India Unified Payment Interface (UPI) User Guide Oracle Banking Payments

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India Unified Payments Interface (UPI) User Guide Oracle Financial Services Software Limited

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1. About this Manual

1.1 Introduction

This manual is designed to help you to quickly get familiar with the India Unified Payments Interface (UPI) functionality of Oracle Banking Payments. It takes you through the various stages in processing a <u>UPI</u> payment transaction.

1.2 <u>Audience</u>

This manual is intended for the following User/User Roles:

Role	Function
Payment Department Operators	Payments Transaction Input functions except Authorization.
Back Office Payment Department Operators	Payments related maintenances/Payment Transaction Input functions except Authorization
Payment Department Officers	Payments Maintenance/ Transaction Authorization
Bank's Financial Controller/ Payment Department Manager	Host level processing related setup for PM module and PM Dashboard/Query functions

1.3 **Documentation Accessibility**

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <u>http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc</u>.

1.4 Organization

This manual is organized into the following chapters.:

Chapter	Description
Chapter 1	About this Manual gives information on the intended audience. It also lists the various chapters covered in this User Manual.
Chapter 2	<u>Unified Payments Interface</u> provides a snapshot of the local payments or payments limited to a specific region.
Chapter 3	<i>Function ID Glossary</i> has alphabetical listing of Function/Screen ID's used in the module with page references for quick navigation.

1.5 Glossary of Icons

This User Manual may refer to all or some of the following icons:

lcons	Function
×	Exit



lcons	Function	
+	Add row	
-	Delete row	
Q	Option List	

1.6 Abbreviations Glossary

Abbreviation	Detailed Description	
UPI	Unified Payments Interface	
<u>VPA</u>	Virtual Payments Address	
UI	User Interface	
ReST	Representational State Transfer	
SOAP	Simple Object Access Protocol	



2. India Unified Payments Interface-UPI

This chapter contains the following sections

- Section 2.1, "Overview of UPI Pay Request"
- Section 2.2, "UPI Maintenances"
- Section 2.3, "UPI Pay Request Remitter Bank Request for Debit Processing"
- Section 2.4, "UPI Pay Request Beneficiary Bank Request for Credit Processing"
- Section 2.5, "UPI Non-Financial API List of accounts linked to Mobile Number"
- Section 2.6, "UPI Payments Message Browser"

2.1 Overview of UPI – Pay Request

2.1.1 Financial API:

- OBPM on receiving 'Pay Request to Debit (ReqPay_Debit API)' on behalf of Remitter Bank in an xml format over HTTPS, it is able to process the debit request by debiting the Payer Account and send back response xml along with success/failure response codes to NPCI UPI.
- OBPM upon receiving 'Pay Request to Credit (ReqPay_Credit API)' on behalf of Beneficiary Bank in an xml format over HTTPS, it is able to process the credit request by crediting the Payee Account and send back response xml along with success/failure response codes to NPCI UPI.
- OBPM generates Debit/Credit Notifications to Payer/Payee upon completion of accounting.

2.1.2 Non-Financial API:

• OBPM upon receiving 'List Accounts API' request in an xml format on behalf of Remitter bank, it is able to identify account numbers and account branch IFSC Codes that are linked for the given customer mobile number and send back response xml to NPCI UPI.

2.1.3 UPI System Connectivity:

 NPCI UPI system connectivity. For all request messages received from NPCI UPI, OBPM generates an acknowledgment message

2.2 UPI Maintenances

This section lists the key common maintenances that are required for processing of India UPI Payments.

- Source Maintenance (PMDSORCE)
- Account level Daily Limits (PMDACCPF)
- External System Maintenances for Sanctions, External Credit Approval and Accounting

For more details on above mentioned maintenance screens, refer to Payments Core User Guide.

The other key maintenances are as follows:



2.2.1 UPI Pay Request Bank Preferences

You can maintain the UPI Pay Request Bank Preferences in this screen maintaining preferences such as transaction limit, pricing code, accounting codes, network account details. This is be referred when processing:

- Debit request API coming in from NPCI UPI when the bank is a 'Remitter Bank'
- Credit request API coming in from NPCI UPI when bank is a 'Beneficiary Bank'

You can invoke the 'UPI Pay Request Bank Preferences' screen by typing 'PVDBKPRF' in the field at the top right corner of the application toolbar and clicking the adjoining arrow button. Click 'New' button on the Application toolbar.

UPI Pay Request Bank Pre	eferences Details			- x
New Enter Query				
Network	Code*	Netw	ork Description	
Host	Code *	Network Ty	/pe Description	
Transaction cu	rrency * INR			
Network Serv	vice ID *			
ReqPay Debit ReqPay Cr	edit			
Transaction Limit		Pricing Details		
Minimum A	mount	Transactio	n Pricing Code	
Maximum A	mount			
Accounting Codes		Network Account	Details	
Accounting	Code *	N	etwork Account	
Maker	Date Time:	Mod No	Record Status	_
Checker	Date Time:		Authorization Status	Exit

You can specify the following fields:

Network Code

Select the Network code from the list of values. If only one Network is maintained with payment type as 'UPI' for the host code, the same is defaulted in this field. In case multiple networks are found for the same combination, all applicable networks are listed. You can select the required network.

Network Description

System defaults the Description on the Network Code selected.

Network Type Description

System defaults the Network Type Description on the Network Code selected.

Host Code

System defaults the Host code of transaction branch.

Transaction Currency

Allowed Currency for UPI payment is 'INR' only. This is defaulted here.

Network Service ID

Specify the Network Service ID.



Transaction Limit

You can specify the Minimum and Maximum Transaction Limit. Transaction Min, Max limit is maintained per UPI Payment (only for Req Pay Debit Request) as required by the bank. Modifiable

Pricing Details, Accounting Codes and Network Account Details are maintained for Request Pay Debit & Request Pay Credit as below:

Transaction Pricing Code

You can select the Pricing Code from the list of values available. Pricing Code maintained in screen Pricing Code maintenance (PPDCDMNT) is linked here. Computation of Charges and Tax are based on the pricing code linked here.

Accounting Code

You can select the Accounting Code from the list of values available. It's a mandatory field.

Network Account Details

You can select the Network Account from the list of values available. While posting the debit / credit accounting, Clearing GL is replaced with Network account if maintained.

2.2.1.1 UPI Pay Request Bank Preferences Summary

You can view a summary of network using 'UPI Pay Request Bank Preferences Summary' screen. To invoke this screen, type 'PVSBKPRF' in the field at the top right corner of the application toolbar and click the adjoining arrow button.

	Request Bank Pret		1507AL						- ×
Search	Advanced Search	Reset Clear	All						
Case Se	ensitive								
	Authorization	Status	~			Record Status	~		
	Network	Code		Q		Host Code		Q	
	Transaction cu			0	N	etwork Service ID		0	
	Transaction cu			~	N	etwork Service ID		~	
Records	perpage 15 🗸 候	┥ 1 Of 1 🔰	G	Lock Colur	mns 0 🗸				
	Authorization Status	Record Status	Network Code	Host Code	Transaction currency	Network Service ID			
									Exit

You can search for the networks using one or more of the following parameters:

- Authorization Status
- Record Status
- Network Code
- Host Code
- Transaction currency
- Network Service ID

Once you have specified the search parameters, click 'Search' button. The system displays the records that match the search criteria.



2.2.2 Account Type Restrictions

You can maintain the Account type restrictions in this existing screen for UPI Payments. For UPI Payments allowed account types are Savings and Current.

You can invoke the 'Account Type Restrictions' screen by typing 'PJDACSTR' in the field at the top right corner of the application toolbar and clicking the adjoining arrow button. Click 'New' button on the Application toolbar.

count Type Restriction								-
ave								
	Host Code	INDIA						
	Network Code	UPI	Q					
Outbound Payment R	estrictions				Inbound Payment	Restrictions	17.00	
	Restriction Type	Allowed •				Restriction Type	Allowed •	
M 4 1 01 1 🕨	Go			+ - 8		Go		+ - =
Account Type*		Account Type Code	9		Account Type *		Account Type Code	
Savings Bank	Q	10			Savings Bank	Q	10	
			D.1. T.				Record Status	
Maker Checker			Date Time: Date Time:		Mod No		Authorization	Cancel

2.2.3 India Payment Account Preferences

The existing screen India Payment Account Preferences screen is modified and below new fields are added:

- Customer Number
- Account Name
- Customer Name

These fields are defaulted based on the customer account number selected.

Branch IFSC field is added as an LOV. This lists open and valid IFSC Codes maintained. You can select the appropriate branch IFSC code for the customer account.



Save						
Host Code Branch Code Customer Account Number * Customer Number Account Currency Account Name Account Type	000	٩		Branch Name Branch IFSC Customer Name Mobile Number MMID Aadhaar Number	+91	
SST State Code GST State Code GST State Name GST IN		۹				
Maker Checker	Date Time: Date Time:		Mod No		ord Status horization Status	Cance

2.2.4 UPI Reject Response Code Maintenance

This screen has factory shipped values for reject response codes mapped to internal error code.

You can invoke the 'UPI Reject Response Code' screen by typing 'PVDRJMNT' in the field at the top right corner of the application toolbar and clicking the adjoining arrow button. Click 'Unlock' button on the Application toolbar.

- You are allowed to update the reject response code and internal error code mapping from here.
- Same error code cannot be linked to more than one valid reject response code.
- Auto reject of a payment request (ReqPay Debit, ReqPayCredit), if applicable,
- is initiated on encountering internal system error codes while processing incoming pay request APIs. Auto rejects are processed with the Reject response code linked to the error code.



UPI Reject Response Code Mappi	ing			- ×
Unlock				
Reject Response	Code * Ø	Response Cor	de Description	
Internal Error Code +	Go Description			+ - =
Maker Checker	Date Time: Date Time:	Mod No	Record Status Authorization Status	Cancel

2.3 <u>UPI Pay Request – Remitter Bank – Request for Debit</u> <u>Processing</u>

This section contains the following topics:

- Section 2.3.1, "ReqPay Debit API Processing"
- Section 2.3.2, "ReqPay Debit Outbound Payments Transaction Input"
- Section 2.3.3, "ReqPay Debit Outbound Payment View"

2.3.1 <u>ReqPay Debit – API Processing</u>

• OBPM processes the incoming request for debit API 'ReqPay Debit'. This API has the Payer VPA, Payer Account, Payer Bank IFSC Code, Transaction Amount, Instruction Date, Payee VPA, Payee Account, Payee Bank IFSC code as input. OBPM generates an acknowledgement message as : <u pi:Ack xmlns:upi="" api="" reqMsgId="" err="" ts=""/>

- The response API returns transaction status confirmation.
- API Name: ReqPay
- Transaction Type: Debit

API Name	Request Input to OBPM	Request from OBPM
----------	-----------------------	-------------------



ReqPay	Timestamp	Timestamp
RespPay	Request Message ID	Response Message ID
	Remarks (Note)	Remarks (Note)
	Туре	Type (Outbound Transaction)
	Payer VPA	Original Request Message ID
	Payer Name	Result
	Payer Mobile Number	Error Code
	Payer Account Number	Payer VPA
	Account Type	Transfer Amount
	Payer Branch IFSC	Transfer Currency 'INR'
	Transfer Amount	ApprovalRef (last 6-digit of UPI
	Transfer Currency 'INR'	reference number)
	Remarks	Payer Account Number
	MPIN	Response Code
	Payee VPA	Payee VPA
	Payee Name	Transfer Amount
	Payee Account Number	Transfer Currency 'INR'
	Account Type	Payee Account Number
	Payee Branch IFSC	

2.3.2 <u>ReqPay Debit Outbound Payments Transaction Processing</u>

Request for Debit - Outbound payments transaction processor follows the below listed processing steps:

- Message Parsing
- Acknowledgement Message Generation
- Transaction Account Branch Derivation
- Initial Validations
- Duplicate Check
- Account Level Daily limit Check
- Pricing
- ECA Check (for Customer/Account Status, MPIN Validation, Balance Check)
- Accounting
- Messaging
- Notification

2.3.2.1 <u>Transaction Type Derivation:</u>

• System parses the incoming message and derive the Transaction Type as' DEBIT' from the XML tag <Txn> type.

• System generates an acknowledgement message.

2.3.2.2 <u>Transaction Account Branch Derivation:</u>

• System derives the transaction account branch as below:

Payer Branch IFSC	XML Tag
Derive Based on IFSC Code present in	<payer.ac.detail>Name 'IFSC'</payer.ac.detail>
XML tag of ReqPay API	



• Once the above validations and derivations are done, the below mandatory fields checks are done:

- Network Code: Validated against the static maintenance (PMDNWCOD) available.
- Host Code: The Host Code linked to the transaction branch is derived from branch parameters (STDCRBRN)
- Transaction Branch Code: This is a valid branch in core maintenance.

2.3.2.3 Initial Validations:

- The following processing are covered as part of initial validations:
- Data enrichment Account / Bank Re-direction, Network character replacement
- Network Limit validations
- Account/Customer Validations based on core maintenance
- If Account re-direction or bank re-direction is maintained, then the account / bank details are replaced with those values.
- Network character replacement is done for characters not allowed by the Network if the corresponding maintenance is available in the screen (PMDSPCHR).
- Mandatory Fields / Referential data checks are done based on the details received in the payment request and the values populated by system. Validations are available to verify if the below fields are present in the request
 - Host Code
 - Network Code
 - Transaction Branch
 - Payer Account Number (Validation
 - is available to check only INR currency accounts allowed for UPI.)
 - Payer Branch IFSC
 - Payee Account Number
 - Payee Name
 - Transaction Currency
 - Transaction Amount
 - Instruction Date
 - Payee Bank IFSC is allowed for UPI network (PMDBKMNT IFSC Directory).
- Transaction amount limit check is done for the minimum and maximum amount limits defined for the Network, as maintained in 'UPI Pay Request Bank Preferences (Function ID: PVDBKPRF)'
- In case of any validation failure, then the transaction is rejected with proper error code.
- Account Type Restrictions: System validates if the debtor (Payer) account type is allowed for the Network Code as maintained in Account Type Restrictions screen (PJDACSTR) for the outbound payment. If the account type is not allowed for the network, system displays error message, else moves to further processing steps.
- Customer / Account Status validations:
- Customer/Account Status checks are not in OBPM. ECA / DDA system performs these checks.



2.3.2.4 Duplicate Check:

 Duplicate parameters are maintained at the source (PMDSORCE). Based on the duplicate days and fields set, duplicate check for the transaction are done. If the transaction is identified as a duplicate transaction, the transaction is moved to business override queue. The following parameters are available for duplicate check:

_	Payer Account	DBTR_ACC
---	---------------	----------

_	Payee Account	CRDTR ACC
	i ayee Account	

- Transaction Amount TFR_AMT
- Instruction Date
 VALUE_DATE
- Payee Bank IFSC Code CRDTR_BANK_CODE

2.3.2.5 Daily limit check:

• System tracks the daily aggregate limit and source wise limit allowed for a customer account on a daily basis. If limit is breached, the transaction is rejected with a valid error code.

2.3.2.6 Pricing - Charge / Tax Computation:

• Only Internal Pricing is applicable. India GST tax values are applied based on the configuration.

2.3.2.7 ECA Check with DDA System:

• The debit details along with MPIN (as received) are sent to the DDA system for customer / account / MPIN validation and balance check.

2.3.2.8 Messaging:

- Every request message (ReqPay) received for 'Pay Request Debit' is responded (RespPay) with a response message and Time stamp.
- Response Message is generated and viewed in the Outbound Message browser and forwarded to NPCI UPI system.

2.3.2.9 Accounting:

 Accounting entries posted are handed off to Accounting system. Payment Transaction status is marked as 'Processed'.

2.3.2.10 Notification

• Notification is generated to Payer after debit accounting is successfully posted (Transaction Status 'Processed', Event 'DRLQ').

2.3.3 ReqPay Debits Outbound Payment View

You can view the ReqPay Debit Outbound transactions in this screen.

You can invoke 'ReqPay Debits Outbound Payment View' screen by typing 'PVDOVIEW' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.



Enter Query			
Transaction Branch		Transaction Reference Number *	
Branch Name		UPI Reference Number	
Host Code		Source Reference Number	
Source Code		Original Request Message ID	
Network Code		Request Time Stamp	
Main Pricing			
Payer Details		Payment Details	
Paver VPA		Booking Date	YYYYAMADD
Payer Name		Instruction Date	YYYY-MM-DD
Payer Mobile Number		Transaction Currency	INR
Payer Account Number		Transaction Amount	
Payer Account Type		Remarks	
Payer Branch IFSC			
Payee Details		Transaction Status	
Payee VPA		Transaction Status	*
Payee Name		Debit Liquidation Status	
Payee Org ID		Credit Liquidation Status	
Payee Account Number		Queue Code	*
Payee Account Type			
Payee Bank IFSC		Response Status	*
External System Status		Error Details	
External Credit Approval Status		Error Code	
ternal Credit Approval Reference		Error Description	
IDF MIS View Queue Action All Message	s Accounting Entries		
Maker Id	Checker Id	Authorization	Status
Maker Date Stamp	Checker Date Stamp		

From this screen, click Enter Query. The Transaction Reference field gets enabled which opens an LOV screen.

Along with the transaction details, you can also view the details for the following:

- Source code For transactions received through Rest API services, the source code is populated as received in the request.
- External System Status
- Transaction Status

Click Execute Query to populate the details of the transaction in the Outbound UPI Payments View screen. The system displays all the fields in the below mentioned tabs based on the transaction reference number selected.

For more details on Main, Payment Details and Pricing tabs refer to 'PVDOTONL' details above.

2.3.3.1 UDF Tab

I

You can invoke this screen by clicking UDF tab in the PVDOVIEW screen.



UDF	View		- x
Ente	r Query		
	Transaction Reference	e Number *	
Field	s		
1	1011 N		
	Field Label •	Field Value	
			Exit

2.3.3.2 <u>MIS Tab</u>

You can invoke this screen by clicking MIS tab in the PVDOVIEW screen.

Transaction Reference Number *	MIS Group	
nsaction MIS	Composite MIS	



2.3.3.3 All Messages

On click of this button, the below screen is launched to view 'ReqPay Debit' message received from NPCI UPI and RespPay Debit' message sent to NPCI UPI.

					1
Transaction Referen	ce Number 1904317527250	000	UPIR	eference Number 904314053131	
equest Messages					
< 1 Of 1 > >	Go				
Message Reference	Original Request Message ID	Message Date and Time	Acknowledgement Status		
	Message				
sponse Messages	12.1				
Message Reference	00				
Miessage Relerence	Response Message ID	Message Date and Time	Acknowledgement Status		
	Message				

2.3.3.4 ReqPay Debit Outbound Payments View Summary

You can view the summary in 'ReqPay Debit Outbound Transaction View Summary' screen. You can invoke the UPI Outbound Payments Summary screen by typing 'PVSOVIEW' in the field at the top right corner of the Application toolbar and clicking on the adjoining arrow button.

ch Advanced Search Reset Clear All				
9 Sensitive				
Original Request Message ID	Q	UPI Reference Number	line and the second second	Q
Transaction Reference Number	Q	Instruction Date	YYYYYAMA-DD	
Payer VPA	Q	Payer Mobile Number		Q
Payee VPA	٩	Response Status		
Transaction Status	•			
rds per page 15 V K < 1 Of 1 N	Go Lock Columns 0 *	Transaction Amount Paver VPA Paver Mobile	Number Pavee VPA Transa	iction Status Resnance Status
ds per page 15 • • • • • 1 Of 1 • • • Original Request Message ID UPI Reference Number		Transaction Amount Payer VPA Payer Mobile	Number Payee VPA Transa	ction Status Response Status
		Transaction Amount Payer VPA Payer Mobile	Number Payee VPA Transa	ction Status Response Status
		Transaction Amount Payer VPA Payer Mobile	Number Payee VPA Transa	ction Status Response Statu:
		Transaction Amount Payer VPA Payer Mobile	Number Payee VPA Transa	ction Status Response Statu:
		Transaction Amount Payer VPA Payer Mobile	Number Payee VPA Transa	ction Status Response Statu:
		Transaction Amount Payer VPA Payer Mobile	Number Payee VPA Transa	ction Status Response Statu:
		Transaction Amount Payer VPA Payer Mobile	Number Payee VPA Transa	ction Status Response Statu:
		Transaction Amount Payer VPA Payer Mobile	Number Payee VPA Transa	ction Status Response Statu:
		Transaction Amount Payer VPA Payer Mobile	Number Payee VPA Transa	ction Status Response Statu:
		Transaction Amount Payer VPA Payer Mobile	Number Payee VPA Transa	ction Status Response Statu:



You can search for the records using one or more of the following parameters:

- Transaction Reference
- Original Request Message ID
- Payer VPA
- Payee VPA
- UPI Reference Number
- Instruction Date
- Payer Mobile Number
- Response Status
- Transaction Status

Once you have specified the search parameters, click 'Search' button. The system displays the records that match the search criteria.

Double click a record or click 'View Transaction 'button to view the detailed screen.

2.4 <u>UPI Pay Request – Beneficiary Bank – Request for</u> <u>Credit Processing</u>

This section contains the following topics:

- Section 2.4.1, "ReqPay Credit API Processing"
- <u>Section 2.4.2, "ReqPay Credit Inbound Payments Processing"</u>
- Section 2.4.3, "ReqPay Credit Inbound Payment View"

2.4.1 ReqPay Credit – API Processing

- System processes the incoming request for credit API 'ReqPay Credit'. This API has the Payer VPA, Payer Account, Payer Bank IFSC Code, Transaction Amount, Instruction Date, Payee VPA, Payee Account, Payee Bank IFSC code as input.
- System generates an acknowledgement message as below:
- <upi:Ack xmlns:upi="" api="" reqMsgld="" err="" ts=""/>
- The response API returns the transaction status confirmation (success / fail).
 - API Name: ReqPay
 - Transaction Type:Credit

API Name	Request Input to OBPM	Request from OBPM
----------	-----------------------	-------------------



Pog Dov	Timostomo	Timostamp
ReqPay	Timestamp	Timestamp
RespPay	Request Message ID	Response Message ID
	Remarks (Note)	Remarks (Note)
	Туре	Type (Inbound Transaction)
	Payer VPA	Original Request Message ID
	Payer Name	Result
	Payer Mobile Number	Error Code
	Payer Account Number	Payer VPA
	Account Type	Transfer Amount
	Payer Branch IFSC	Transfer Currency 'INR'
	Transfer Amount	ApprovalRef (echo)
	Transfer Currency 'INR'	Payer Account Number
	Remarks	Response Code (echo)
	Payee VPA	Payee VPA
	Payee Name	Transfer Amount
	Payee Account Number	Transfer Currency 'INR'
	Account Type	ApprovalRef (last 6-digit of UPI
	Payee Branch IFSC	reference number, as received)
		Payee Account Number
		Response Code

ReqPay Credit Inbound Payments Transaction Processing

2.4.1.1 Transaction Type Derivation:

• System parses the incoming message and derive the Transaction Type as' CREDIT' from the XML tag <Txn> type.

System generates an acknowledgement message

2.4.1.2 Transaction Account Branch Derivation:

• System derives the transaction account branch as below:

Payer Branch IFSC	XML Tag
Derive Based on IFSC Code present in	<payee.ac.detail> Name 'IFSC'</payee.ac.detail>
XML tag of ReqPay API	

- Once the above validations and derivations are done, the below mandatory fields checks are done:
 - Network Code: Validated against the static maintenance (PMDNWCOD) available.
 - Host Code: The Host Code linked to the transaction branch is derived from branch parameters (STDCRBRN)
 - Transaction Branch Code: This is a valid branch in core maintenance.

2.4.1.3 Initial Validations:

- The following processing are covered as part of initial validations:
 - Data enrichment Account / Bank Re-direction, Network character replacement
 - Account/Customer Validations based on core maintenance



- If Account re-direction or bank re-direction is maintained, then the account / bank details are replaced by that values.
- Network character replacement is done for characters not allowed by the network.
- Mandatory Fields / Referential data checks are done based on the details received in the payment request and the values populated by system
 - In case of validation failure for any of the above, transaction is rejected with proper error code.
 - Account Type Restrictions:
 - System validates if the creditor (Payee) account type is allowed for the Network Code as maintained in Account Type Restrictions screen (PJDACSTR) for the outbound payment. After the above step, If the creditor (Payee) account type is found to be '40' i.e. NRE account type, then system will apply Non NRE to NRE payments Check validation.
- Customer / Account Status validations:
 - Customer / Account Status checks is not performed in OBPM. EAC / DDA system performs these checks.

2.4.1.4 Duplicate Check:

- Based on the duplicate days and fields set, duplicate check for the transaction are done. If the transaction is identified as a duplicate transaction, the transaction is moved to the business override queue.
- The following parameters are available for duplicate check
 - :Payer Account DBTR_ACC
 - Payee Account CRDTR_ACC
 - Transaction Amount TFR_AMT
 - Instruction Date
 VALUE_DATE
 - Payer Bank IFSC Code DBTR_BANK_CODE
 - UPI Reference Number END_TO_END_ID

2.4.1.5 External Account Check

- Transaction details are to DDA system, for the validation of the credit account. If External Account Check is 'Approved', the transaction is marked as 'Processed' and response message (Response Code '00' is generated).
 - If the EAC status is 'Rejected', 'Interim', 'Pending' then the transaction is rejected and response message generated (Response Code: '<>00')

2.4.1.6 <u>Pricing / Tax</u>

 Internal pricing / GST tax calculations are performed for the inbound payment, if applicable.

2.4.1.7 Messaging:

 Every request message (ReqPay) received for 'Pay Request – Credit' is responded (RespPay) with a response message and Time stamp. Message is forwarded to NPCI UPI system. System generates Response Message and it is forwarded to NPCI UPI system.

2.4.1.8 Accounting Handoff

• Accounting is handed off to the external system.



2.4.1.9 Notification

• Notification is generated to the Payee after the credit accounting is successfully posted (Transaction Status 'Processed', Event 'CRLQ').<u>ReqPay Credit Inbound Payment View</u>

You can view the ReqPay Credit Inbound transactions in this screen.

You can invoke 'ReqPay Credit Inbound Payment View' screen by typing 'PVDIVIEW' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

Enter Query					
Transaction Branch		Transaction Reference Number *			
Branch Name		UPI Reference Number			
Host Code		Source Reference Number			
Source Code		Original Request Message ID			
Network Code		Request Time Stamp			
Main Pricing					
Payee Details		Payment Details			
Payee VPA		Booking Date	YYYY-MM-DD		
Payee Name		Instruction Date	YYYYAMADD		
Payee Org ID		Transaction Currency	INR		
Payee Account Number		Transaction Amount			
Payee Account Type		Remarks			
Payee Branch IFSC					
ayer Details		Transaction Status			
Payer VPA		Transaction Status	٣		
Payer Name		Debit Liquidation Status	•		
Payer Mobile Number		Credit Liquidation Status			
Payer Account Number		Queue Code		*	
Payer Account Type		Response Status			
Payer Bank IFSC				100 m	
xternal System Status		Error Details			
External Account Check Status	*	Error Code			
External Account Check Reference		Error Description			
JDF MIS View Queue Action All Messag	es Accounting Entries				
Maker Id	Checker Id	Authorization	Status		Exi
Maker Date Stamp	Checker Date Stamp				EXI

• From this screen, click Enter Query. The Transaction Reference field gets enabled which opens an LOV screen.

Along with the transaction details, you can also view the details for the following:

- Source code : For transactions received through Rest API services, the source code is populated as received in the request.
- External System Status
- Transaction Status : Click Execute Query to populate the details of the transaction in the Inbound Payments View screen. The system displays all the fields in the below mentioned tabs based on the transaction reference number selected.

For more details on Main, Payment Details and Pricing tabs refer to details above.

2.4.1.10 UDF Tab

You can invoke this screen by clicking UDF tab in the PVDIVIEW screen.



UDF View		- x
Enter Query		
Transaction Refere	nce Number *	
Fields		
N 4 1 0f 1 > N	- Ga	:
Field Label .	Field Value	
		Exit

2.4.1.11 MIS Tab

You can invoke this screen by clicking MIS tab in the PVDIVIEW screen.

Transaction Reference Number *	MIS Group Default	
ansaction MIS	Composite MIS	

2.4.1.12 All Messages

On click of this button, the below screen is launched to view 'ReqPay Credit' message received from NPCI UPI and RespPay Credit' message sent to NPCI UPI.



				. =
Transaction Refer	ence Number 1904317527	7250000	UPI Reference Number 904314053131	
Request Messages				
4 4 1 OF 1 > N	Go			
Message Reference	Original Request Message	e ID Message Date and Time	e Acknowledgement Status	
	Message			
lesponse Messages	Message			
Response Messages	60	Message Date and Time	Acknowledgement Status	1
4 1 OF 1 - H		Message Date and Time	Acknowledgement Status	:
4 1 OF 1 > N	60	Message Date and Time	Acknowledgement Status	1
4 1 OF 1 - H	60	Message Date and Time	Acknowledgement Status	1
4 1 OF 1 > N	60	Message Date and Time	Acknowledgement Status	:
4 1 OF 1 > N	60	Message Date and Time	Acknowledgement Status	
4 1 OF 1 > N	60	Message Date and Time	Acknowledgement Status	
4 1 OF 1 > N	60	Message Date and Time	Acknowledgement Status	**
4 1 OF 1 > N	60	Message Date and Time	Acknowledgement Status	
4 1 OF 1 > N	60	Message Date and Time	Acknowledgement Status	3

2.4.1.13 <u>ReqPay Credit Inbound Payments View Summary</u>

You can view the summary in 'ReqPay Credit Inbound Transaction View Summary' screen. You can invoke the Inbound Payments Summary screen by typing 'PVSIVIEW' in the field at the top right corner of the Application toolbar and clicking on the adjoining arrow button.

Pay Request for Credit, Inbound Transaction View	Summary		÷
rch Advanced Search Reset Clear All			
e Sensitive			
			11
Original Request Message ID	Q	UPI Reference Number	٩
Transaction Reference Number	p	Instruction Date	19991AM-00
Payer VPA	Q	Payee VPA	Q
Transaction Status		Response Status	
and the second second	and the second second		
rds per page 15 * 🗰 < 1 Of 1 🕨 🕅			
Original Request Message ID UPI Reference Nur	mber Transaction Reference Number Instruction Date	Transaction Amount Payer VPA Payer Mobile I	Number Payee VPA Transaction Status Response Status
*			
w Transaction			
e Transaction			_

You can search for the records using one or more of the following parameters:



- Transaction Reference
- Original Request Message ID
- Payer VPA
- Payee VPA
- UPI Reference Number
- Instruction Date
- Payer Mobile Number
- Response Status Transaction Status

Once you have specified the search parameters, click 'Search' button. The system displays the records that match the search criteria.

Double click a record or click 'View Transaction 'button to view the detailed screen.

2.5 <u>UPI Non-Financial API – List of accounts linked to Mo-</u> bile Number

This section contains the following topics:

- I Section 2.5.1, "Request for Account List API Processing"
- I Section 2.5.2, "UPI Non-FIN API Request- Inbound Message Browser"
- Section 2.5.3, "UPI Non-FIN API Response- Outbound Message Browser"

2.5.1 <u>Request for Account List – API Processing</u>

- Incoming request API 'ReqListAccount'. This API has the Bank Name, Customer Mobile Number as input. System generates an acknowledgement message on successful request.
- The response API returns customer account numbers linked to the mobile number along with account type and respective account branch IFSC codes. The account number is masked, except for the last four digits, in the response API 'RespListAccount'

2.5.2 UPI Non-FIN API Request- Inbound Message Browser

A new message browser screen 'UPI Non-FIN API Request - Inbound Message Browser' is available to view the list of accounts request messages and the linked acknowledgment / response messages.

You can invoke the "Non-FIN API Request Inbound Message Browser" screen by typing <u>'PVSNFBRW'</u> in the field at the top right corner of the application tool bar and clicking on the adjoining arrow button.



	ser		
Search Advanced Search Reset Clear All			
Case Sensitive			
Original Request Message ID Message Status	Q	UPI Transaction Type	Request Message Date YYYY 444-00 🗔
Records per page 15 🔻 💘 < 1 Of 1 🕨	M Go Lock Co	shimos A •	
and the second se		ge Date Time Message Status Acknowledgement Status UPI Transactio	on Type Response Message ID Response Message Date Time
New Request Message View Acknowledgement	'View Response Message		

You can search for the records using one or more of the following parameters:

- Original Request Message ID
- Message Status
- UPI Transaction Type
- Acknowledgement Status
- Request Message Date
- Response Message ID

You can view the Request, Acknowledgment and Response Messages as below:

- View Request Message: On click of this button, depending on the UPI transaction type, 'ReqListAccount' message received from NPCI UPI is displayed.
- View Acknowledgement: On click of this button, system the 'ACK
- / NAK' message sent to NPCI UPI is displayed.
- View Response Message: On click of this button, depending on the UPI transaction type, "RespListAccount' message sent to NPCI UPI is displayed.

2.5.3 UPI Non-FIN API Request- Outbound Message Browser

A new message browser screen 'UPI Non-FIN API Request - Outbound Message Browser' is available to view the list of accounts response messages sent and the linked request messages/acknowledgment.

You can invoke the "Non-FIN API Request Outbound Message Browser" screen by typing <u>'PVSNFOUT</u> in the field at the top right corner of the application tool bar and clicking on the adjoining arrow button.



h Advanced Search Reset Clear All				
Sensitive				
Original Request Message ID	Q	UPI Transaction Type	Request Message Date 1000-MM-00	
			Response Message ID	Q
Message Status		Acknowledgement Status	Kashousa wassada m	~
s per page 15 • 🙀 < 1 Of 1 🕨 🕨	Go Lock Col	lumns 0 •		
		te Time Message Status Acknowledgement Status UPI Transaction Ty	pe Original Request Message ID Request Message Date Time	
sponse Message View Acknowledgement '				

You can search for the records using one or more of the following parameters:

- Original Request Message ID
- Message Status
- UPI Transaction Type
- Acknowledgement Status
- Request Message Date
- Response Message ID

You can view the Response, Acknowledgment and Request Messages as below:

- View Response Message: On click of this button, depending on the UPI transaction type, "RespListAccount' message sent to NPCI UPI is displayed.
- View Acknowledgement: On click of this button, system the 'ACK / NAK' message sent to NPCI UPI is displayed.

View Request Message: On click of this button, depending on the UPI transaction type, 'ReqListAccount' message received from NPCI UPI is displayed.

2.6 UPI Payments Message Browser

- All Incoming Requests XML received over HTTPS are available in the UPI Payments browser along with the received message with OBPM generated reference, received date, processing status. An ACK / NACK message is generated and sent out immediately.
- After processing the transaction (Outbound Payment, Inbound Payment), response message is generated and populated into a JMS queue. From there, the response XML is sent over HTTPS

This section contains the following topics:

- Section 2.6.1, "UPI Pay Request for Debit / Credit: Outbound Message Browser"
- Section 2.6.2, "UPI Pay Request for Debit / Credit: Inbound Message Browser"



2.6.1 UPI Pay Request for Debit / Credit: Outbound Message Browser

A new message browser screen 'UPI Pay Request for Debit / Credit- Outbound Message Browser' is available to view all the outbound response messages and the linked debit / credit request messages /acknowledgment messages

You can invoke the "Outbound Message Browser" screen by typing '<u>PVSOUTBR</u>' in the field at the top right corner of the application tool bar and clicking on the adjoining arrow button.

Search Advanced Search Reset Clear All			
ase Sensitive			
Original Request Message ID Message Status 🔹	م م	UPI Transaction Type	Request Message Date 19994MADD 55
cords per page 15 * H < 1 Of 1 > Branch Message Reference Response Messa		lumns 0 • ata Time Message Status Acknowledgement Status UPI Transaction	n Type Transaction Reference Number Transaction Amount Unginal Request Message ID Requ
			Message Date Tin
w Response Message View Request Message			

You can search for the records using one or more of the following parameters:

- Original Request Message ID
- Message Status
- Response Message ID
- UPI Transaction Type
- Acknowledgement Status
- Request Message Date
- Transaction Reference Number

You can view the Response, Request, and Transaction & Acknowledgment Messages as below:

- View Response Message: On click of this button, depending on the UPI transaction type, 'RespPay Debit' or 'RespPay Credit' message sent to NPCI UPI is displayed.
- View Request Message: On click of this button, depending on the UPI transaction type, 'ReqPay Debit' or 'ReqPay Credit' messages received from NPCI UPI is displayed
- View Acknowledgement: On click of this button, system the 'ACK/NAK' message sent to NPCI UPI is displayed.



View Transaction:

On click of this button, depending on the UPI transaction type, the 'UPI Pay Request for Debit Outbound Payment Transaction View or 'UPI Pay Request for Credit Inbound Payment Transaction View screens are launched.

2.6.2 UPI Pay Request for Debit / Credit: Inbound Message Browser

A new message browser screen 'UPI Pay Request for Debit / Credit- Inbound Message Browser' is available to view all the inbound Debit request / Credit request messages and the linked acknowledgment / response messages.

You can invoke the "Inbound Message Browser" screen by typing '<u>PVSINBRW</u>' in the field at the top right corner of the application tool bar and clicking on the adjoining arrow button.

arch Advanced Search Reset Clear All				
se Sensitive				
Original Request Message ID Message Status	Q	UPI Transaction Type Acknowledgement Status	Request Message Date YMMMICD Transaction Reference Number	٩
Response Message ID	Q			
Branch Message Reference Original Request M				Harris Data 2
				Message Date 1
				Message Date
				Message Date

You can search for the records using one or more of the following parameters:

- Original Request Message ID
- Message Status
- Response Message ID
- UPI Transaction Type
- Acknowledgement Status
- Request Message Date
- Transaction Reference Number

You can view the Request, Transaction, Acknowledgment and Response Messages as below:

 View Request Message: On click of this button, depending on the UPI transaction type, 'ReqPay Debit' or 'ReqPay Credit' messages received from NPCI UPI is displayed.



Exit

- View Acknowledgement: On click of this button, system the 'ACK / NAK' message sent to NPCI UPI is displayed.
- View Transaction: On click of this button, depending on the UPI transaction type, the 'UPI Pay Request for Debit Outbound Payment Transaction View or 'UPI Pay Request for Credit Inbound Payment Transaction View screens are launched View Response Message: On click of this button, depending on the UPI transaction type, 'RespPay Debit' or 'RespPay Credit' message received from NPCI UPI is displayed



3. Function ID Glossary

Ρ

PVDBKPRF	2-7
PJDACSTR	2-8
PMDEXACP	2-9
PVDRJMNT	2-9
PVDOVIEW	2-15

PVSOVIEW	2-18
PVDIVIEW	2-23
PVSIVIEW	2-26
PVSNFBRW	
PVSNFOUT	2-28
PVSOUTBR	
PVSINBRW	2-31

