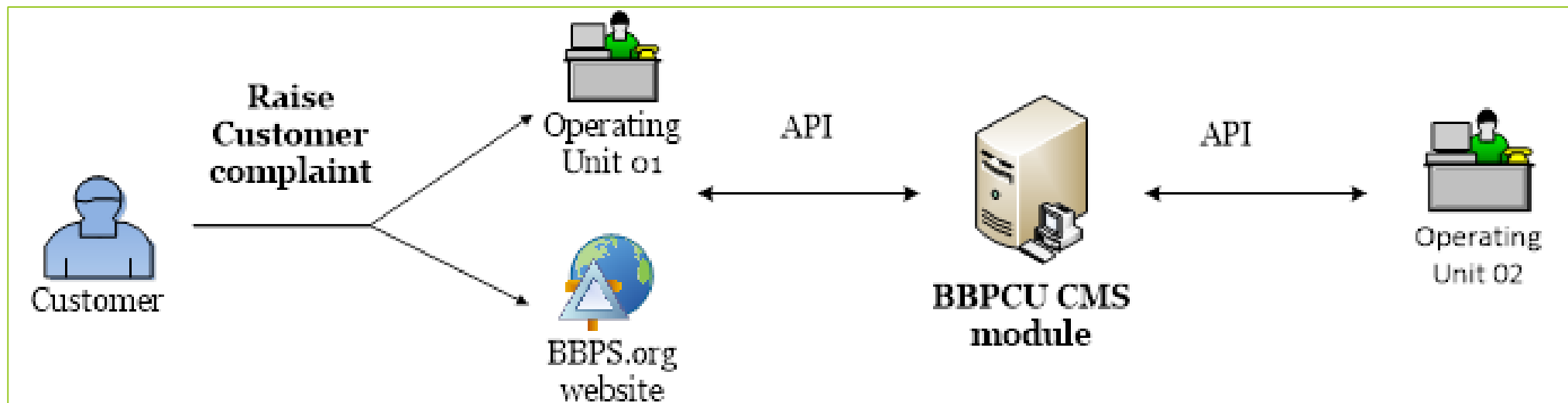
Dispute Management System (DMS)

- Dispute Management System will facilitate BBPOU's to raise and resolve a dispute on a transaction that has previously been cleared by the BBPCU or BBPOU

- DMS will have a process of arbitration where the BBPCU's arbitration committee will deliver a final verdict

- Complaints not resolved through the CMS can be manually uploaded to the DMS

- BBPOUs will also be able to raise disputes in DMS against any other BBPOUs

- Various levels of DMS:

  - Dispute Initiation: Credit Adjustment / Refund

  - Pre-arbitration

  - Arbitration

  - Good faith

Thank you !