GUIDELINES FOR CUSTOMER FRONT-END AT BBPOU

Bharat Bill Payment System

Version 1.5

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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-	V1.1
	2016	
30-Dec-2016	Page 6 & 7: Section 4.1.1 and exceptions.	V1.2
	Page 13: Section 5.2 on CCF	
	Page 22: Bill Presentment	
19-Jan-2017	Section 4.1 – Addition of various type of billers	V1.3
	New section 5 on Biller Characteristics	
	Section 6.1 – Added biller limits	
	Section 10: Elaboration of Bill Presentment	
06-Jul-2017	Section 11 & 12 - OTP process added while searching	V1.4
	transaction and registering complaint	
	Section 6 – Validation of min Length and max Length	
	for input parameters	
	Section 12- Complaint Registration SMS format	
04-Dec-2017	Brand Guidelines addition	V 1.5



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 Bharat BillPay outlets, should follow the key aspects highlighted in this document.

Bharat Bill Payment System 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 BBOPUs.



3 Bharat BillPay Branding Guidelines

- Bharat BillPay Logo and Branding should be displayed across all channels from where the customer can execute transactions at the BBPOUs end. The Bharat Bill Payment System brand guidelines must be followed as delineated in Annexure-I
- 2. On the BBPOU portal, sections should be available specifically displaying all the billers under Bharat BillPay scheme.
- 3. On the BBPOU portal, the Bharat BillPay Logo and other branding should be :
 - a. Displayed at **each page** of transactional flow, search transaction, complaint registration and search complaint

Section	Bharat BillPay 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 Bharat Bill Payment System 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 Billers" and Bharat BillPay 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 Bharat Bill Payment System, it should route to Bharat Bill Payment System 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 Bharat Bill Payment System 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 Bharat Bill Payment System MDM on weekly basis
- 5. Title can be displayed as "Bharat Bill Payment System 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)
- 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	Supports	Transaction	Quick Pay	Implication for the
	Requirement	Adhoc		value in	Front-end
				BillPayReq	
ONLINE	OPTIONAL	Т	1) QuickPay can be done	1)Yes	For such billers, both
			(for any amount)	2)No	option should be



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



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

- 11. The system displays a page with the following data in tabular format (data size=15, Previous/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. Pin code
- 12. The page should display the Bharat BillPay 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 Bharat Bill Payment System 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	Riller Name
Populated with all Active biller categories	
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 N	Name 🔄 Biller ID
Biller Category	Biller Name
Populated with all Active biller categories	VODAFONE
Coverage	Biller ID
Populated with all State Names and National	
Populated with all City Names within a State	
	SEARCH

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

Pay Bill	
Biller Name	DILLFAI
VODAFONE	
Payee Mobile Number	



Biller Name ABC Life Insurance Payee Mobile Number	Pay Bill
ABC Life Insurance Payee Mobile Number	Biller Name
Payee Mobile Number	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
- 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
 - 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



- blr_payment_modes This field states the acceptable payment modes by the biller (if any)
- 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.
- 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

- 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.
- 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.
- 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)

BBPOU Logo	Fetch Bill	BHARAT BILLPAY
Biller Name Electricity Board Niga	m Limited	
Payee Mobile Number		
9999999999		
Consumer Number		
12345678		
	PF	ROCEED

- 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	<u>Pay Bill</u>	
Biller Name		
Electricity Board Nigam Limited		Payee Mobile Number
		9999999999
Consumer Number		Bill to be Boid
12345678		
		Search Base Bill Amount Deption B
		Option A Option C
Bill Date		
dd/mm/www		Amount
aammiyyyy		100
Bill Period		Select Payment Mode
Month/Year		Cash 🗸
Bill Number		Customer Convenience Fees
54321678		2
		Total Amount
Bill Due Date		
dd/mm/yyyy		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. ₹49,999 for cash payments (All Billers)
 - t ₹ 200,000 for all other payments modes (for DTH & Broadband limit remains at ₹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)

- 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	bou	blr_id	fee_	fee_description	tran_a	tran_am	percen	flat	fee_dir
_id	_id		code		mt_min	t_max	t_fee	_fe	ection
								е	
41	OU	TSTY000	QCF	Customer_Convenie	201	9999999	1	100	C2B
	44	00RAJ11		nce_Fee_for_QCF		999			

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 = Round(300*1/100 +100) = Round(103) = 103 Convenience Fee + Taxes = Round(103 + 103*15/100) = Round(103 + 15.45) = Round(118.45) = **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.
- 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
- 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	BHARAT
Biller Name	DILLFAI
VODAFONE	
Payee Mobile Number	
9999999999	
Mobile Number	
8787878787	
Amount	
100	
Select Payment Mode	
Cash	\mathbf{c}
Customer Convenience Fees	
2	
Total Amount	
102	
	PAY



BBPOU Logo	Confirm Paymen		BILLPAY
Biller Name		Payee Mobile Number	1
Electricity Board Nigam Limit	ed	999999999	
Consumer Number		Consumer Name	
12345678		Mr. Kumar	
Bill Date		Payment Mode	
dd/mm/yyyy		Cash	·
Amount		Customer Convenience Fees	
100		2	
		Total Amount	
		102	
		BACK PAY	
BBPOU Logo Transaction Successful !!!		BB	HARAT ILLPAY
BBPOU Logo Transaction Successful !!! Transaction ID		Transaction Date and Time	HARAT ILLPAY
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789		Transaction Date and Time dd/mm/yyyy hh:mm:ss	
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789 Transaction Status		Transaction Date and Time dd/mm/yyyy hh:mm:ss Payment Channel	
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789 Transaction Status Status		Transaction Date and Time dd/mm/yyyy hh:mm:ss Payment Channel Agent Outlet	
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789 Transaction Status Status Biller Name		Transaction Date and Time dd/mm/yyyy hh:mm:ss Payment Channel Agent Outlet Biller ID	HARAT ILLPAY
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789 Transaction Status Status Biller Name Electricity Board Nigam Limit	ed	Transaction Date and Time dd/mm/yyyy hh:mm:ss Payment Channel Agent Outlet Biller ID ELECMAH00000012345	
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789 Transaction Status Status Biller Name Electricity Board Nigam Limit Consumer Name	ed	Transaction Date and Timedd/mm/yyyy hh:mm:ssPayment ChannelAgent OutletBiller IDELECMAH0000012345Payment Mode	
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789 Transaction Status Status Biller Name Electricity Board Nigam Limit Consumer Name Mr. Kumar	ed	Transaction Date and Time dd/mm/yyyy hh:mm:ss Payment Channel Agent Outlet Biller ID ELECMAH00000012345 Payment Mode Cash	
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789 Transaction Status Status Biller Name Electricity Board Nigam Limit Consumer Name Mr. Kumar Payee Mobile Number	ed	Transaction Date and Time dd/mm/yyyy hh:mm:ss Payment Channel Agent Outlet Biller ID ELECMAH00000012345 Payment Mode Cash Amount	
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789 Transaction Status Status Biller Name Electricity Board Nigam Limite Consumer Name Mr. Kumar Payee Mobile Number 999999999	ed	Transaction Date and Time dd/mm/yyyy hh:mm:ss Payment Channel Agent Outlet Biller ID ELECMAH00000012345 Payment Mode Cash Amount 100	
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789 Transaction Status Status Biller Name Electricity Board Nigam Limit Consumer Name Mr. Kumar Payee Mobile Number 9999999999 Consumer Number	ed	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	
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789 Transaction Status Status Biller Name Electricity Board Nigam Limit Consumer Name Mr. Kumar Payee Mobile Number 999999999 Consumer Number 12345678	ed	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	
BBPOU Logo Transaction Successful !!! Transaction ID AB0123456789 Transaction Status Status Biller Name Electricity Board Nigam Limit Consumer Name Mr. Kumar Payee Mobile Number 999999999 Consumer Number 12345678 Bill Date	ed	Transaction Date and Timedd/mm/yyyy hh:mm:ssPayment ChannelAgent OutletBiller IDELECMAH00000012345Payment ModeCashAmount100Customer Convenience Fees2Total Amount	



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.
- 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 <u>confirmation provided by the Customer BBPOU</u> and not those provided by the Agents or Agent Institutions.
 - b. For payment made through electronic/ digital channels such as online/ netbanking / 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
 - I. 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	BHARAT
Transaction Successful !!!	
Transaction ID	Transaction Date and Time
AB0123456789	dd/mm/yyyy hh:mm:ss
Transaction Status	Payment Channel
Status	Agent Outlet
Biller Name	Biller ID
Electricity Board Nigam Limited	ELECMAH00000012345
Consumer Name	Payment Mode
Mr. Kumar	Cash
Payee Mobile Number	Amount
9999999999	100
Consumer Number	Customer Convenience Fees
12345678	2
Bill Date	Total Amount
dd/mmhana	(100



Thank you for the bill payment of ₹ <u><AMOUNT></u> against <<u>BILLERNAME></u>, Consumer No. <<u>CONSUMERNO</u>.>, Transaction Ref ID <<u>RefID</u>> received on <<u>DATE & TIME</u>> vide <<u>PAYMENT CHANNEL></u>



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

- 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.



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

- 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.
 - o Transaction ID
 - o Mobile Number & Date Range

	BBPOU Log	go	Search Transaction									
_	Transaction ID					Mol	oile Number					
	Transaction to						Date	from Da	te:	To Date:		
					PR	OCEE	2					
	Transaction	Transaction	Customer	Customer	BBPOU	Biller	Biller	Category	Transaction	CCF	Charges	Status
	date and Time	ID	Mobile number	ID	Name	ID	Name		Amount			
	Register Complaint View Details											

- 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
 - o Transaction date and time
 - Transaction ID
 - o BBPOU Name
 - o Biller Name
 - o Biller ID
 - Customer Mobile number
 - o Customer ID
 - Biller Category
 - o Transaction Amount
 - \circ CCF
 - o Charges
 - o 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

- 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
		Enter Mobile Number / Transaction ID / Date
Step 1:	Enter Mobile Number	Range



Step 2:	Generate & enter OTP	Generate & enter OTP
	Select Complaint Against:	
	 Agent 	
	 Biller 	Fetch Information (for OFF-US from CU
Step 3:	 System (will be added later) 	database for ON-US from OU database)
Step 4:	Select relevant disposition type	Select relevant disposition type
Step 5:	Enter description	Enter description
	Submit Complaint. BBPCU will assign	Submit Complaint. BBPCU will assign it to
Step 6:	it to respective OU	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 Regis	ter Complaint		BB	HARAT LLPAY
Type of Complaint	Transaction	ı Based		7
Enter your Mobile Number				
Transaction ID				
Date Range	From Date:	1	ō Date: 🗄	
			View]
Biller Name		Consume	r Name	
Electricity Board Nigam Limited)	Mr. Kuma	ar	
Consumer Number		Payment	Mode	
12345678		Cash		
Payee Mobile Number		Customer	Convenience	Fees
9999999999		2		



Bill Date	Total Amount
dd/mm/yyyy	
	102
Amount	Transaction Status
100	Success
Transaction ID	Transaction Date & Time
AB01123456789	20-Dec-2016 11:00:00 am
Complaint Reason	Auto-populated Dispositions
Complaint Description	Description
	BACK Register

12.1.2 Mockups for Service Based Complaints





Type of complaint	Master Disposition List	Issue Related to:
Transaction Level	Transaction Successful, account not updated	Transaction
	Amount deducted, biller account credited but	
Transaction Level	transaction ID not received	Transaction
	Amount deducted, biller account not credited &	
Transaction Level	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
	Enter Complaint ID / Mobile	Enter Complaint ID / Mobile
Step 1:	Number / Date Range	Number / Date Range
Step 2:	View details	View details

12.3.1 Complaint Tracking Sample Screens

Complaint Tracking				
	Check Compla	int Status		
Type of Complaint				
Complaint ID*			OR	
Mobile Number*			OR	
Date Range*	From Date:		To Date:	
		VIEW		



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
- I. 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



ANNEXURE-A BRAND GUIDELINES

Mnemonic

The Bs of Bharat BillPay come together to form the Bharat BillPay logo unit. A lowercase b is placed on top of an uppercase B to create a simple, yet clever mnemonic that creates a unique property for the brand which is easily identifiable. Together, the new B mnemonic stands for the best solution there is for bill payments.

BHARAT BILLPAY $\mathbf{B} + \mathbf{b} = \mathbf{B}$



The Logo & Colours

The primary colours used for the Bharat BillPay logo have been taken from the NPCI colour palette. The 2 shades of orange bring an element of the future and freshness to this new solution for bill payments, while the blue represents the technology that powers the Bharat BillPay platform.



C- 000 M- 065 Y- 100 K- 000 C- 000 M- 030 Y- 090 K- 000

C- 100 M- 090 Y- 000 K- 020

B BHARAT BILLPAY







The Bharat BillPay logo can be used in multiple sizes but the size cannot be lesser than 20mm as show here.





Website

The Bharat BillPay logo, when used on a website, should be present on the top right-hand corner of the page in 120 pixels size for optimum visibility.

			1024 pixeis			
					120 pi	els
NetBa	nking				BBL	
Wy Bills	•	Bharat Bill P	avment System (BBPS) Billers			
My Billers	•	Please select your	biller from category, location and the specific biller	r by entering biller name that	t you wish to add.	
My Billers Bharat Bill Payment System 🖽	•	Please select your	biller from category, location and the specific biller of	r by entering biller name tha	t you wish to add.	
My Billers Bharat Bill Payment System	*	Please select your BBPS Billers	biller from category, location and the specific biller of	r by entering biller name tha	t you wish to add.	
My Billers Bharat Bill Payment System (2000) BBPS Instapay Query Transaction	•	BBPS Billers	biller from category, location and the specific biller of	r by entering biller name that	t you wish to add. Name	
My Billers Bharat Bill Payment System (2000) BBPS Instapay Query Transaction Check BBPS Complaint clause	► ▼	Please select your BBPS Billers Biller Select Biller	biller from category, location and the specific biller o	r by entering biller name tha	t you wish to add. Name	
My Billers Bharat Bill Payment System BBPS Instapay Query Transaction Check BBPS Complain status	► ▼ nt	Please select your BBPS Billers BILL BILL BILL BILL BILL BILL Category*	biller from category, location and the specific biller of Category == Select Biller Category == v	r by entering biller name that	t you wish to add. Name Vodafone Postpaid	
My Billers Bharat Bill Payment System BBPS Instapay Query Transaction Check BBPS Complaint Status Complaint History	► ▼ nt	Please select your BBPS Billers Biller Select Biller Category* Location	biller from category, location and the specific biller of category Category == Select Biller Category == v == Select Biller Location == v	e by entering biller name tha Biller Name*	t you wish to add. Name Vodafone Postpaid	



Mobile App

The Bharat BillPay logo, when used in a mobile app, should be present on the top right-hand corner of the page in 75 pixels size for optimum visibility.

320	pixels	
		75 pixels
	⊿	^{4G} 📕 📋 11:5
	A	ڻ 🔦
BHARAT BILLPAY PAYMEN	T SYSTEM	B BHARA
From Account		
Available Balance		
Category		~
Amount		
	PROCEED	CANCEL
		72 - 48
\triangleleft	0	

oco pinolo	75 pixel
	3G 🔟 💼 14
*	🔶 d
BHARAT BILLPAY PAYMENT SYSTEM	BBHAR
SUCCESS	
0000000	
Customer Name	
C SHASHIKALA	
Biller Name	
Mahanagar Gas Limited	
Biller ID	
BBPMGL	
Transaction Reference ID	
BOBBB01M4917867	
CA Number	
210000319778	
	ок



Online Recipt

The Bharat BliPay logo, when used on an online receipt, should be present on the top left-hand corner of the receipt in 120 pixels size for optimum visibility.

120 pixels		
B BHARAT BILLPAY	NetBanking	
BPS - Payment Co	nfirmation	
hank You. We have received	your payment request. Please quote your	
ransaction Reference ID for an	y queries for the below payment.	
Transaction Details		
Name of the biller	Vodafone PostPaid	
Mobile number	8879754943	
Bill Number	HD0100069083	
Bill Date (dd/mm/yyyy)	29/06/2017	
Bill Due Date (dd/mm/yyyy)	29/06/2017	
Transaction Ref ID	HD0100069083	
Registered Mobile Number	9029232242	
Payment Mode	Internet Banking	
Payment Channel	Internet Banking (Logged In)	
Bill Amount	10.00	
Customer Convenience Fee	0.00	
Total Amount	10.00	
Transaction Date and Time	29/06/2017 23:17:03	
Clater	PAID	



he Bharat BillPay logo, when used on a paper receipt, hould be present on the top right-hand corner of the receipt n 40mm size for optimum visibility.		210 m	m	
				40 mm
				B BHARAT BILLPAY
		Payment R	eceipt	
	13 Udyog Bhavan, Sonawala Lane, Gor Goregaon, 400063 India Phone: 1802 266 3090 Email: IndiaWowstoktions.in CIN:U74999MH2009PTC196937	egaon (East)		Date: 2017-10-10 Receipt #:1586 Payment
	Payment Mode: Cash		Subscrib	er/Received From:
	Service	Amount (INR)	GST @18% (INR)	Total (INR)
	Internet/Broadband	610.17	109.83	720.00
	internet broadband	Thank you for you	r payment.	72000