



# GUIDELINES FOR CUSTOMER FRONT-END AT BBPOU

Bharat Bill Payment System

Version 1.4

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## 1 Change Management

Date	Section	Version
18-Nov-2016	Initial Document	V1.0
21-Dec-2016	Feedback incorporated post workshop on 20-Dec-2016	V1.1
30-Dec-2016	Page 6 & 7: Section 4.1.1 and exceptions. Page 13: Section 5.2 on CCF Page 22: Bill Presentment	V1.2
19-Jan-2017	Section 4.1 – Addition of various type of billers New section 5 on Biller Characteristics Section 6.1 – Added biller limits Section 10: Elaboration of Bill Presentment	V1.3
06-Jul-2017	Section 11 & 12 - OTP process added while searching transaction and registering complaint Section 6 – Validation of min Length and max Length for input parameters Section 12- Complaint Registration SMS format	V1.4

## 2 Synopsis

This document highlights the key features that are recommended to be designed by a Customer BBPOU for connecting to BBPS ecosystem. The front-end design, layout, features and underlying workflow, both for direct use by the customer and by the agent servicing customers at BBPS outlets, should follow the key aspects highlighted in this document.

BBPS is an inter-operable nationwide bill payment system & is expected to have a very large number of billers on-boarded by the various BBPOUs. Thus a good number of bill payments are expected to be OFF-US bills, where the BBPOU that is accepting bill payment from the customer will not have any direct or existing relationship with the biller.

An obvious challenge in such a scenario is the ability of Customer BBPOU to have a standardized front-end which can take care of all Biller categories and their respective scenarios.

It is expected that the data sent by the billers in response to bill fetch request and bill payment request would differ from biller to biller. Hence, the front-end should be capable of correctly and meaningfully rendering biller-specific screens, both for bill fetch and bill payment. Other important requirements and features such as Branding, Receipt generation, Complaints, Biller registration and Customer registration are to be taken care of by BBPOUs.

### 3 BBPS Branding Guidelines

1. BBPS Logo and Branding should be **displayed across all channels** from where the customer can execute transactions at the BBPOUs end.
2. On the BBPOU portal, sections should be available specifically displaying all the billers under BBPS scheme.
3. On the BBPOU portal, the BBPS Logo and other branding should be :
  - a. Displayed at **each page** of transactional flow, search transaction, complaint registration and search complaint

Section	BBPS Logo
Bill Fetch Request	Mandatory
Bill Fetch Response	Mandatory
Payment Processing Third Party Page	Optional
Payment Confirmation	Mandatory
Receipt	Mandatory

- b. Printed on the **physical receipt & digital copy**
4. At the BBPOU physical outlet like Agents, Bank Branch and Business Correspondents
  - a. Prominently displayed at the signage at and within the **physical outlets.**
  - b. **Agent Login** screen
5. Receipt Printed from any channel should be consistent

## 4 Search Biller Guidelines

As the number of categories of billers and billers within each category would eventually be quite large, and a good number of these billers would be OFF-US billers, it is important to design a biller select/ search feature which is user friendly, scores high on usability and enables quick selection of the correct biller. The front-end and workflow should be designed keeping these requirements in mind and should be appropriate for the form factor of the device on which bill payment is offered.

The feature of quick selection of the right biller from amongst a very large number of billers is required both for Agent front-end (desktop, mobile devices, POS, etc.) as well as customer front-end (e.g., mobile devices, Apps, desktop, kiosk, Internet banking portal, etc.). The User should be able to conveniently and quickly search and view any of the billers that are part of the BBPS ecosystem. The navigation should be user-friendly and intuitive.

By way of an example, a possible rendering of the Biller Search features could be on the lines given below. The BBPOUs may design their own front-end in a manner that ensures that all desired functionalities and features are present. It may be noted that the display of “Bharat Bill Payment System (BBPS) Billers” and BBPS Logo as mentioned in the example below are mandatory.

### 4.1 Search Biller Example

1. A **common section of “Bill Payment”** should be displayed at the BBPOU Portal or/and third party login (Agents/Agent Institutions etc)
2. **Internet/Mobile Banking (Post Login):** All customer BBPOUs, should offer only one option of Bill payments. For Billers currently under BBPS, it should route to BBPS APIs and for others it should route to current aggregator APIs. The list of all the billers should be displayed under specific Categories offered by the Customer BBPOU
3. The complete list of billers who are a part of the BBPS ecosystem, will be updated in the MDM. It will be the responsibility of the BBPOU to refresh the MDM at its end and ensure that the complete list of billers is displayed
4. As a practice, the BBPOUs may refresh the BBPS MDM on weekly basis
5. Title can be displayed as “Bharat Bill Payment System (BBPS) Billers”

6. Search Biller Functionality should be:
  - a. user friendly
  - b. scores high on usability
  - c. enables quick selection of the correct biller
7. Search Filters:
  - a. Biller Category (Electricity/Gas/Water etc)  
This should be displayed as per the categories approved by RBI
  - b. Coverage (National/State/Regional)  
The Coverage is captured in the Biller MDM as a part of Biller configuration, it should be displayed from the Biller MDM
  - c. State & City (State & City names)  
The Coverage is captured in the Biller MDM as a part of Biller configuration, it should be displayed from the Biller MDM
  - d. Biller Name (Name of the biller)
  - e. Biller ID (Biller ID)
8. The customer selects/ enters data in any of the above search options and clicks the Search button.
9. Depending upon the selection of the biller, the transaction processing page may be rendered.
10. The various types of biller configuration in the system is as per the below table:

Biller Type	Fetch Requirement	Supports Adhoc	Transaction	Quick Pay value in BillPayReq	Implication for the Front-end
ONLINE	OPTIONAL	T	1) QuickPay can be done (for any amount) 2) Payment against fetch can also be done for any amount	1)Yes 2)No	For such billers, both option should be available to either pay with bill fetch or directly quick pay
ONLINE	NOT_SUPPORTED	T	Only QuickPay can be done (for any amount)	Yes	For such billers, option should be available to directly pay without bill fetch

ONLINE	MANDATORY	T	QuickPay cannot be done (for any amount) Payment against fetch can be done for any amount	No	For such billers, option should be available to enter input parameter for bill fetch for a particular biller from the MDM.  Amount can be edited at the time of payment
ONLINE	MANDATORY	F	QuickPay cannot be done. Exact, Exact +, Exact - can be paid against fetched bill as per configuration	No	For such billers, option should be available to enter input parameter for bill fetch for a particular biller from the MDM.  Amount cannot be edited at the time of payment
OFFLINE A	OPTIONAL	T	1) QuickPay can be done (for any amount) 2) Payment against fetch can also be done for any amount	1)Yes 2)No	For such billers, both option should be available to either pay with bill fetch or directly quick pay
OFFLINE A	NOT_SUPPORTED	T	Only QuickPay can be done (for any amount)	Yes	For such billers, option should be available to directly pay without bill fetch
OFFLINE A	MANDATORY	T	QuickPay cannot be done (for any amount) Payment against fetch can be done for any amount	No	For such billers, option should be available to enter input parameter for bill fetch for a particular biller from the MDM.  Amount can be edited at the time of payment
OFFLINE A	MANDATORY	F	QuickPay cannot be done. Exact, Exact +, Exact - can be paid against fetched bill as per configuration	No	For such billers, option should be enter input parameter for bill fetch for a particular biller from the MDM.  Amount cannot be edited at the time of payment

OFFLINE B	NOT_SUPPORTED	T	QuickPay can be done (for any amount)	Yes	For such billers, option should be available to directly pay without bill fetch
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11. The system displays a page with the following data in tabular format (data size=15, Prev/Next links as appropriate):

- a. Biller ID – sortable column
- b. Biller Name – sortable column
- c. Category
- d. Coverage
- e. City - sortable
- f. State - sortable
- g. Pincode

12. The page should display the BBPS Logo.

#### **Exception to 4.1.1**

#### **Transition plan (Compliance date 31st Jan 2017)**

The BBPOU can (for the transition period) offer a separate section for BBPS, however billers under BBPS section should not be available in their existing Bill payment section. The customers should be well informed for which billers are available in which section.

### **4.2 Search Biller Sample Screens**

#### Search Biller

Biller Category
 Coverage
 Biller Name
 Biller ID

**Biller Category**

Populated with all Active biller categories

**Biller Name**

**Coverage**

Populated with all State Names and National

**Biller ID**

Populated with all City Names within a State

**SEARCH**

### Search Biller

Biller Category    Coverage    Biller Name    Biller ID

**Biller Category**  
▼ Populated with all Active biller categories

**Biller Name**  
VODAFONE

**Coverage**  
▼ Populated with all State Names and National

▼ Populated with all City Names within a State

**Biller ID**

**SEARCH**

1. In case a Biller is a part of the BBPS ecosystem, the logo SHOULD be displayed

### Pay Bill



**Biller Name**  
VODAFONE

**Payee Mobile Number**

2. In case a Biller is NOT a part of the BBPS ecosystem, the logo should not be displayed

### Pay Bill

**Biller Name**  
ABC Life Insurance

**Payee Mobile Number**

## 5 Biller Characteristics

1. The new billers addition and existing biller modifications are updated in the MDM
2. It will be the responsibility of the BBPOU to refresh the MDM on regular interval to extract the latest biller information
3. At each stage of searching a biller and executing of transaction, the Customer BBPOU should refer to the updated MDM
4. Apart from the generic fields in the Biller MDM, some of the characteristics of the biller MDM are listed below:
  - a. **blr\_mode** – This field helps to identify the type of integration the Biller BBPOU has with the Biller. There are 3 scenarios within the same – ONLINE, OFFLINE A and OFFLINE B
  - b. **blr\_accepts\_adhoc** - This field helps to identify if the biller accepts adhoc amount
  - c. **blr\_pmt\_amt\_exactness** – This field states the type of amount that a biller accepts. The parameters configured are either EXACT, EXACTUP or EXACTDOWN.
    - i. In case the configuration is EXACT, this interprets that the biller would only accept the bill fetch response amount
    - ii. In case the configuration is EXACTUP, the biller would accept amount only equal to or higher to the bill fetch response amount value
    - iii. In case the configuration is EXACTDOWN, the biller would accept amount only equal to or lesser to the bill fetch response amount value
  - d. **blr\_payment\_modes** – This field states the acceptable payment modes by the biller (if any)
  - e. **blr\_payment\_channels** – This field mentions the acceptable payment channel by the biller (if any)
  - f. **blr\_customer\_params** – The customer params field, mentions the input parameters that are required to be displayed by the customer BBPOU on the

frontend and should be entered by the customer/agent at the time of bill fetch.

For e.g. Customer Account Number, Cycle Number etc

- g. **blr\_response\_params** – The response params field, refers to the output parameters that will be passed by the biller in the bill fetch response. These fields are to be displayed by the customer BBPOU on the frontend. For e.g. Bill Number, Customer Name etc.
- h. **blr\_additional\_info** – The additional info field, is an optional parameters, this refers to the additional output parameters that will be passed by the biller in the bill fetch response. These fields are to be displayed by the customer BBPOU on the frontend. For e.g. Early Payment Date, Late Payment Date etc.

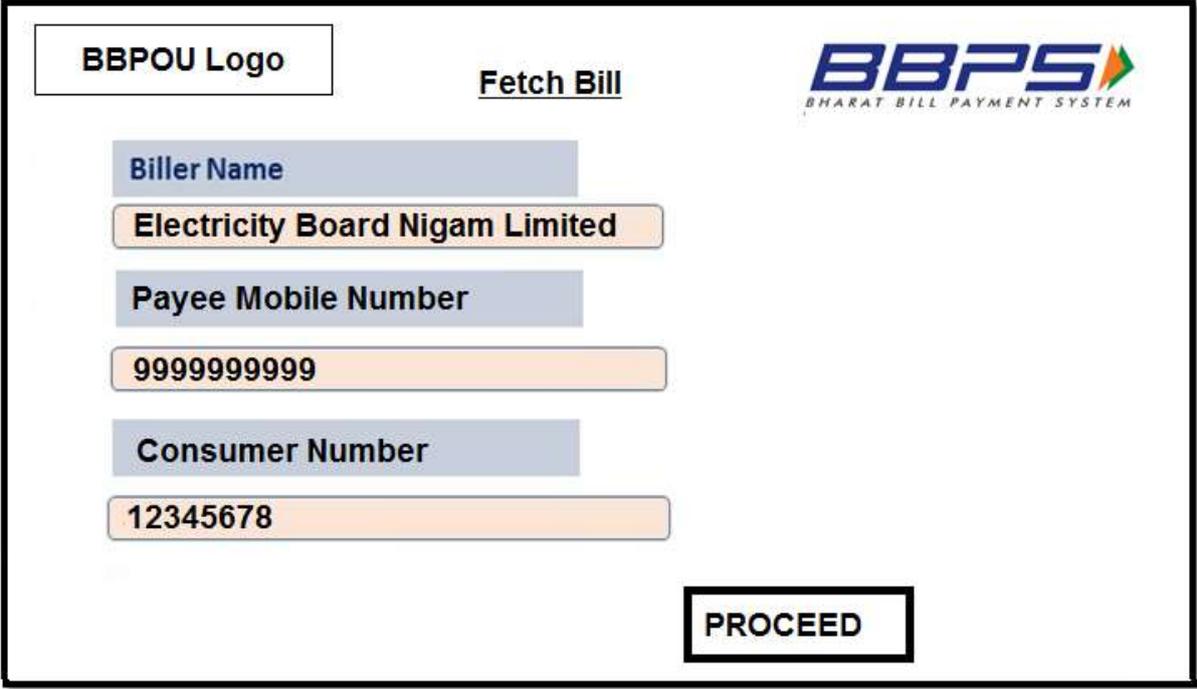
## 6 Execution of Transactions

1. User should be able to execute transactions like Fetch and Payment from the BBPOU front-end. The front-end should also allow the customer to lodge a complaint and check status of complaints lodged.
2. The system should be able to bifurcate basis whether a biller is part of BBPS ecosystem or not. BBPS standards and Procedural Guidelines must be followed for the billers that are part of BBPS. BBPS Logo must be displayed in the section of BBPS billers.
3. Even in a scenario where the BBPOU is executing a transaction for a biller who is part of BBPS system and the transaction type is ON-US, the BBPS Logo should be displayed on the transaction page.
4. In general, the customer experience at the front-end should be similar for both ON-US and OFF-US billers.
5. The front-end from which the BBPOU triggers transactions should be able to render the screen/page basis the fields provided in the Biller MDM and the input values may be validated suitably as required.
6. In case if the validation of minLength and maxLength has been provided for the input parameters for a particular biller in the Biller MDM, the Customer BBPOU should incorporate the validation at the frontend. This will ensure reduction of failures at COU end itself.
7. New categories and billers in the BBPS system will keep on getting added and the billers' requirements may keep on changing. Hence, in general it will not be possible for a BBPOU to keep static pages containing biller specific input and output parameters of all billers in BBPS. The input and output parameters for bill fetch/payment may vary significantly from biller to biller. For instance, one biller may require only Relationship Number to fetch/ pay the current bill whereas another may require Consumer Number, Consumer Type, BU Number and Cycle Number to fetch/ pay the bill. Likewise, the bill fetch response sent by the biller for display to the customer may also vary widely. The BBPOU front-end page should, therefore, be able to load the biller-specific screen/page on the fly based on Biller MDM, with appropriate identifier names as well as validations for input/ output fields.

## 6.1 Bill Fetch Response and Amount Block Scenarios

Due to the diversity of the Biller response parameters, the Customer BBPOU should be able to render those scenarios appropriately. A Biller response contains two sections

- 1) Biller Response Section (Mandatory)
- 2) Amount Section (Optional)



The screenshot shows a web form titled "Fetch Bill" for the BBPS (Bharat Bill Payment System). The form includes a BBPOU Logo on the left and the BBPS logo on the right. There are three input fields, each with a label and a value:

- Biller Name:** Electricity Board Nigam Limited
- Payee Mobile Number:** 9999999999
- Consumer Number:** 12345678

A "PROCEED" button is located at the bottom right of the form.

1. Payee Mobile number and Bill Fetch Parameters are different
2. Capturing the Mobile Number is mandatory
3. Option should be available to dynamically populate the fetch parameters, content of the label and text box validation basis the biller configuration from MDM

BBPOU Logo

**Pay Bill**


  
BHARAT BILL PAYMENT SYSTEM

**Bill Name**  
Electricity Board Nigam Limited

**Consumer Number**  
12345678

**Consumer Name**  
Mr. Kumar

**Bill Date**  
dd/mm/yyyy

**Bill Period**  
Month/Year

**Bill Number**  
54321678

**Bill Due Date**  
dd/mm/yyyy

**Payee Mobile Number**  
9999999999

**Bill to be Paid**

Base Bill Amount     Option B

Option A                 Option C

**Amount**  
100

**Select Payment Mode**  
Cash ▼

**Customer Convenience Fees**  
2

**Total Amount**  
102

PAY

4. All the mandatory parameters should be displayed
5. Option should be available for the user to select Amount to be paid
6. Biller limits should be handled at the frontend itself. The same have been configured for all billers.
7. Currently, the biller limits for all the billers that are active in the system are as below:
  - a. Rs 49,999 for cash payments (All Billers)
  - b. Rs 200,000 for all other payments modes (for DTH & Broadband limit remains at Rs 49,999)
8. The above mockup displays a scenario, where the biller intends to pass 4 amount block parameters in Bill Fetch Response. The details regarding the amount block parameters will be updated in the Biller MDM.
9. CCF should be calculated basis the payment mode and amount selected for payment
10. Following is an example of a biller response block:

```
<BillerResponse amount="200" billDate="2016-10-01" billNumber="12303001" billPeriod="October" customerName="Manoj" dueDate="2016-10-31">
```

```
<Tag name="A" value="50"/>
<Tag name="B" value="75"/>
<Tag name="C" value="25"/>
</BillerResponse>
```

The biller configuration for this biller is as follows:

```
paramName:"A","dataType":"NUMERIC","optional":true,
paramName:"B","dataType":"NUMERIC","optional":true,
paramName:"C","dataType":"NUMERIC","optional":true,
```

```
"amountOptions":[
{"amountBreakupSet":["BASE_BILL_AMOUNT"]},
{"amountBreakupSet":["A"]},
{"amountBreakupSet":["B"]},
{"amountBreakupSet":["C"]},
{"amountBreakupSet":["BASE_BILL_AMOUNT","A"]},
{"amountBreakupSet":["BASE_BILL_AMOUNT","B"]},
{"amountBreakupSet":["BASE_BILL_AMOUNT","C"]},
{"amountBreakupSet":["BASE_BILL_AMOUNT","A","B"]},
{"amountBreakupSet":["BASE_BILL_AMOUNT","A","C"]},
{"amountBreakupSet":["BASE_BILL_AMOUNT","A","B","C"]},
{"amountBreakupSet":["BASE_BILL_AMOUNT","B","C"]},
{"amountBreakupSet":["A","B"]},
{"amountBreakupSet":["A","C"]},
{"amountBreakupSet":["A","B","C"]},
{"amountBreakupSet":["B","C"]}]
```

For the given amount breakup set, following calculations are possible.

Scenario	Combination	Calculation
1	{"amountBreakupSet":["BASE_BILL_AMOUNT"]},	200
2	{"amountBreakupSet":["A"]},	50
3	{"amountBreakupSet":["B"]},	75
4	{"amountBreakupSet":["C"]},	25
5	{"amountBreakupSet":["BASE_BILL_AMOUNT","A"]},	200+50 = 250
6	{"amountBreakupSet":["BASE_BILL_AMOUNT","B"]},	200+75 = 275
7	{"amountBreakupSet":["BASE_BILL_AMOUNT","C"]},	200+25 = 225
8	{"amountBreakupSet":["BASE_BILL_AMOUNT","A","B"]},	200+50+75 = 325
9	{"amountBreakupSet":["BASE_BILL_AMOUNT","A","C"]},	200+50+25 = 275
10	{"amountBreakupSet":["BASE_BILL_AMOUNT","A","B","C"]},	200+50+75+25 = 350

11	{"amountBreakupSet":["BASE_BILL_AMOUNT","B","C"]},	200+75+25 = 300
12	{"amountBreakupSet":["A","B"]},	50+75 = 125
13	{"amountBreakupSet":["A","C"]},	50+25 = 75
14	{"amountBreakupSet":["A","B","C"]},	50+75+25 = 150
15	{"amountBreakupSet":["B","C"]}	75+25 = 100

## 6.2 Bill Payment and Customer Convenience Fee Calculation (CCF)

The BBPS system envisages two types of Customer Convenience Fees:

- One which is induced by the biller BBPOU (CCF1)
- Second which is induced by the customer BBPOU (CCF2)

### 6.2.1 Biller BBPOU induced Customer Convenience Fees (CCF1)

1. The system allows the Biller BBPOU to mark a customer convenience fee (CCF1) on behalf of the biller and it is part of Biller MDM.
2. This amount will be a part of the clearing and settlement and will be passed back to the biller along with the transaction amount and applicable tax.
3. While attempting a Bill Payment Transaction for a Biller, a biller induced customer Convenience Fee may be applied depending on Payment Channel/Mode/Bill Value.
4. It is the responsibility of Customer BBPOU to calculate the correct CCF once the customer attempts the payment and presents it on the screen.
5. Please find below a sample CCF calculation methodology.

fee_id	bou_id	blr_id	fee_code	fee_description	tran_amt_min	tran_amt_max	percen_t_fee	flat_fee	fee_direction
41	OU44	TSTY000 00RAJ11	QCF	Customer_Convenience_Fee_for_QCF	201	9999999 999	1	100	C2B

Now based on Biller, Biller OU, MTI, Mode and Channel we arrive at the following convenience fee (QCF) combination in the **interchange fee** configuration table as follows:

Amount Say = 300

Convenience Fee =  $\text{Round}(300 * 1/100 + 100) = \text{Round}(103) = 103$

Convenience Fee + Taxes =  $\text{Round}(103 + 103 * 15/100) = \text{Round}(103 + 15.45) = \text{Round}(118.45) = \mathbf{118}$

This 118 value is to be then presented on the front-end as **custConvFee** to the customer.

### 6.2.2 Customer BBPOU induced Customer Convenience Fees (CCF2)

1. BBPS scheme will notify a maximum amount that a customer BBPOU can charge the customer alongside CCF1.
2. The CCF2 may be at Biller level and can vary basis of Payment channel, Payment mode (OFFUS / ONUS) and Payment value.
3. The Customer BBPOU can choose to charge the customer upto the maximum amount that is notified by BBPCU
4. Customer OU will have to pass two attributes as below
  - a. <PaymentMethod/> OFFUSPay="Yes|No"
  - b. <Amount/> COUcustConvFee = "XXX"
5. This value will not be passed for clearing and settlement. This amount is retained by the Customer BBPOU.
6. The CCF2 will be recorded at the BBPCU level for regular audit and compliance check
7. The customer should be able to view only one CCF in the system i.e. addition of CCF1 and CCF2

## 7 Non-Bill Fetch Scenario

1. In this example, Payee Mobile number and Bill Fetch Parameters are different
2. Option should be available to dynamically populate content of the label and text box validation basis the biller configuration from MDM
3. Selection/Displaying of Payment Mode is mandatory
4. CCF should be calculated after entering the Amount and selection of Payment Mode
5. Total Amount includes CCF

### Pay Bill



**Biller Name**  
VODAFONE

**Payee Mobile Number**  
9999999999

**Mobile Number**  
8787878787

**Amount**  
100

**Select Payment Mode**  
Cash

**Customer Convenience Fees**  
2

**Total Amount**  
102

**PAY**

## 8 Payment Request and Response

BBPOU Logo

**Confirm Payment Details**


  
BHARAT BILL PAYMENT SYSTEM

<b>Bill Name</b>	<b>Payee Mobile Number</b>
Electricity Board Nigam Limited	9999999999
<b>Consumer Number</b>	<b>Consumer Name</b>
12345678	Mr. Kumar
<b>Bill Date</b>	<b>Payment Mode</b>
dd/mm/yyyy	Cash
<b>Amount</b>	<b>Customer Convenience Fees</b>
100	2
	<b>Total Amount</b>
	102

BACK
PAY

BBPOU Logo


  
BHARAT BILL PAYMENT SYSTEM

Transaction Successful !!!

<b>Transaction ID</b>	<b>Transaction Date and Time</b>
AB0123456789	dd/mm/yyyy hh:mm:ss
<b>Transaction Status</b>	<b>Payment Channel</b>
Status	Agent Outlet
<b>Bill Name</b>	<b>Biller ID</b>
Electricity Board Nigam Limited	ELECMAH00000012345
<b>Consumer Name</b>	<b>Payment Mode</b>
Mr. Kumar	Cash
<b>Payee Mobile Number</b>	<b>Amount</b>
9999999999	100
<b>Consumer Number</b>	<b>Customer Convenience Fees</b>
12345678	2
<b>Bill Date</b>	<b>Total Amount</b>
dd/mm/yyyy	102

E-mail
Print

## 9 Receipt generation

1. Bharat Bill Payment Service (BBPS) being anytime and anywhere, instant Bill Payment facility is expected to be used by large cross section of the society for paying their bills.
2. Success of the BBPS depends upon the customer experience at the agent outlets or through the self-service channels, e.g., Internet or Mobile.
3. A verifiable confirmation of bill payment would not only encourage repeat usage but also go a long way in fostering customer confidence and thereby establishing BBPS as a trusted brand.
4. Instant payment confirmation which can be independently verified by the customer at any BBPS touch point or a website or by sending it via SMS to a central number, is one of the unique features of BBPS. This would eliminate ambiguity and uncertainty and provide the customer with the convenience of transaction completion in a single session.
5. Upon successful completion of payment made at the BBPS outlet, an instant confirmation of bill payments should be provided to the customer by means of an SMS/ email/ print out as desired by the customer for payments made at physical outlets.
6. BBPOUs are requested to take note of the following ;
  - a. **For payment made at Physical Outlets of Agents:** Upon successful completion of payment made at the BBPS outlet, an instant confirmation of bill payments will be provided to the customer by means of an SMS/ email/ print out as desired by the customer. It may be noted that the SMS and email confirmation refer to the confirmation provided by the Customer BBPOU and not those provided by the Agents or Agent Institutions.
  - b. **For payment made through electronic/ digital channels such as online/ net-banking / mobile, etc.:** Upon successful completion of payment, an instant confirmation of bill payments will be displayed on the device/ channel used for making bill payment. In addition, an electronic payment confirmation will be provided by the BBPOU to the customer by means of an SMS and/or email as desired by the customer. The BBPOU may at their option, or if mandated by

the biller, provide an option of generating a confirmation of payment in softcopy which can be printed by the customer.

7. Please take note that in terms of the BBPS standards, the following fields must be included in the BBPS bill payment receipt (physical and/ or digital )
  - a. BBPS logo -top right hand side (please refer to the attachment)
  - b. Logo of BBPOU (top left hand side)
  - c. Name of the customer
  - d. Name of the biller
  - e. Biller ID
  - f. Transaction Ref ID
  - g. Consumer ID (given by the Biller)
  - h. Mobile number to which the SMS is being sent.
  - i. Payment Mode
  - j. Payment Channel
  - k. Bill Date
  - l. Bill amount
  - m. Customer Convenience Fee
  - n. Total Amount
  - o. Date and time of bill payment transaction
  - p. Website URL, on which the Consumer may input the Transaction RefID to verify authenticity of the Transaction OR the customer helpdesk mail id where the query regarding the bill payment needs to be sent (may be pre-printed)

8. Format of the SMS alert can be as follows:

'Thank you for payment of ₹<AMOUNT> against <BILLERNAME>, Consumer no<CONSUMERNO.>, Txn Ref ID <12digitRefID> on <DATE&TIME> vide <Pmt Chnl>'

(Maximum 160 characters)

9. It may be noted that the instant confirmation of the bill payment and subsequent issuance of BBBPS receipts as specified below being part of the BBPS standards must be adhered to by all the BBPOUs.

BBPOU Logo



**Transaction Successful !!!**

**Transaction ID**  
AB0123456789

**Transaction Status**  
Status

**Biller Name**  
Electricity Board Nigam Limited

**Consumer Name**  
Mr. Kumar

**Payee Mobile Number**  
9999999999

**Consumer Number**  
12345678

**Bill Date**  
dd/mm/yyyy

**Transaction Date and Time**  
dd/mm/yyyy hh:mm:ss

**Payment Channel**  
Agent Outlet

**Biller ID**  
ELECMAH00000012345

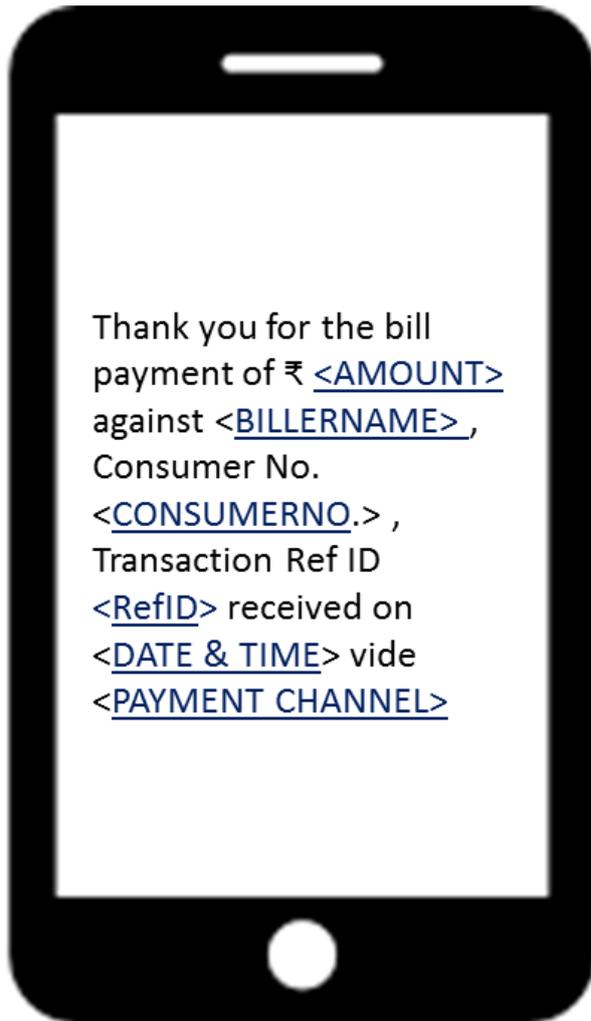
**Payment Mode**  
Cash

**Amount**  
100

**Customer Convenience Fees**  
2

**Total Amount**  
102

## 9.1 Sample Receipt Formats



## 10 Bill Presentment

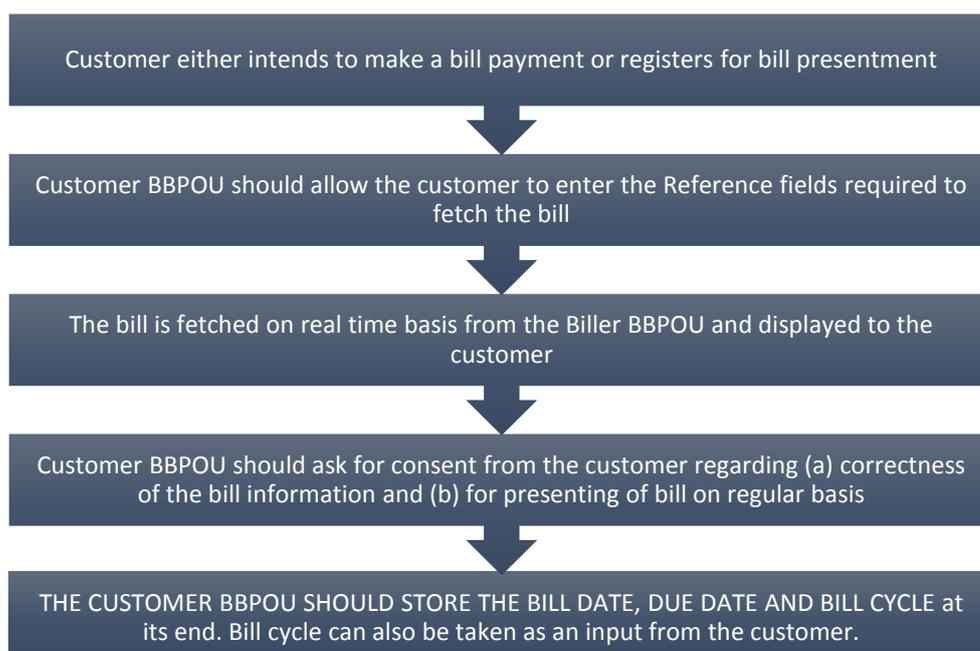
1. Bill Presentment is a process that enables the customer to receive bills, on regular basis, as and when the bill is generated
2. BBPS offers two methods of bill presentment, which the Customer BBPOU can adopt-
  - a. **ONLINE Bill Presentment** (Preferred method)
  - b. **OFFLINE Bill Presentment** (Current method)

### 10.1 ONLINE Bill Presentment

1. Online Bill Presentment is a preferred method of generating and presenting the bill to the customer. It ensures that the bill information reaches the customer soon after the bill is generated at the billers end.
2. The process of adapting the online bill presentment is detailed out below.
3. There are two level activity that the customer BBPOU will have to follow:
  - a. Collate the data from the customer (One-time activity)
  - b. Fetch the bill and present it to the customer (Ongoing activity)

#### 10.1.1 One time Activity

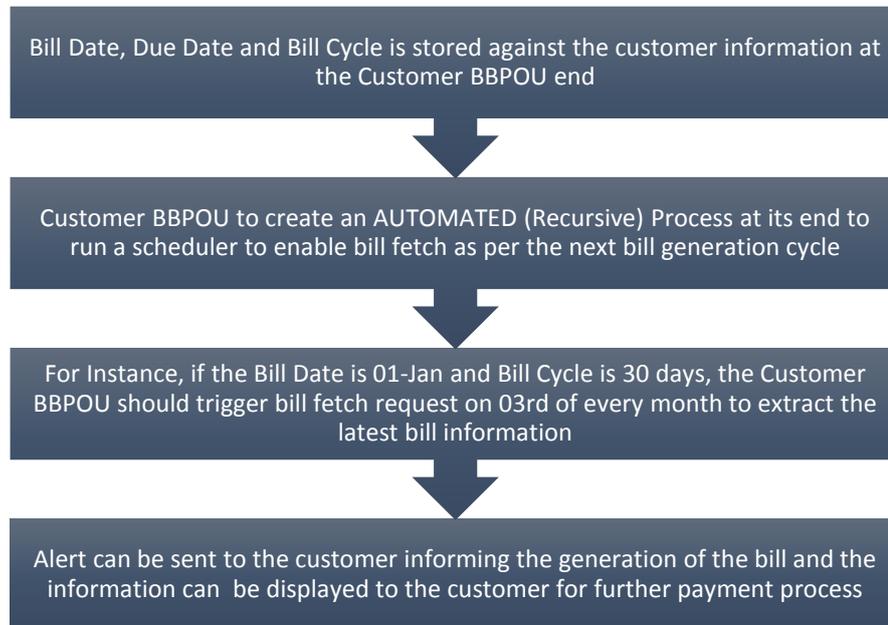
The below mentioned process is a one-time activity that the BBPOU will have to follow for extracting the bill information and storing at its end.



Once the data is stored at the Customer BBPOU end, the bill date, due date and bill cycle can be used to identify the next billing cycle and automate the bill fetch process.

### 10.1.2 Ongoing process

The below process is an ongoing activity at the Customer BBPOU end for enabling bill fetch and presenting to the customer.



The Customer BBPOU should ask for consent from the Customer before storing the information for the purpose of bill presentment.

*I hereby wish to receive bills generated by the billers on regular basis.*

PAY

## 10.2 OFFLINE Bill Presentment

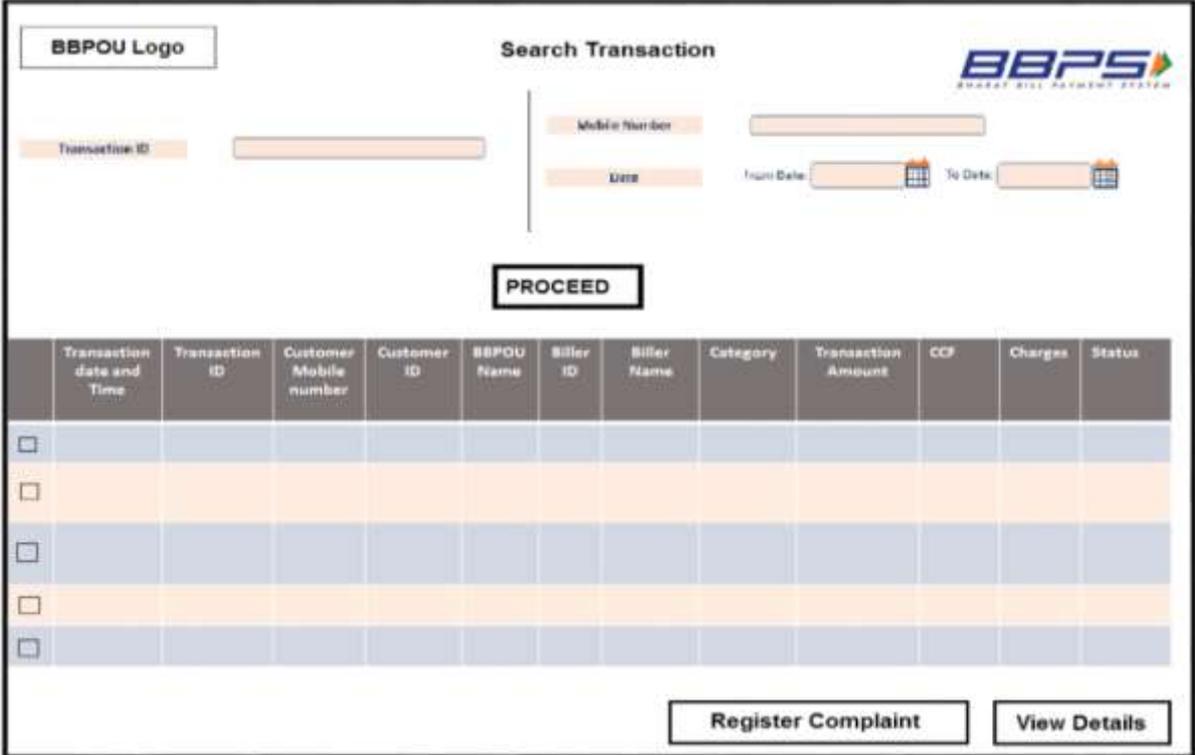
1. Offline Bill Presentment is the current method of presenting the bill to the customer.
2. In this case, BBPOU collates the information from the customer and generates a bulk file.
3. The file is then uploaded on the BBPCU system
4. BBPCU segregates the data and the request is redirected to the respective biller BBPOU.

5. Biller BBPOU will respond to the bill presentment request in the specified format as and when the bill is generated.
6. BBPCU will accordingly route the transaction to the Customer BBPOU.
7. The customer BBPOU can then further send alerts to the customer informing about the bill being presented.
8. The customer should be able to view the bill generated at the BBPOU end and accordingly make payment.

**Bill Payment for the above presentment requests can be auto-scheduled (Standing Instruction) basis of Due date or can be customer triggered basis of the preference of the customer.**

## 11 Search Transaction

1. BBPOU should enable the user to search any transaction that has been executed on the BBPS Platform.
2. User should be able to search a transaction based on the following additional fields.
  - Transaction ID
  - Mobile Number & Date Range



	Transaction date and Time	Transaction ID	Customer Mobile number	Customer ID	BBPOU Name	Biller ID	Biller Name	Category	Transaction Amount	CCF	Charges	Status
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												
<input type="checkbox"/>												

3. For searching a transaction for logged in and non-logged in sessions, OTP process should be followed if search through mobile number is selected.
4. For non-logged in session searching through Mobile number is optional
5. OTP should be generated by the BBPOU for the mobile number entered at the time of transaction.
6. Logs regarding verification should be stored.
7. Fields to be displayed as an output of “View Transactions” section may be the following. This is only an indicative list of fields; there can be additional fields to this
  - Transaction date and time
  - Transaction ID
  - BBPOU Name

- Biller Name
- Biller ID
- Customer Mobile number
- Customer ID
- Biller Category
- Transaction Amount
- CCF
- Charges
- Status

8. Option should be available for the customer to take a print-out of the same.

## 12 Complaint registration and tracking

### 12.1 Registration

1. BBPOU system should have adequate functionalities to handle customer complaints, both for ON-US and OFF-US transaction carried out in BBPS network. While details are given in the BBPS Procedural Guidelines and standards, certain important features mentioned below that are required for complaints registration and tracking should be available in the BBPOU front-end.
2. The customer will be able to register complaint for both ON-US and OFF-US transactions through the BBPOU channel.
3. Registering of complaint from BBPOU channel will be API based (501)
4. The BBPOU will have to follow the process of verifying the customer basis OTP validation to register a complaint from both logged in and non-logged in session if the search is executed through mobile number.
5. Registering a complaint through non-logged in session through mobile number is optional
6. The customer will be able to register complaint for any transaction executed on the BBPS ecosystem. A customer can lodge a complaint at any outlet of any BBPOU, and not necessarily only with the BBPOU where the transaction was carried out. The role of a BBPOU outlet that is not the outlet where the transaction was carried out, will be confined to registering the complaint in the system and advising complaint registration number to the complainant. Thereafter, it will have no role in complaint follow up or resolution. Typical workflow of complaint registration will be as follows.

	Service Based	Transaction Based
Step 1:	Enter Mobile Number	Enter Mobile Number / Transaction ID / Date Range
Step 2:	Generate & enter OTP	Generate & enter OTP

Step 3:	Select Complaint Against: <ul style="list-style-type: none"> <li>▪ Agent</li> <li>▪ Biller</li> <li>▪ System (will be added later)</li> </ul>	Fetch Information (for OFF-US from CU database for ON-US from OU database)
Step 4:	Select relevant disposition type	Select relevant disposition type
Step 5:	Enter description	Enter description
Step 6:	Submit Complaint. BBPCU will assign it to respective OU	Submit Complaint. BBPCU will assign it to respective OU.

7. For transactional based complaints, Information that needs to be fetched is as per the API.

### 12.1.1 Mockups for Transactional Based Complaints

BBPOU Logo

**Register Complaint**


  
BHARAT BILL PAYMENT SYSTEM

**Type of Complaint**

**Enter your Mobile Number**

**Transaction ID**

**Date Range**

Transaction Based

From Date:  To Date:

**View**

**Biller Name**

Electricity Board Nigam Limited

**Consumer Number**

12345678

**Payee Mobile Number**

9999999999

**Consumer Name**

Mr. Kumar

**Payment Mode**

Cash

**Customer Convenience Fees**

2

<b>Bill Date</b>	<b>Total Amount</b>
dd/mm/yyyy	102
<b>Amount</b>	<b>Transaction Status</b>
100	Success
<b>Transaction ID</b>	<b>Transaction Date &amp; Time</b>
AB01123456789	20-Dec-2016 11:00:00 am
<b>Complaint Reason</b>	Auto-populated Dispositions ▼
<b>Complaint Description</b>	Description
<input type="button" value="BACK"/> <input type="button" value="Register"/>	

### 12.1.2 Mockups for Service Based Complaints

BBPOU Logo

## Complaint Registration



Type of Complaint	Service Based ▼
Enter your Mobile Number	
Complaint Type	Agent/Biller/System ▼
Complaint Reason	Auto-populated Dispositions ▼
Complaint Description	Description

### 12.1.3 List of Disposition

1. The below list of dispositions should be configurable.
2. BBPCU may edit, add and delete any disposition to the list.

Type of complaint	Master Disposition List	Issue Related to:
Transaction Level	Transaction Successful, account not updated	Transaction
Transaction Level	Amount deducted, biller account credited but transaction ID not received	Transaction
Transaction Level	Amount deducted, biller account not credited & transaction ID not received	Transaction
Transaction Level	Amount deducted multiple times	Transaction
Transaction Level	Double payment updated	Transaction
Transaction Level	Erroneously paid in wrong account	Transaction
Transaction Level	Others, provide details in description	Transaction
Service Based	Agent not willing to print receipt	Agent
Service Based	Agent misbehaved	Agent
Service Based	Agent outlet closed	Agent
Service Based	Agent denying registration of complaint	Agent
Service Based	Agent not accepting certain bills	Agent
Service Based	Agent overcharging	Agent
Service Based	Biller available. Unable to transact	Biller/System
Service Based	Multiple failure for same biller	Biller/System
Service Based	Denomination not available	Biller
Service Based	Incorrect bill details displayed	Biller
Service Based	Incomplete / No details reflecting	Biller

### 12.2 Complaint Acknowledgement Receipt via SMS

Once the complaint is registered successfully, the customer shall receive an acknowledgement via SMS stating the complaint ID to track the complaint status.

### 12.2.1 Sample Acknowledgement Format

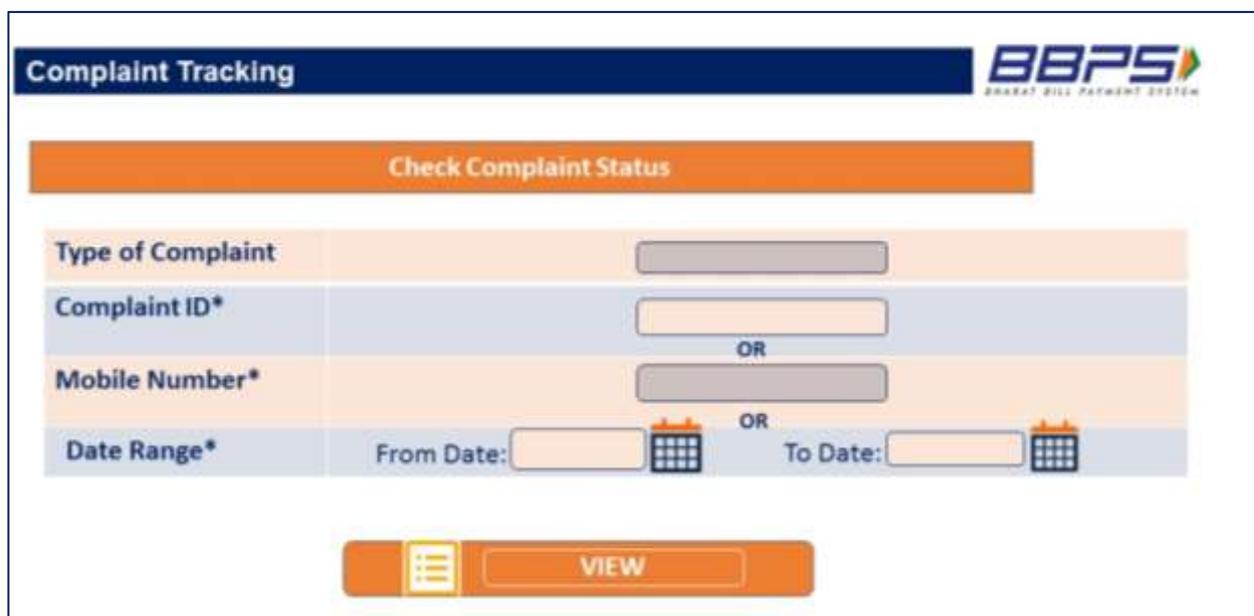
Your Complaint has been registered successfully. Your Complaint ID is XXXXXXXXX. You can track status of your complaint using your Complaint ID.

### 12.3 Complaint Tracking

1. The customer will be able to track all registered complaints.
2. Tracking of complaint from BBPOU channel will be API based.

	Service Based	Transaction Based
Step 1:	Enter Complaint ID / Mobile Number / Date Range	Enter Complaint ID / Mobile Number / Date Range
Step 2:	View details	View details

#### 12.3.1 Complaint Tracking Sample Screens



## 13 Customer Registration Module (Optional and to be Released)

This optional functionality enables customers to register with the BBPCU. Customers can register through BBPOU portal or agent portal, in such a case registration will happen through a set of APIs.

### 13.1 Customer Registration

1. The customer clicks the Register link.
2. BBPOU to first check through an API if the mobile number is already registered with BBPCU
3. If the number is registered, the BBPOU should enable the customer to login to a secured section and access bill information
4. If the number is not registered, control moves to the Generate OTP. The system prompts the customer for the OTP.
5. The customer enters the OTP s/he received.
6. If the OTP is correct, the customer can proceed with providing further information.
7. The system should display a page with the following fields:
  - a. Heading: Register with Bharat Bill Payment System along with BBPS Logo
  - b. Label: \* indicates required fields
  - c. Textbox: Mobile Number\*
    - i. Required
    - ii. Only numbers allowed
    - iii. Max length 10
  - d. Textbox: Customer Name\*
    - i. Required
    - ii. Only characters allowed
    - iii. Max length 30
  - e. Radio buttons: Gender
    - i. Options: Male, Female
    - ii. System should store 'M' or 'F' based on selection
  - f. Date picker: Date of Birth
    - i. Must not allow selection of date less than 18 years from current date

- g. Textbox: E-mail Address
  - i. Alphanumeric
  - ii. E-mail address format checking must be done
  - iii. Max length 50
- h. Textbox: Address Line 1\*
  - i. Required
  - ii. Alphanumeric
  - iii. Max length 50
- i. Textbox: Address Line 2
  - i. Alphanumeric
  - ii. Max length 50
- j. Textbox: Address Line 3
  - i. Alphanumeric
  - ii. Max length 50
- k. Textbox: City\*
  - i. Required
  - ii. Only characters allowed
  - iii. Max length 15
- l. Drop down list: State\*
  - i. Selection required
  - ii. Default = “—Select State—“
- m. Textbox: PIN\*
  - i. Required
  - ii. Numbers only
  - iii. Max length 6
- n. Textbox: Aadhaar number
  - i. Numbers only
  - ii. Max length 12
- o. Textbox: PAN
  - i. Alphanumeric
  - ii. Max length 10
- p. Textbox: Passport Number

- i. Alphanumeric
  - ii. Max length 8
- q. Button: Save
- r. Button: Cancel
- 8. The user clicks the Save button.
- 9. BBPOU sends the data to BBPCU through API.
- 10. The BBPCU sends the Customer ID and temporary password to the mobile number and e-mail address (if provided) of the customer.

### 13.2 Login Facility

- 1. This feature should enable the customer to log into a secured section to view all the transactions executed by him on the BBPS network, through any BBPOU.
- 2. The validation of the user ID and password will happen at BBPCU level.
- 3. The system displays the following:
  - a. Label: \* indicates required fields
  - b. Radio button set: Login Using:
    - i. Radio button: Password
      - 1. Selected by default
    - ii. Radio button: OTP
  - c. Instructional text: Click the Generate OTP button to receive an OTP on your registered mobile. This will happen only if the customer clicks “Login using OTP”
    - i. Hidden if Password radio button selected, visible otherwise
  - d. Button: Generate OTP
    - i. Hidden if Password radio button selected, visible otherwise
  - e. Textbox: Mobile No.
    - i. Required
    - ii. Numbers only
    - iii. Max length 10
  - f. Textbox: Password
    - i. Hidden if OTP radio button selected, visible otherwise
    - ii. Required if not hidden

- g. Textbox: OTP
    - i. Hidden if Password radio button selected, visible otherwise
    - ii. Required if not hidden
    - iii. Numbers only
    - iv. Max length 6
  - h. Button: Login
  - i. Link: Forgot Username
  - j. Link: Forgot Password
2. The user clicks the Login button and the system checks the login ID-password combination (or mobile number-OTP combination) and finds it valid.
  3. The user is logged in and taken to the secured section
  4. User should be able to access the below sections:
    - a. Bill Management (Add/View/Delete)
    - b. Bill Presentment
    - c. Complaint Registration and Tracking
    - d. View Billers
    - e. View Previous Transactions
    - f. Change Personal Information