

India IMPS Payments User Guide

Oracle Banking Payments

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India IMPS Payments User Guide
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1. About this Manual

1.1 Introduction

This manual is designed to help you to quickly get familiar with the features of India IMPS Payments in Oracle Banking Payments. It takes you through the various stages in processing a Inbound/Outbound IMPS Payments and NPCI Connectivity.

You can further obtain information specific to a particular field by placing the cursor on the relevant field and striking <F1> on the keyboard.

1.2 Audience

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 Payments and PM Dashboard/Query functions

1.3 Documentation Accessibility

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

1.4 Organization

This manual is organized into the following chapters.:

Chapter	Description
Chapter 1	<i>About this Manual</i> gives information on the intended audience. It also lists the various chapters covered in this User Manual.
Chapter 2	<i>IMPS Overview</i> provides introduction of IMPS.
Chapter 3	<i>IMPS Maintenances</i> provides information on IMPS Payments related maintenances.
Chapter 4	<i>IMPS Outbound Payments</i> provides information on IMPS Payments related initiation and processing of outbound payments.
Chapter 5	<i>IMPS Inbound Payments</i> provides information on IMPS Payments related initiation and processing of inbound payments.

Chapter	Description
Chapter 6	<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:

Icons	Function
	Exit
	Add row
	Delete row
	Option List

1.6 Abbreviations Glossary

Abbreviation	Detailed Description
IMPS	Immediate Payment Service
NPCI	National Payments Corporation of India
ISO 8583	International standard for financial transaction card originated interchange messaging
NFS	National Financial Switch
OBPM	Oracle Banking Payments Module
RRN	Retrieval Reference Number
OR	Original Request
VR	Verification Request
NBIN	National Bank Identification Number
MMID	Mobile Money Identifier
P2A, P2P	IMPS Transaction Types: P2A: Person to Account P2P: Person to Mobile Number

2. IMPS Overview

Immediate Payment Service, commonly known as IMPS, is an instant real time interbank electronic funds transfer service. This service can be accessed any time 24X7X365 and across channels like Internet, Mobile, ATM and Branch. This facility is provided by NPCI through NFS Switch. Messages used for the connection between the NPCI Central switch, remitter and beneficiary was based on ISO-8583:1987 standard.

To make it more scalable and future ready, it is imperative to migrate it to customizable API based XML messaging. This new XML platform allows more data carrying capacity to capture originator details for domestic and FIR transactions. It also allow Banks to have a common code for multiple NPCI platforms like IMPS and UPI, enabling optimization of resources and making the ecosystem future ready through API based solutions.

Key features of Immediate Payment Service (IMPS)

- Supports IMPS Person to Person (P2P) and Person to Account (P2A) transactions.
- Supports following transactions types and messages -
 - IMPS Outbound and Inbound Request Pay and Response Pay XML
 - IMPS Outbound and Inbound Check Transaction Request and Response XML
 - Outbound Prefunded transactions
 - TCC Upload files
 - Acknowledgement Message
 - Heartbeat Request and Response messages
- Supports following functionalities
 - Beneficiary registration for outbound transactions
 - Account type validations - NRE Account
 - Transaction level limit check, Daily Limit Check
 - Notification to channels on transaction processing
- Initiation of IMPS Outbound transactions using following options
 - UI screens
 - SOAP/Rest Service
- Supports maintenances for NPCI Connectivity

3. IMPS Maintenances

3.1 IMPS Maintenances

This section lists the key common maintenances that are required for processing of outbound and inbound India IMPS Payments:

- Network Maintenance (PMDNWMNT)
- Source Maintenance (PMDSORCE)
- Source Network Preferences (PMDSORNW)
- External System Maintenances for Sanctions, External Credit Approval and Accounting
- Reject Code Maintenance (PMDRJMNT)
- IMPS Transaction Limits (PMDDFLMT)
- India Payment Mobile Money Identifier Maintenance (PMDEXACP)
- Beneficiary Registration (PMDBENRN)
- IFSC Directory (PMDIFSMN)
- Branch and IFSC Code Mapping (PMDIFSBR)
- India Tax Preference (PMDINTXP)

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

This chapter contains the specific maintenances for IMPS in the following sections:

- [Section 3.1.1, "Outbound Payment Preferences"](#)
- [Section 3.1.2, "Inbound Payment Preferences"](#)
- [Section 3.1.3, "Account Type Restrictions"](#)
- [Section 3.1.4, "NBIN - IFSC Mapping"](#)
- [Section 3.1.5, "India Payments Network and Queue Connection"](#)
- [Section 3.1.5, "IMPS Network Code Source Preference"](#)
- [Section 3.1.6, "IMPS XML NPCI Connectivity Maintenance"](#)
- [Section 3.1.7, "IMPS Adapter Definition"](#)

3.1.1 Outbound Payment Preferences

You can maintain the Outbound Preferences for India IMPS through this screen.

You can invoke 'IMPS Outbound Payment Preferences Detailed' screen by typing 'PJDNWOPF' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

Following are the actions allowed from this screen:

- New
- Save
- Copy
- Print
- Enter Query
- Unlock
- Delete
- Authorize

Specify the following fields:

Network Code

Select the network code of the India IMPS from the list of values.

If only one Network is maintained with payment type as 'IMPS' for the host code, the same gets 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 of the network selected.

Network Type Description

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

Network Service ID

Specify the Network Service ID.

Host Code

System defaults the host code of transaction branch on clicking 'New'.

Host Code Description

System defaults the description of the Host Code displayed.

Transaction Currency

System defaults the transaction currency as 'INR' for India IMPS payments

IMPS Transaction Type

'P2A' option is checked by default. This is a mandatory field and you can modify the option defaulted. IMPS transaction types allowed for the network are:

- **P2A:** When checked, this indicates 'Account Number + IFSC based' IMPS transaction type
- **P2P:** When checked, this indicates 'MMID + Mobile Number' based IMPS transaction type

Note

It is mandatory to maintain at least one IMPS transaction type for the network as required.

Transaction Limit

Minimum and maximum limit amount per transaction type for IMPS Payments as required by the bank can be maintained here. This can be modified. Transaction limit has a one-to-one mapping with IMPS Transaction type.

P2A Minimum Amount

Specify the minimum limit allowed per IMPS transaction type.

P2A Maximum Amount

Specify the maximum limit allowed per IMPS transaction type.

P2P Minimum Amount

Specify the minimum limit allowed per IMPS transaction type.

P2P Maximum Amount

Specify the maximum limit allowed per IMPS transaction type.

P2U Minimum Amount

Specify the minimum limit allowed per IMPS transaction type.

P2U Maximum Amount

Specify the maximum limit allowed per IMPS transaction type.

Note

- If IMPS Transaction type checked is 'P2A', only P2A transaction limit can be maintained.
 - If Transaction limit values are entered in P2P without selecting respective IMPS transaction types, system throws a warning message 'Please select applicable IMPS transaction types before maintaining Transaction Limit'.
-

Pricing Details

Transaction Pricing Code

Select the pricing code from the list of values. All the valid Pricing codes maintained in 'Pricing Code Detailed' (PPDCDMNT) are listed here. Pricing codes to be applied for India IMPS can be selected. Computation of Charges and Tax are based on the pricing code linked here.

Accounting Codes

Debit Liquidation

This is a mandatory field. Select the accounting code for the Credit/Debit Leg (Intermediary GL) of event DRLQ/CRLQ.

Credit Liquidation

This is a mandatory field. Select the accounting code for the Credit Leg (Clearing GL) of event CRLQ.

Designated Branch

Specify the Designated Branch from the list of values.

Network Account Details

Network Account

Select the Network Account from the list of values. All the valid network accounts are listed here. The Network account if maintained here, is replaced with Clearing GL while posting the credit accounting for outbound payments.

Processing Preferences

Time-Out Period (In Seconds)

System automatically generates Verification Request (VR) for the Outbound Payment if no Original Response is received from NPCI Switch within the time out period maintained in seconds here.

This is maintained as 30 seconds for IMPS network code and is modifiable.

Retry Count for Check Transaction Request

This is maintained as '3' for IMPS network code and is modifiable. Based on this, system auto generates Verification Request every '30' seconds with a maximum retry count of '3' for VR as per current NPCI directive. If not maintained, no VR is generated.

Check Transaction Request Interval

You can specify the interval/gap between the two Check Transaction Request.

Accounting Preference

You can set the preference for accounting during the outbound transaction processing, in this field. Select the accounting preferences from the drop-down values. The options are:

- **Before Messaging** - If the accounting preference chosen for the Network is 'Before Messaging', the Message Generation and Hand-off of Original Request message is subsequent to debit/credit accounting for the outbound payment. However the payment processor does not wait for the accounting success/failure response from Accounting/DDA system.
 - In case of payment rejection as per OR/VR response from network, Accounting reversal request is sent to DDA system and payment status is reversed.
- **On Confirmation from CI** - If the accounting preference selected is 'On confirmation from NPCI', the debit /credit accounting is passed only after the receipt of OR/VR

response from network. If the payment is rejected the balance block (ECA) reversal request is sent to DDA system.

3.1.1.1 **IMPS Outbound Payment Preference Summary**

You can view all the Outbound payments preferences maintained, in this summary screen.

You can invoke 'IMPS Outbound Payment Preferences Detailed Summary' screen by typing 'PJSNWOPF' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

Authorization Status	Record Status	Network Code	Host Code	Transaction currency	Network Account	Credit Liquidation	Debit Liquidation	P2A Maximum Amount	P2A Min
----------------------	---------------	--------------	-----------	----------------------	-----------------	--------------------	-------------------	--------------------	---------

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

- Authorization Status
- Record Status
- Network Code
- Host Code
- Transaction Currency

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 select a record and click on 'Details' button to view the detailed maintenance screen.

3.1.2 **Inbound Payment Preferences**

You can maintain the Inbound Preferences for India IMPS through this screen.

You can invoke 'IMPS Inbound Payment Preferences Detailed' screen by typing 'PJDNWIPF' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

Following are the actions allowed from this screen:

- New
- Save
- Copy
- Print
- Enter Query
- Unlock
- Delete
- Authorize

Specify the following fields:

Network Code

Select the network code of the India IMPS from the list of values.

If only one Network is maintained with payment type as 'IMPS' for the host code, the same gets 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 of the network 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 on clicking 'New'.

Host Code Description

System defaults the description of the Host Code displayed.

Source Code

Select the Source Code from the list of values. This is a mandatory field. Source codes maintained in the PMDSORCE screen are listed here. This is used as source code, for inbound payment processing.

For Inbound IMPS payment only 'Upload' source type is applicable.

Source Code Description

System defaults the description, based on the Source Code selected.

Transaction Currency

System defaults the transaction currency as 'INR' for India IMPS payments.

IMPS Transaction Type

'P2A' option is checked by default. This is a mandatory field and you can modify the option defaulted. IMPS transaction types allowed for the network are:

- **P2A:** When checked, this indicates 'Account Number + IFSC based' IMPS transaction type.
- **P2P:** When checked, this indicates 'MMID + Mobile Number' based IMPS transaction type.

Note

It is mandatory to maintain at least one IMPS transaction type for the network as required.

Payment Preferences

Beneficiary Name Match required

This flag indicates, whether 'Beneficiary Name Match' is required for the inbound IMPS payments. Check this box to enable, beneficiary name match. This is unchecked by default.

Beneficiary Validation Amount

Specify the Amount in INR currency.

Accounting Codes

Debit Liquidation

This is a mandatory field. Select the accounting code for the Debit Leg (Clearing GL) of event DRLQ.

Credit Liquidation

This is a mandatory field. Select the accounting code for the Credit/Debit Leg (Clearing GL) of event DRLQ/CRLQ.

Pricing Details

Transaction Pricing Code

Select the pricing code from the list of values. All the valid Pricing codes maintained in 'Pricing Code Detailed' (PPDCDMNT) are listed here. Pricing codes to be applied for India IMPS can be selected. Computation of Charges and Tax are based on the pricing code linked here.

Network Account Details

Network Account

Select the Network Account from the list of values. All the valid network accounts are listed here. The Network account if maintained here, is replaced with Clearing GL while posting the credit accounting for outbound payments.

3.1.2.1 Inbound Payment Preferences Summary

You can view all the Inbound payments preferences maintained, in this summary screen.

You can invoke 'IMPS Inbound Payment Preferences Summary' screen by typing 'PJSNWIPF' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The screenshot displays the 'IMPS Inbound Payment Preferences Summary' application window. At the top, there is a search bar with buttons for 'Search', 'Advanced Search', 'Reset', and 'Clear All'. Below the search bar, there are several filter fields: 'Case Sensitive' (checkbox), 'Authorization Status' (dropdown), 'Record Status' (dropdown), 'Network Code' (text input), and 'Host Code' (text input). There are also 'Transaction currency' and 'Host Code' fields with search icons. A table below shows columns for 'Authorization Status', 'Record Status', 'Network Code', 'Host Code', 'Transaction currency', 'Beneficiary Name Match Required', 'Credit Liquidation', 'Debit Liquidation', and 'National Bank Identifier'. The table is currently empty. At the bottom right, there is an 'Exit' button.

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

- Authorization Status
- Record Status
- Network Code
- Host Code
- Transaction Currency

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 select a record and click on 'Details' button to view the detailed maintenance screen.

3.1.3 Account Type Restrictions

You can maintain the account type restrictions applicable for the IMPS payments in this screen.

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

Host Code

System defaults the host code of transaction branch on clicking 'New'.

Host Code Description

System defaults the description of the host code displayed.

Network Code

Select the network code 'IMPS' from the list of values.

If only one Network is maintained with payment type as 'IMPS' for the host code, the same gets 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 Code Description

System defaults the description of the host code displayed.

Network Type Description

System defaults the Network Type Description of the Network code selected.

Outbound Payment Restrictions/Inbound Payment Restrictions

Payment restrictions can be maintained for Outbound Payments and Inbound Payments separately for specific networks.

Restriction Type

The options are 'Disallowed' and 'Allowed'. System defaults the value as 'Disallowed'

Disallowed – This option indicates, that the list of Account types maintained is in disallowed list.

Allowed – This option indicates, that the list of Account types maintained is in allowed list.

Note

- Click on '+' button to add new row for selecting Account type details.
- Click on '-' button to delete the Account type details added. To delete a specific record, check the record and click on '-' button.
- Click on 'Single View' button to view the complete details for the record selected.

Account Type

Select the Account Type from the list of values. You can add multiple records in this grid. The account types listed are:

Account Type	Account Type Code
Savings Bank	10
Current Account	11
Cash Credit	13
Loan Account	14
Overdraft	12
NRE	40

Account Type Code

System defaults the Account Type Code, based on the Account Type selected.

Note

System validates the records added while saving. If no record is maintained for Account Type, then error message is displayed as - 'Please maintain Allowed/Disallowed Account Type for the Network Code'.

3.1.3.1 Account Type Restrictions Summary

You can view all the account type restrictions maintained, in this summary screen.

You can invoke 'Account Type Restrictions Summary' screen by typing 'PJSACSTR' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The screenshot shows the 'Account Type Restrictions Summary' application window. At the top, there are search options: 'Search', 'Advanced Search', 'Reset', and 'Clear All'. Below this, there are two dropdown menus: 'Authorization Status' and 'Record Status'. There are also input fields for 'Host Code' and 'Network Code', each with a refresh icon. The main area is a data grid with columns: 'Authorization Status', 'Record Status', 'Host Code', 'Network Code', 'Outbound Payment Restriction Type', and 'Inbound Payment Restriction Type'. The grid is currently empty. At the bottom right, there is an 'Exit' button.

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

- Authorization Status
- Record Status
- Host Code
- Network Code

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 select a record and click on 'Details' button to view the detailed maintenance screen.

3.1.4 **NBIN - IFSC Mapping**

You can maintain the mapping between NBIN and IFSC through this screen.

You can invoke 'NBIN Maintenance' screen by typing 'PJDNBIFS' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button. Click 'New' button on the Application toolbar.

The screenshot shows the 'NBIN Maintenance' application window. The title bar reads 'NBIN Maintenance'. Below the title bar is a toolbar with 'New' and 'Enter Query' buttons. The main content area has three input fields: 'Bank IFSC Code *', 'Bank Name', and 'National Bank Identification Number *'. At the bottom of the window is a status bar with the following fields: 'Maker', 'Checker', 'Date Time', 'Date Time', 'Mod No', 'Record Status', 'Authorization Status', and an 'Exit' button.

Following are the actions allowed from this screen:

- New
- Save
- Copy
- Print
- Enter Query
- Unlock
- Delete
- Authorize

Specify the following fields:

Bank IFSC Code

Select the Bank IFSC Code from the list of values. This maintenance is per bank participating in IMPS network. The Bank IFSC Codes listed in the LOV are unique.

System builds an internal table for the Bank IFSC Code, i.e. only the first four characters of the IFSC Code based on the Local Payment Bank Directory maintenance (STDBKMNT) where the 11-character IFSC Code (Bank Code) is maintained.

Bank Name

System defaults the Bank Name of the IFSC Code selected.

National Bank Identification Number

Specify the unique NBIN number in this field. This is a unique 4-digit number allotted by NPCI for all banks participating in IMPS. This field is modifiable.

Based on the NBIN and IFSC Code mapping done here, system automatically derives NBIN (example, 4267) by matching only the first four alphabetic characters of the beneficiary IFSC Code (SDPS0000072) input in the IMPS Outbound Payment transaction. The derived NBIN is populated in the DE-2 of outbound original request message.

Note

NBIN does not start with zeroes.

3.1.4.1 NBIN - IFSC Mapping Summary

You can view all the NBIN-IFSC mapping maintenances done in this screen.

You can invoke 'NBIN Maintenance Summary' screen by typing 'PJSNBIFS' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The screenshot shows the 'NBIN Maintenance Summary' application window. It includes a search bar with 'Search', 'Advanced Search', 'Reset', and 'Clear All' options. Below the search bar, there are input fields for 'Authorization Status', 'Record Status', 'Bank IFSC Code', 'National Bank Identification Number', and 'Bank Name'. A table below these fields shows a single record with columns for 'Authorization Status', 'Record Status', 'Bank IFSC Code', 'National Bank Identification Number', and 'Bank Name'. The table is currently empty. At the bottom right of the window, there is an 'Exit' button.

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

- Authorization Status
- Record Status
- Bank IFSC Code
- National Bank Identification Number
- Bank Name

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 select a record and click on 'Details' button to view the detailed maintenance screen.

3.1.5 IMPS Network Code Source Preference

You can maintain the Network Source code preferences specific to IMPS network in this screen.

You can invoke 'IMPS Network Code Source Preferences' screen by typing 'PJDNWSCD' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

Preferences		ATM Preferences	
MCC Retail	4814	ATM Terminal ID	
MCC Entity	1512	Terminal Street	
Credit Card MCC Retail	5414	Terminal City	
Credit Card MCC Entity	5415	Terminal State	
Point of Service Entry Mode	012	Terminal Country	
Point of Service Condition Code	00		
Channel code			

Following are the actions allowed from this screen:

- New
- Save
- Copy
- Print
- Enter Query
- Unlock
- Delete
- Authorize

Specify the following fields:

Host Code

System defaults the host code of transaction branch on clicking 'New'.

Host Code Description

System defaults the description of the Host Code displayed.

Source Code

Specify the Source Code, via which the transaction is to be booked. All valid and open source codes maintained in the PMDSORCE screen are listed here.

Source Code Description

System defaults the description of the Source Code selected.

Network Code

Select the network code as IMPS from the list of values.

If only one Network is maintained with payment type as 'IMPS' for the host code, the same gets 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 Code Description

System defaults the description of the Network Code selected.

Network Type Description

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

Preferences

MCC Retail

System defaults the MCC Retail as - 4814. You can select other options from the drop-down values listed. If no values are maintained in this screen, default value '4814' is populated in Request Pay/Check Transaction Request message.

Options listed in the drop -down are:

- 4814 – Retail user initiating from Branch
- 4829 – Transaction initiated from Internet channel
- 6011 - Transaction initiated through ATM Channel

MCC Entity

System defaults the MCC Entity as - 4512. You can select other options from the drop-down values listed:

- 4512 - Corporate user initiating from Branch
- 4513 - Corporate user initiating from Internet/Mobile/SMS/WAP/IVR channel
- 6010 - Corporate user initiating IMPS transactions in Bulk through any channel
- 6012 - Transaction initiated through Assisted/Business Correspondents (BC)

Credit Card MCC Retail

Credit Card MCC Retail is defaulted as MCC 5414 (Retail). This field is editable.

As a part of transaction processing, if Payer Type is Person and Beneficiary Account Type is 'Credit card' then system populates MCC 5414 (Retail) in Reqpay API as per maintenance screen.

Credit Card MCC Entity

Credit Card MCC Entity is defaulted as MCC 5415 (Corporate). This field is editable.

As a part of transaction processing, if Payer Type is Entity and Beneficiary Account Type is 'Credit card' then system populates MCC 5415 (Corporate) in Reqpay API as per maintenance screen.

Point of Service Entry Mode

System defaults the Point of Service Entry Mode as - 012. You can select other options from the drop-down values listed. If no values are maintained in this screen, default value '012' is populated in DE-22.

Options listed in the drop -down are:

- 019 - Transaction initiated through Mobile Phone
- 012 - Transaction initiated through Internet Channel/ Branch
- 901 - Transaction initiated through ATM Channel

Point of Service Condition Code

System defaults the Point of Service Condition Code as - 05. You can select other options from the drop-down values listed. If no values are maintained in this screen, default value '05' is populated in DE-23.

Options listed in the drop -down are:

- 05 - Transaction initiated through Mobile Phone
- 05 - Transaction initiated through Internet Channel/ Branch
- 00 - Transaction initiated through ATM Channel

Channel Code

Select the Channel Code from the list of values. All the valid channel codes are listed here. The options listed are:

- ATM
- INET
- IVR
- MAT
- MOB
- POS
- SMS
- USDB
- USDC
- WAP

ATM Preferences

You can maintain the ATM Preferences in this section.

If values '6011', '901', '00' are maintained in merchant category code, point of service entry code, point of service condition code respectively, system validates if ATM preferences details are maintained. If not maintained, system gives a warning message 'Please maintain ATM preferences'.

ATM Terminal ID

Specify the ATM Terminal ID. Alphanumeric characters of length 8 is allowed. This gets populated in DE-41, DE-42.

Terminal Street

Specify the Terminal Street. Alphanumeric characters of length 23 is allowed.

Terminal City

Specify the Terminal City. Alphanumeric characters of length 13 is allowed.

Terminal State

Specify the Terminal State. Alphanumeric characters of length 2 is allowed.

Terminal Country

Select the Terminal Country from the list of values. For IMPS network, Terminal Country supported is 'IN'.

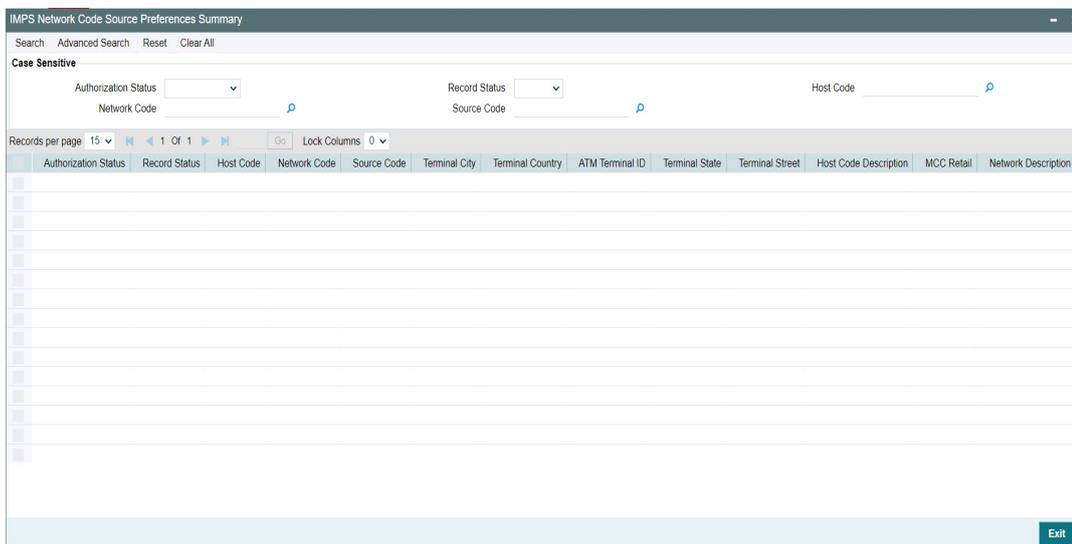
Note

Terminal Street, City, State, Country, specified here gets populated in DE-43.

3.1.5.1 **IMPS Network Code Source Preferences Summary**

You can view all the network code source preferences maintained for IMPS network through this screen.

You can invoke 'IMPS Network Code Source Preferences Summary' screen by typing 'PJSNWSCD' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.



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

- Authorization Status
- Record Status
- Network Code
- Host Code
- Source Code

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

3.1.6 **IMPS XML NPCI Connectivity Maintenance**

You can capture IMPS XML connectivity details in this screen.

The request and response messages are posted using https URL in the given format.

The URL shall be used to identify the product, current version of the product, the API and the entity initiating the message.

URL: `https://<Source IP Address of bank>/imps/<API name>/<version>/urn:txnid: <txn id> .`

Sample IMPS URL - `https:// 10.200.0.1:443 /imps/ReqPay/2.0/urn:txnid:`

All the required maintenance details for connectivity is configured from this screen.

You can invoke 'IMPS XML NPCI Connectivity Maintenance Detailed' screen by typing 'PJDXMLCN' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

Specify the following fields:

Host Code

Select the Host Code from the list of values. All valid and authorized Host codes are listed here.

Host Code Description

System defaults the description of the Host Code selected.

Network Code

Select the network code of the India IMPS from the list of values.

If only one Network is maintained with payment type as 'IMPS' for the host code, the same gets 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 of the network selected.

Preferences

Url

Specify a valid IMPS request and response url.

Heartbeat Request Interval (MM:SS)

Specify a valid interval between two heartbeat request.

Note

As per specification, the value can be configured in 3 minutes.

Schema Definition File Path

Specify a valid XSD path.

API Name

Select the valid API Name from the following:

- ReqPay
- RespPay
- ReqChkTxn
- RespChkTxn
- ReqHbt
- RespHbt

Version

Specify a valid Version.

Note

By-default, the version is 2.0.

SSL Details**Key Manager Factory**

Specify a valid Key Manager Factory.

Key Password

Specify a valid key Password.

SSL Context

Specify a valid SSL context.

Keystore Name

Specify the keystore name.

Keystore Password

Specify the keystore password.

Keystore Path

Specify the keystore path.

Keystore Constant

Specify the keystore constant.

Keystore Password Constant

Specify the keystore password constant.

Keystore Instruction Type

Specify the keystore instruction type.

3.1.6.1 **IMPS XML NPCI Connectivity Maintenance Summary**

You can invoke 'IMPS XML NPCI Connectivity Maintenance Summary' screen by typing 'PJSXMLCN' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

The screenshot displays the 'IMPS XML NPCI Connectivity Maintenance Summary' application window. At the top, there is a search bar with options for 'Search', 'Advanced Search', 'Reset', and 'Clear All'. Below the search bar, there are search filters for 'Case Sensitive', 'Authorization Status', 'Record Status', 'Host Code', and 'Network Code'. A table below the filters shows columns for 'Authorization Status', 'Record Status', 'Host Code', 'Host Code Description', 'Network Code', 'Network Description', 'Uri', 'Heartbeat Request Interval (MM: SS)', 'API Name', and 'Version'. The table is currently empty. At the bottom right, there is an 'Exit' button.

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

- Authorization Status
- Record Status
- Host Code
- Network Code

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

4. IMPS Outbound Payments

Outbound credit transactions can be booked, viewed through the Outbound IMPS transaction screens.

4.1 IMPS Outbound Transaction Input

This chapter contains the following sections:

- [Section 4.1.1, "IMPS Outbound Transaction Input"](#)
- [Section 4.1.2, "IMPS Outbound Transaction View"](#)
- [Section 4.1.3, "ReST Services"](#)

4.1.1 IMPS Outbound Transaction Input

You can book the outbound IMPS transactions through this screen. Outbound IMPS details can be provided here.

You can invoke 'IMPS Outbound Payment Transaction Input Detailed' screen by typing 'PJDOTONL' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button. Click 'New' button on the Application toolbar.

The screenshot shows the 'IMPS Outbound Transaction Input Detailed' application window. At the top, there is a toolbar with 'New' and 'Enter Query' buttons. The main area is divided into several sections:

- Transaction Reference:** Fields for Transaction Reference, Retrieval Reference, Source Reference, Message ID, Transaction ID, Network Code, Network Code Description, and IMPS Transaction Type (set to P2A). There is also a 'Prefunded Payments' checkbox.
- Debtor Details:** Fields for Debtor Account Number, Debtor Account Type, Debtor Account Branch, Debtor Name, Customer No, Debtor Mobile Number, Debtor MMID, Debtor Bank Name, and Debtor Bank IFSC Code.
- Payment Details:** Fields for Booking Date, Instruction Date, Activation Date, Transaction currency (set to INR), Transaction Amount, and Remarks.
- Beneficiary ID:** Field for Beneficiary ID.
- Beneficiary Details:** Fields for Beneficiary Name, Beneficiary Account Number, Beneficiary Account Type, Beneficiary IFSC Code, Beneficiary MMID, and Mobile Number.
- A/C + IFSC:** Fields for Beneficiary Name, Beneficiary Account Number, Beneficiary Account Type, Beneficiary IFSC Code, Bank Name, Branch Name, Mobile Number, and Email ID.

At the bottom, there is a status bar with 'UDF | MIS' on the left, and 'Maker ID', 'Maker Date Stamp', 'Checker ID', 'Checker Date Stamp', 'Authorization Status', and an 'Exit' button on the right.

Following are the actions allowed from this screen:

- New
- Save
- Copy
- Print

- Enter Query
- Unlock
- Delete
- Authorize

Specify the following details:

Transaction Branch

The system defaults the transaction branch code with the user's logged in branch code.

Branch Name

System displays the Name of the Transaction Branch.

Host Code

System defaults the host code of transaction branch on clicking 'New'.

Host Code Description

System defaults the description of the Host Code displayed.

Source Code

Select the Source Code from the list of values. All valid Source code are listed here. For manually input transactions, source code can be selected from the list of valid source codes.

For transactions received through Rest services, the source code is populated as received in the request.

Source Code Description

System defaults the description of the Source Code selected.

Network code

The system defaults the Network code as 'IMPS'. If only one Network is maintained with payment type as 'IMPS' for the host code, the same gets defaulted in this field.

And you can also select the Network code from the list of values when multiple networks are available. All valid codes maintained in Network maintenance (PMDNWMNT) screen are listed.

Transaction Reference

This is a 16-digit unique identifier of the IMPS payment transaction and auto-generated by the system based on the common transaction reference generation logic.

For more details on the reference generation logic, refer to Payments Core User manual.

Retrieval Reference

System auto generates the RRN (Retrieval Reference Number) on authorization of the payment transaction. This is a 12-digit number. RRN is generated using the following logic:

The RRN Mask is: 'YDDDHSSSSSS'

- Y – Last digit of year.
- DDD – Julian date of transaction
- HH – Hour of transaction (derived from DE-12 as in IST).
- SSSSSS – STAN of transaction (Same as in DE -11 for system generated unique 6-digit number within a business day).

Source Reference

System defaults the Source Reference Number as Transaction Reference. The maximum length of this field accepts up to 35 characters. and it is modifiable.

Message ID

This field displays the unique Message ID generated by system.

Transaction ID

This field displays the unique Transaction ID generated by system.

Network Code

Select the Network code as 'IMPS' from the list of values. In case multiple networks are found for the same combination, all applicable networks are listed for the field. You can select the required network.

Network Code Description

System defaults the description of the Network Code selected.

IMPS Transaction Type

Select the IMPS Transaction Type from the drop-down values. The options are:

- **P2A:** You can specify the details of A/C + IFSC in the Beneficiary Details section. System validates and does not allow to enter details in the MMID+Mobile Number / Aadhaar Number section for P2A Transaction type.
- **P2P:** You can specify the details of MMID + Mobile Number in the Beneficiary Details section. System validates and does not allow to enter details in the A/C + IFSC / Aadhaar Number section for P2P Transaction type.

Prefunded Payments

Select this check box to indicate that Pre funded payments are allowed for the source.

4.1.1.1 Main Tab

Debtor Details

Debtor Account Number
Debtor Account Type
Debtor Account Branch
Debtor Name
Customer No
Debtor Mobile Number
Debtor MMID
Debtor Bank Name
Debtor Bank IFSC Code

Payment Details

Booking Date
Instruction Date
Activation Date
Transaction currency INR
Transaction Amount
Remarks

Beneficiary ID

Beneficiary ID

Beneficiary Details

A/C + IFSC

Beneficiary Name
Beneficiary Account Number
Beneficiary Account Type
Beneficiary IFSC Code
Bank Name
Branch Name
Mobile Number
Email ID

MMID + Mobile Number

Beneficiary Name
Beneficiary MMID
Mobile Number

UDF | MIS

Maker ID
Maker Date Stamp

Checker ID
Checker Date Stamp

Authorization Status

Exit

Debtor Details

Debtor Account Number

Select the Debit Account Number from the list of values. All open and authorized accounts maintained in the India Payment Account Preferences (PMDEXACP) are listed for this field. System displays only the 'Savings/Current type accounts in the LOV.

System defaults the following details on selecting the Debit Account Number and the details cannot be modified:

- Debtor Account Type
- Debtor Account Branch
- Debtor Name
- Customer No
- Debtor Mobile Number
- Debtor MMID
- Debtor Bank Name
- Debtor Bank IFSC Code

Payment Details

Booking Date

System defaults the current date as Booking Date. This is disabled for user modification.

Instruction Date

System defaults the current application server date. This date can be modified by the user. This is the requested execution date by the customer. Back dates are not allowed as instruction date.

Activation Date

Activation Date is derived from Instruction date and is disabled for modification.

Since Network / Branch holidays are applicable for IMPS payments, activation date is same as instruction date. Payment is submitted to NPCI on Activation date and processed by NPCI on the same date.

Transaction Currency

System defaults the Transfer currency as 'INR'. This field is disabled for modification.

Transaction Amount

Specify the Transaction Amount.

Remarks

Any internal remarks can be input in this field. This is a free text field of allowed character length '50'

Beneficiary ID

Beneficiary ID

Select the Beneficiary ID from the list of values. This field fetches the Beneficiary IDs maintained for the debtor account number and beneficiary type combination.

Note

- For the selected debtor account number, if IMPS transaction type selected is 'P2A', the LOV displays only beneficiary IDs of type 'P2A' with beneficiary details maintained in A/C+IFSC section of beneficiary registration (PMDBENRN) for the network 'IMPS'.
 - Similarly, for P2P IMPS transaction types, Beneficiary ID LOV, fetches only the P2P beneficiary type records maintained for the debtor account number.
-

Beneficiary Details**A/C + IFSC**

System defaults the following A/C + IFSC details on selecting the valid Beneficiary ID:

- Beneficiary Name
- Beneficiary Account Number
- Beneficiary Account Type
- IFSC Code
- Bank Name
- Branch Name
- Mobile Number and Email ID (if available)

On saving the transaction, following validations are done by the system:

- System validates if IMPS transaction type applicable is maintained in IMPS Outbound Payment Preferences (PJDNWOPF). If not input for IMPS transaction type, system throws a warning message 'This Particular IMPS Transaction type <IMPS_TXN_TYPE> is not enabled. Unable to process'.
- System validates if the values for the above fields (Beneficiary Name, Ben Account Number and IFSC Code) are present for the IMPS transaction type 'P2A (A/C + IFSC)'. If not input, system throws a warning message 'Please enter Beneficiary Name, Account Number, IFSC Code to proceed'.
- System shows 'Transfer to Overdraft, Cash Credit, Loan Account, Account is not allowed through IMPS.' as per the beneficiary account type input.
- System validates if the debtor account type is allowed for the Outbound Payment and Network Code as maintained in Account Type Restrictions screen (PJDACSTR). If the account type is not allowed for the network, system shows error message 'This Account Type is not allowed for IMPS transfer.' The transaction is moved to Process Exception queue.
 - If the validation is successful, it is moved to the next step of outbound processor.
 - In cases where beneficiary account type is not input, system still processes the transaction as validation successful.
- System validates for 'On-US Transfer' (for P2P transfer within same bank) for Outbound IMPS as below:
 - System derives the NBIN based on the first four-digits of beneficiary MMID input at the transaction level.
 - Compare this derived NBIN with the NBIN maintained at the IMPS outbound payment preferences screen PJDNWOPF.
 - If found to be same, the outbound transaction is blocked and rejected. System shows the warning message 'IMPS Transfer within the same bank is not allowed. Unable to Save'.

Note

- All the fields in the grid, except Bank and Branch Name can be edited, only if the Beneficiary ID is 'NULL' (without beneficiary registration)
 - System does not allow the user to select same bank as that of remitter bank's IFSC Codes as per the LOV restriction.
 - LOV Restriction condition: NBIN maintained in (PJDNWOPF) is equal to Bank IFSC Code (first four characters) as maintained in the screen NBIN Details (PJDNBIFS).
-

MMID + Mobile Number

System defaults the following MMID + Mobile Number details on selecting the valid Beneficiary ID:

- Beneficiary Name
- MMID
- Mobile Number

On saving the transaction, following validations are done by the system:

- System validates if the values for the above fields (Beneficiary Name, MMID, Mobile Number) are present for the IMPS transaction type 'P2P (MMID + Mobile Number)'. If not input, system throws a warning message 'Please enter Beneficiary Name, MMID, Mobile Number to proceed'
- All the above fields are editable only if Beneficiary ID is 'NULL' (without beneficiary registration) and the debtor account number is not of 'GL' type.

Enrich Button

On clicking the Enrich button, system computes the Charges, and Tax on Charges if applicable, based on the maintenance for Transaction Pricing Code specified in IMPS Outbound Payment Preferences screen (PJDNWOPF).

4.1.1.2 Pricing Tab

You can view the computed charges and taxes applicable for each charge component, for the transaction booked by clicking the 'Pricing' tab. Pricing details are populated on clicking the 'Enrich' button.

Charges and Tax components are fetched as maintained in the Pricing Value Maintenance screen (PPDVLMNT) as applicable for the Payment Source code & Customer Service model.

Pricing Component	Pricing Currency	Pricing Amount	Waived	Debit Currency	Debit Amount
-------------------	------------------	----------------	--------	----------------	--------------

The below mentioned attributes is available in the Pricing tab.

Pricing Component

Displays the Name of the pricing component, applicable for the transaction, for which charges are computed.

Pricing Currency

Displays the Currency in which the charge amount is calculated for the Pricing component. from the Pricing Code maintenance.

Pricing Amount

Displays the fixed or calculated charge amount using the Pricing Value maintenance. You can edit the amount in this field to a non-zero value.

Waiver

Check this box to indicate that the charge is waived for the pricing component.

- If a particular Charge component is waived by the user then system would automatically also check the waiver the associated Tax component
- If charge/tax component is already waived in the Pricing Value maintenance, this component would still be displayed with the value and the waiver flag checked. This flag would not be allowed to be unchecked by the user.

Debit Currency

Displays the currency in which the charge amount is debited for the pricing component. This is the currency of the debit (originator) account

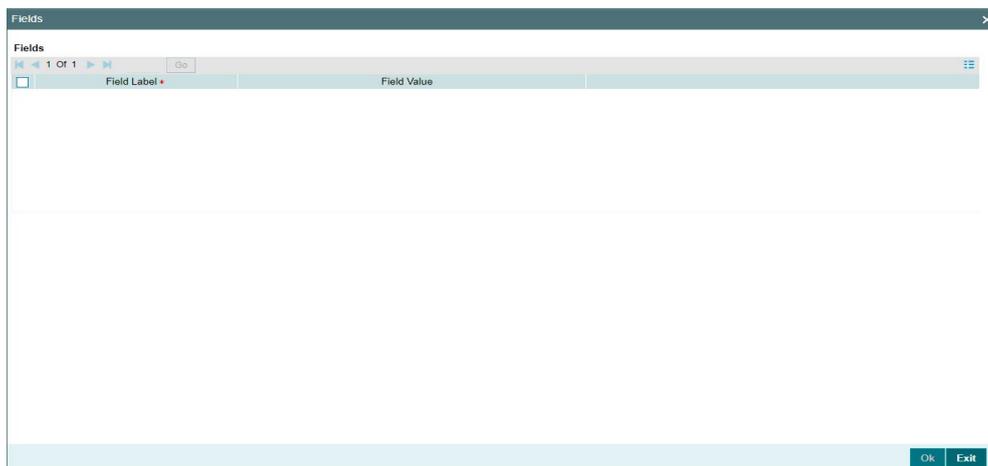
Debit amount

Displays the debited amount to the selected debit amount.

4.1.1.3 UDF Tab

You can view or capture the UDF fields and its details for the outbound IMPS transaction input screen by clicking the 'UDF' button.

Based on the UDF Group linked_in the Source Maintenance screen, for source code applicable to Manual initiation, UDF fields are available for input while creating the transaction.



4.1.1.4 MIS Tab

You can view/ edit the MIS details for the outbound IMPS transaction input screen by clicking the 'MIS' button.

Based on the MIS Group linked in the Source Maintenance screen, for source code applicable to Manual initiation, MIS default values are populated for the IMPS payment transaction.

You can change the default MIS values and input values for other MIS fields for which no value is defaulted.

4.1.1.5 IMPS Outbound Transaction Input Detailed Summary

You can view all the IMPS outbound transactions booked in this summary screen.

You can invoke 'IMPS Outbound Transaction Input Detailed Summary' screen by typing 'PJSOTONL' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

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

- Transaction Reference Number
- Retrieval Reference
- Network Code
- Source Code

- Maker ID
- Checker ID
- Instruction Date
- Activation Date
- IMPS Transaction Type
- Transaction Currency
- Transaction Branch
- Transaction Amount
- Booking Date
- Debtor Account Number
- Customer No
- Beneficiary Account Number
- Beneficiary IFSC Code
- Beneficiary MMID
- Beneficiary Mobile Number
- Authorization Status
- Beneficiary Account Type
- Debit Account Type

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 select a record and click 'Details' button to view the detailed maintenance screen.

4.1.2 IMPS Outbound Transaction View

You can view all the outbound IMPS transactions with all the processed details in this screen.

You can invoke 'Outbound IMPS Transaction View Detailed' screen by typing 'PJDOVIEW' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

- From this screen, click Enter Query. The Transaction Reference field gets enabled which opens an LOV screen.
- Click the Fetch button and select the required value.
- Along with the transaction details in the Main and Pricing tabs user can also view the Status details for the following:
 - External System Status
 - Transaction Status
 - Error Details
- Click Execute Query to populate the details of the transaction in the Outbound IMPS Transaction View screen.

View Reversal Transaction

For a IMPS Outbound Transaction if there is a 'ReqPay' API for remitter online credit is received from NPCI and process successfully, then on click 'View Reversal Transaction' button to invoke the IMPS Inbound Transaction View Detailed (PJDIVIEW) screen to view the respective inbound transaction details.

For more details on Main, Pricing tabs refer to 'PJDOTONL' screen details above.

Transaction Status - Queue Code

Transaction Status	Applicable Queue Codes for IMPS	Remarks
In Progress	<SC/EC/EP>	Transaction is under progress (or) response is pending from External systems. Queue Code is applicable if response is pending from External systems - Sanction Check - ECA - Pricing
Exception	<SC/EC/EP/BO/PE>	Transaction is in an internal/external queue. Applicable internal/external queues - Sanction Check - ECA - Pricing - Business Override - Processing Exception
Future Dated	<FV>	Transaction is future-value dated
Processed	##	OUT message is generated
Cancelled	##	Cancelled from exception queue
Seized	##	Sanction Seized
Rejected	##	Decline response from NPCI

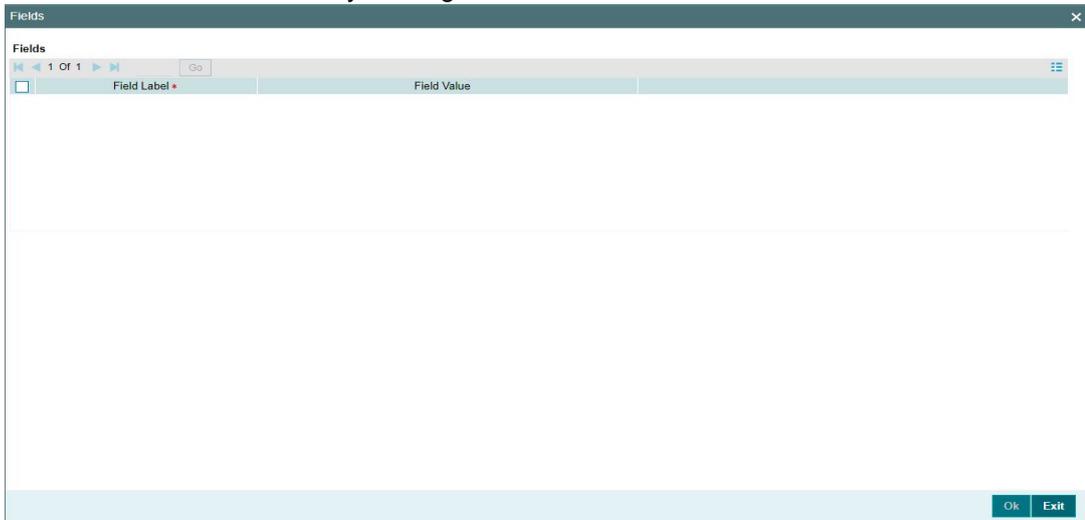
Settlement Status

Settlement Status field in the 'Transaction Status' section displays the following details.

- Settled: On receipt of Response Pay with response code 00
- Deemed Approved: On receipt of Response Pay with response code 91

4.1.2.1 UDF Tab

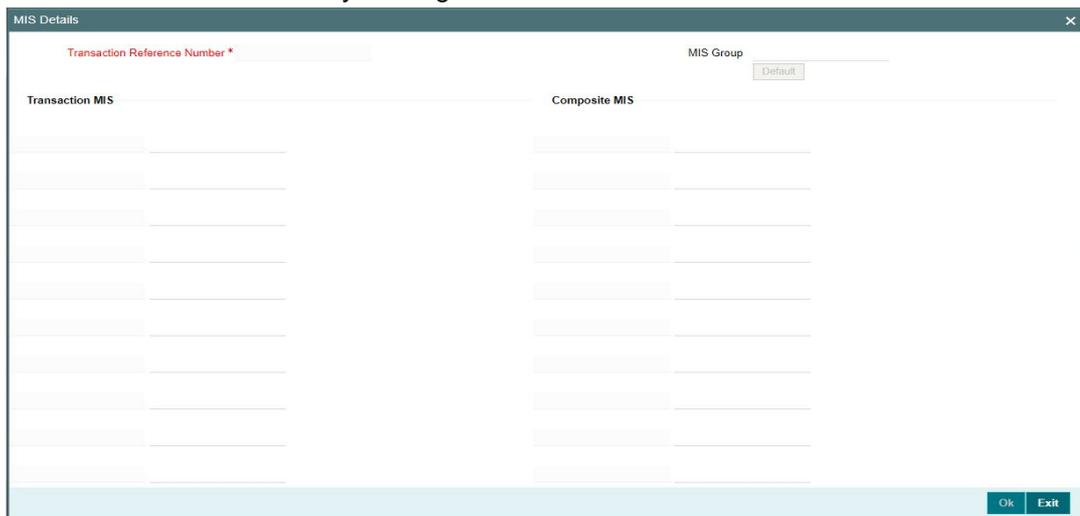
You can invoke this screen by clicking 'UDF' tab in the screen.



The screenshot shows a window titled "Fields" with a close button (X) in the top right corner. Below the title bar is a navigation bar containing a left arrow, "1 of 1", a right arrow, and a "Go" button. The main area is a table with two columns: "Field Label" and "Field Value". The table is currently empty. At the bottom right of the window, there are "Ok" and "Exit" buttons.

4.1.2.2 MIS Tab

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



The screenshot shows a window titled "MIS Details" with a close button (X) in the top right corner. At the top, there are two input fields: "Transaction Reference Number" (with a red asterisk) and "MIS Group" (with a "Default" button next to it). Below these are two sections: "Transaction MIS" and "Composite MIS". Each section contains a vertical list of input fields. At the bottom right of the window, there are "Ok" and "Exit" buttons.

4.1.2.3 View Queue Action Log

User can view all the queue actions for the respective transaction initiated. You can invoke this screen by clicking the 'View Queue Action' button in View screen, where the Transaction Reference Number is auto populated and related details are displayed.:

The screenshot shows a web application window titled "View Queue Action Log". At the top, there is a search area labeled "Enter Query" with two input fields: "Transaction Reference Number" and "Network Code". Below the search area is a table with the following columns: "Transaction Reference Number", "Action", "Remarks", "Queue Code", "Authorization Status", "Maker Id", and "Maker Date Stamp". The table shows "1 Of 1" records. At the bottom of the window, there are three buttons: "View Request Message", "View Response Message", and "Exit".

Following details are displayed:

- Transaction Reference Number
- Network Code
- Action
- Remarks
- Queue Code
- Authorization Status
- Maker ID
- Maker Date Stamp
- Checker ID
- Checker Date Stamp
- Queue Status
- Queue Reference No
- Primary External Status
- Secondary External Status
- External Reference Number

User can view the request sent and the corresponding response received for each row in Queue Action Log.

Also user can view the request sent to and the response received from external systems for the following:

- Sanction screening
- External credit approval
- External price fetch
- Accounting system

4.1.2.4 All Messages

Click the 'All Messages' link in the Outbound IMPS Payments View screen, to invoke this sub-screen.

The screenshot shows a web application window titled "All Messages". At the top, there are two input fields: "Transaction Reference" and "Retrieval Reference". Below these, the window is divided into two main sections: "Request Messages" and "Response Messages".

Request Messages Section:

- Includes a "Go" button and a "Message" button.
- Table with columns: Message Reference, Message Type, VR Sequence, Message Date and Time.

Response Messages Section:

- Includes a "Go" button and a "Message" button.
- Table with columns: Message Reference, Message Type, Response Code, Response Code Description, Response Status, Message Date and Time.

An "Exit" button is located at the bottom right of the window.

You can view the generated messages and the response messages for the transaction in this sub screen for the Transaction Reference Number specified. Following details are displayed in the screen:

Request Messages

- Message Reference Number
- Message Type
- VR Sequence
- Message Date and Time

Response Messages

- Message Reference
- Message Type
- Response Code
- Response Code Description
- Response Status
- Message Date and Time

4.1.2.5 Accounting Entries Tab

You can view the Accounting Entries posted for the Outbound IMPS in Accounting entries Tab.

Accounting Entries

Enter Query

Transaction Reference Number

Accounting Entries

1 Of 1

<input type="checkbox"/> Event Code	Transaction Date	Value Date	Account	Account Branch	TRN Code	Dr/Cr	Amount Tag	Account Currency	Transaction Amount
-------------------------------------	------------------	------------	---------	----------------	----------	-------	------------	------------------	--------------------

Accounting Details

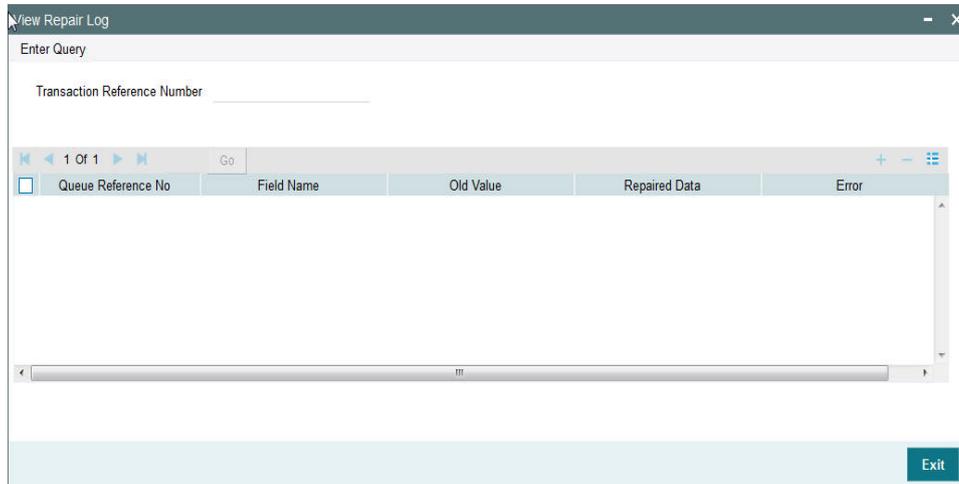
Exit

By default, the following attributes of the Accounting Entries tab are displayed:

- Event Code
- Transaction Date
- Value Date
- Account
- Account Branch
- TRN Code
- Dr/Cr
- Amount Tag
- Account Currency
- Transaction Amount
- Netting
- Offset Account
- Offset Account Branch
- Offset TRN Code
- Offset Amount Tag
- Offset Currency
- Offset Amount
- Offset Netting
- Hand-off Status

4.1.2.6 View Repair Log

User can view all the Repair actions for the respective transaction initiated. You can invoke this screen by clicking the 'View Repair Log' button in View screen, where the Transaction Reference Number is auto populated and related details are displayed.

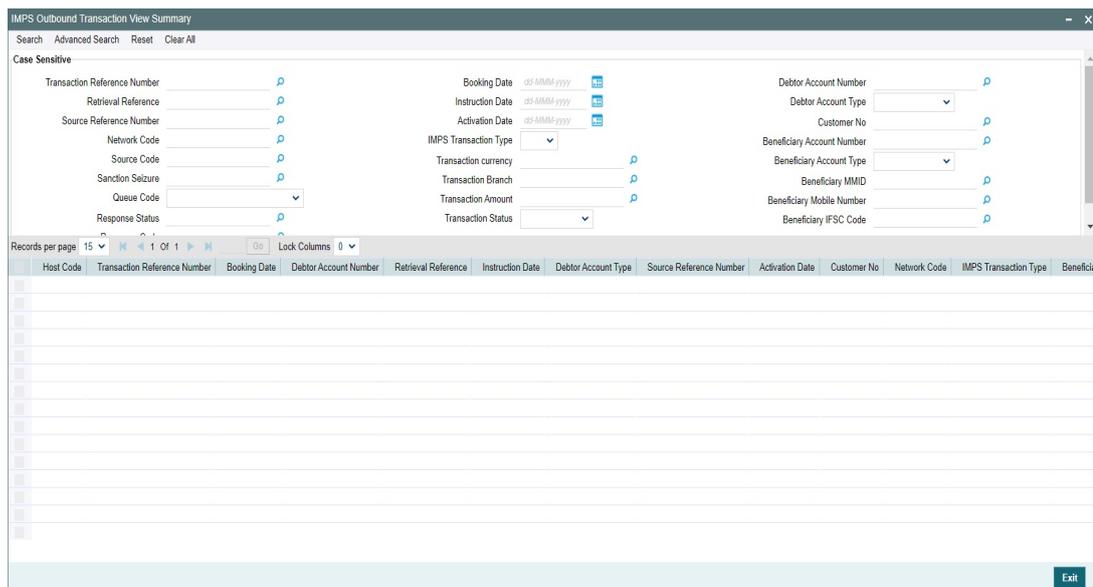


Following details are displayed:

- Queue Reference No
- Field Name
- Old Value
- Repaired Data
- Error

4.1.2.7 IMPS Outbound Transaction View Summary

You can invoke 'Outbound IMPS Transaction View Summary' screen by typing 'PJSOVIEW' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.



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

- Transaction Reference Number

- Retrieval Reference
- Source Reference Number
- Network Code
- Source Code
- Queue Code
- IMPS Transaction Type
- Transaction Currency
- Transaction Branch
- Transaction Amount
- Transaction Status
- Booking Date
- Instruction Date
- Activation Date
- Debtor Account Number
- Debtor Account Type
- Customer No
- Beneficiary Account Number
- Beneficiary Account Type
- Beneficiary IFSC Code
- Beneficiary MMID
- Beneficiary Mobile Number
- Sanction Seizure
- Response Code
- Response 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 select a record and click on 'Details' button to view the detailed maintenance screen.

4.1.3 ReST Services

ReST services for Outbound IMPS transaction are supported.

4.2 IMPS Outbound Payments Processing

4.2.1 Outbound IMPS Payment Processing

- Following are the processing steps for outbound payments:
 - Initial Validations
 - NRE Account Validation
 - Intra Bank Transfer Check
 - Duplicate Check
 - Daily limit Check
 - Sanctions CheckPricing

- ECA Check
- Accounting
- Messaging
- Prefunded Payments Allowed
- Debtor Account Derivation
- Debtor Account Type Derivation
- Debtor Name Derivation

4.2.1.1 Initial Validations

The following processing are covered as part of initial validations:

- Data enrichment - Account / Bank Re-direction, Network character replacement
- Beneficiary ID Validation if registered for the IMPS network with corresponding Beneficiary Type.
- Mandatory fields validations
- Network Limit validations
- Account/Customer Validations based on core maintenance
- Network Character replacement
- If Account re-direction or bank re-direction is maintained, then the account / bank details are replaced by that values. Account re-direction is applicable for debtor account only.
- 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. Validation is available to verify if the below fields are present in the request:
 - Host Code
 - Network Code
 - Transaction Branch
 - IMPS Transaction Type
 - Debtor Account (Validation is available to check only INR currency accounts allowed for IMPS.)
 - IFSC Code
 - Beneficiary Account Number
 - Beneficiary Name
 - Transaction Currency
 - Transaction Amount
 - Instruction Date
 - Beneficiary bank IFSC Code is allowed for IMPS network (PMDBKMNT)
- Transaction amount limit check is done for the minimum and maximum amount limits defined for the Network, as maintained in IMPS Outbound Payment Preferences (PJDNWOPF)
- In case of validation failure for any of the above, transaction is rejected with proper error code. Transaction is moved to Process Exception Queue.
- Account Type Restrictions: System validates if the debtor 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 shows error message 'This Account Type is not allowed for IMPS transfer.' Transaction is moved to Process Exception Queue.

- If the validation is successful, it is moved to the next step of outbound processor.
- In cases where beneficiary account type is not input, system still processes the transaction as validation successful.
- Customer /Account Status validations:
 - System validates whether account record is open and authorized.
- The system checks the Account Type Value present in the incoming channel requests for Debtor Account Type and Beneficiary Account Type.
- If the user selects any value other than the LOV available for Debtor Account Type and Beneficiary Account Type, the system rejects the transaction.

4.2.1.2 NRE Account Validation

When the user clicks the 'Enrich/Save' button and Transaction Type is 'P2A', the system checks for the following NRE account type validations:

- If you select Beneficiary Account Type 'NRE' (40), then you must select Debtor Account Type also 'NRE' (40). Else system rejects the transaction with an error message PJ-TXP-048 'If Beneficiary Account Type is NRE, then Debtor Account Type must be NRE.'
- If you select Debtor Account Type 'NRE' (40), then you can select Beneficiary Account Type as any account from drop-down lists, such as Savings Bank (10), Current Account (11), Cash Credit (13), Loan Account (14), Overdraft (12), NRE (40), and Credit Card (52).

4.2.1.3 Duplicate Check:

- Duplicate parameters can be maintained for the source (PMDSORCE). Based on the duplicate days and fields set, duplicate check for the transaction is done.
- If the transaction is identified as a duplicate transaction, then the transaction is moved to business override queue.
- The following parameters are validated during duplicate check:
 - Debtor Account - DBTR_ACC
 - Beneficiary Account - CRDTR_ACC (Aadhaar number, MMID& Mobile Number is mapped to this element.)
 - Transaction Amount - TFR_AMT
 - Instruction Date - VALUE_DATE
 - Retrieval Reference Number - RRN
 - Transaction ID - TXN_ID
 - Message ID - MSG_ID
 - Beneficiary Bank IFSC Code -_CRDTR_BANK_CODE (For India Payments IFSC Code is mapped for this element)
 - DBTR_BANK_CODE

4.2.1.4 Message Generation

As part of IMPS XML version, 'OrgID' field is present in the header of the XML. When generating then IMPS outbound message, system performs following:

- Validate if the Sender Bank (Our Bank) Organization ID field is maintained on India Payments Our Bank Identifier Detailed (PMDIOBID) Screen.
 - If Yes, then system derives the 'OrgID' field value and map it to 'OrgID' field in the Header.
 - If No, then system Rejects the payment. No further action can be taken on the payment.

Every payment/message generates Request Pay in XML format. Time stamp put in the message is stored for the transaction. Message is forwarded to NPCI Switch.

4.2.1.5 Daily limit check

- System tracks the daily aggregate limit and source wise limit allowed for a customer account on a daily basis based on the limit maintained in IMPS Transaction Limits (Function ID:PMDDFLMT).
- If the limit is breached, the transaction is moved to BO queue.

4.2.1.6 Sanction Check

- Sanction check for IMPS outbound payment transaction is done on payment instruction date for current dated payments. For future dated transactions, sanction check is done on booking date as well.
- System verifies whether sanction check is applicable in Network Preferences (PMDSORNW)/Customer level preferences, and based on that system initiates sanction check validation.
- The external system status can be linked to one of the following system status:
 - Approved
 - Rejected
 - Interim
 - Seizure
 - Timed out
- If sanction is approved, the transaction is resumed with the further processing.
- In case of seizure, customer account is debited, and the Seizure GL is credited, if seizure accounting is opted. If the status is rejected, interim or timed out, the transaction is moved to sanction check queue.
- Sanction Check System maintenance is updated to have specific In/Out queues for real time instant payment in general. The sanction requests originating from IMPS is sent through separate JMS queues.

4.2.1.7 Future Valued Check

- System checks if the instruction date is future dated. If yes, transaction is moved to Warehouse queue.
- Future dated IMPS transactions are processed by separate jobs.
- Processing of transactions would be completed till sanction check on booking date itself and is stored in future dated transaction tables.
- During beginning of day, future dated transaction job picks up transactions with value date as current date and does complete steps for processing from initial validations.

4.2.1.8 Pricing - Charge /Tax Computation

- Price code can be linked in Outbound IMPS Payment preferences (PJDNWOPF). Internal /External charge/tax values are applied based on the configuration.

4.2.1.9 Balance Check with DDA System

- The debit details are sent to the DDA system for account validation and balance check. The external system status can be linked to one of the following system status:
 - Approved
 - Rejected
 - Interim
 - Timed out

- If balance check is approved, the transaction is resumed with the further processing. If the status is rejected, interim or timed out (15 seconds), the transaction is moved to external credit approval queue.
- It is assumed that customer and account status checks are done by the external ECA system along with account balance check.

4.2.1.10 Accounting

- Accounting preference can be set at Outbound IMPS Payment preferences (PJDNWOPF) for the outbound transactions.
- If the preference maintained is 'Before Messaging' accounting entries are handed off to Accounting system before Messaging and Payment is marked as 'Processed'.
 - On payment reject, the reversal entries are posted and handed-off to Accounting system and the Payment is marked as 'Reversed'.
- If the preference maintained is 'On Confirmation from NPCI', the accounting hand-off is deferred till response is received from NPCI.
 - Based on the response received, payment is marked as 'Processed' or 'Reversed'.
 - On payment success/reject, the accounting entries/reversal entries gets posted and handed-off to Accounting system.

Accounting Entries:

Details in Accounting hand-off	Debit Liquidation	Credit Liquidation
Accounting Event	DRLQ	CRLQ
Amount Tag	XFER_AMT	XFER_AMT
Transaction Account	Debit Customer Account	IMPS Outward Clearing GL maintained in the Accounting code. If Nostro Account (Network Account) is maintained in (PJDNWOPF) that is considered.
Offset Account	This is picked from the Debit Liquidation Accounting code maintenance.	This is picked from the Credit Liquidation Accounting code maintenance.
Transaction Currency	INR	INR
Transaction Amount	Debit Amount	Transfer Amount
Value Date	Transaction Value Date	Transaction Value Date
Offset Currency	Transaction Currency	Transaction Currency

Offset Amount	Transaction Amount	Transaction Amount
---------------	--------------------	--------------------

4.2.1.11 Messaging

Every payment generates a Request pay message in XML format. Time stamp put in the message gets stored for the transaction. Message is forwarded to NPCI Switch.

4.2.1.12 Prefunded Payments Processing

- Customer number/debtor account number is not mandatory.
- If Debtor Account currency is not provided in the outbound request, then it gets defaulted to Transfer Currency (INR) in transaction.
- If the 'Prefunded Payments GL' check box is selected, the system skips the below processing:
 - ECA check
 - Pricing
 - FX Limit Check
- The 'Prefunded Payments GL' is always used as Debit account while posting the debit liquidation entries. The 'Prefunded Payments GL' value maintained in the Source Maintenance (PMDSORCE).

4.2.1.13 Debtor Account Derivation

- If Debtor Account is not given, then the Prefunded Payments GL maintained at Source maintenance (PMDSORCE) is considered as the Debtor Account.
- If a value is given in the Debtor Account field (for uploaded transactions), the system does not validate the same against the customer account maintenance.

4.2.1.14 Debtor Account Type Derivation

- If Debtor Account is a valid account, the system defaults the Debtor Account Type from the India Payments Account Type Preferences Detailed (PMDEXATP) maintained.
- If Debtor Account is a valid GL or not a valid account, the system defaults the Debtor Account Type from the India Payments Default Account Type Preferences (PMDIDAPF).
- For manually inputted transactions, if the "Prefunded Payments" check box is selected, the Debtor Account Type field is editable. You can select or change the Debtor Account type value for Prefunded payments.
- For uploaded transactions (IMPS OUT Service), the system defaults the Debtor Account Type only if the Debtor Account Type is not given in the service request.

4.2.1.15 Debtor Name Derivation

- If Debtor Account is a valid account, the system defaults Account Name from Customer Account Maintenance (STDCRACC) as Debtor Name.
- If Debtor Account is a valid GL, the system fetches Debtor Name from GL Description and populates it in the Debtor name field.
- For manually inputted transactions, if the "Prefunded Payments" check box is selected, the Debtor Account Name field is editable. You can input or modify the Debtor Account Name value.
- For uploaded transactions (IMPS OUT Service), the system defaults the Debtor Account Type only if the Debtor Account Type is not given in the service request.

4.2.1.16 Response Handling

System receives the Response Pay XML from NPCI for the Request Pay sent. The parsing of the XML is done as per the specification.

System matches the request sent and the response received for the request with the help of 'Message Identifier (msgld)' present in the header of the XML.

Based on the response received the Payment status in system is updated appropriately as below:

Transaction Type (API Name in first tag of Response XML)	Response Code	Transaction Status	Response Status
45 or 48	00	Processed	Approved
	91	Processed	Deemed Approved
Response Pay	Other than '00', '91'	Rejected	Declined
Response Pay	M0 & Result is 'Deemed'	Processes	Deemed Approved
Response Pay	M0 and Result is 'Failure'	Rejected	Declined

4.2.1.17 Outbound Check Transaction Status Request Processing

Response Monitor Process will track if the Request Pay XML message sent out has received corresponding Response Pay within the time-out period (Field: Timed Out Period) maintained on Outbound Payment Preferences screen (PJDNWOPF).

If no response received within set time-out period from the NPCI Switch, system would generate a Check Transaction Request as per the specification with required details from the Original Request sent.

System generates Check Transaction Request up to the Max retries and interval (Field: Retry Count for Check Transaction Status and Check Transaction Request Interval) configured in Outbound Payment Preferences screen (PJDNWOPF).

Outbound Request Pay XML/ Message	Outbound Transaction Status	Check Transaction Request Sent by Debtor Bank	Outbound Check Transaction Request Sent	System Action on Outbound Transaction	Check Transaction Status Response Received
Yes	Processed	56 to 65 Sec	Yes (Check Transaction Request Sequence 1)	1. Log Check Transaction request sequence 1	No

Outbound Request Pay XML/ Message	Outbound Transaction Status	Check Transaction Request Sent by Debtor Bank	Outbound Check Transaction Request Sent	System Action on Outbound Transaction	Check Transaction Status Response Received
Yes	Processed	66-75 secs	Yes (Check Transaction Request Sequence 2)	1. Log Check Transaction request sequence 2.	No
Yes	Processed	76-85 secs	Yes (Check Transaction Request Sequence 3)	1. Log Check Transaction request sequence 3. 2. Based on response code received in response, update the outbound transaction status appropriately.	Yes

4.2.1.18 Check Transaction Status Response Processing

Based on the response received, the Payment status gets updated appropriately as below:

Transaction Type (API Name in first tag of Response XML)	Response Code	Transaction Status	Response Status
Check Transaction Status Response	00	Processed	Approved
	91	Processed	Deemed Approved
	Other than '00', '91'	Rejected	Declined

4.2.2 Process Monitoring

- Response Process Monitor will track if the Original Request Pay sent out has received corresponding Response Pay within the time-out period (55 seconds) maintained in Outbound Payment Preferences screen (PJDNWOPF).
- If no response received within '55 seconds' time-out period from the NPCI Switch, system generates a Check Transaction Request with required details from the Original Request sent.
- The maximum number of retry allowed is '3' for IMPS payments.

- System generates Check Transaction Request and forward to NPCI Switch maximum 3 times every 10 seconds, if no response (Original Response Pay/Check Transaction Response) is received from NPCI Switch.
- System will not generate any Check Transaction Request if a corresponding Response Pay/Check Transaction Response is received OR after maximum retry count.

4.3 IMPS Outbound Message Browser

4.3.1 IMPS Outbound Message Browser

You can view all the outbound messages generated in this screen.

You can invoke 'IMPS Outbound Message Browser' screen by typing 'PJSOUTBR' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

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

- Transaction Reference Number
- IMPS Transaction Type
- Retrieval Reference
- Message Reference
- Transaction Branch
- Transaction Status
- Network Code
- Response Code
- Response Status
- Settlement Status
- Beneficiary Account Number
- Beneficiary Mobile Number
- Instruction Date
- Beneficiary MMID

- Debtor Account Number
- Source Code

Following messages can be viewed from this browser:

- RequestPay – Outbound Original Request and Verification Request
- ResponsePay – Outbound Original Response and Verification Response

Once you have specified the search parameters, click 'Search' button. The system displays the records that match the search criteria. Following actions can be done from this screen:

View Request Message

Select a record and click on 'View Request Message' button to view the request message details. System displays the following details with the respective fields.

- Message Reference Number
- Transaction Reference Number
- Message Type
- Message

View Response Message

Select a record and click on 'View Response Message' button to view the request message details. System displays the following details with the respective fields.

- Message Reference Number
- Transaction Reference Number
- Message Type
- Message

View Transaction

Select a record and click on 'View Transaction' to view the complete transaction details.

System launches the IMPS Outbound View Detailed screen (PJDOVIEW) on clicking the 'View Transaction' tab for the selected record.

4.4 IMPS TCC Upload

4.4.1 IMPS Adjustment View

You can invoke 'IMPS Adjustment View' screen by typing 'PJDAJUPD' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button. Click 'New' button on the Application toolbar.

Record Id	Retrieval Reference	Adjustment Type	Response Code	Transaction Amount	Adjustment Date	Status	Error Code	Error Message
-----------	---------------------	-----------------	---------------	--------------------	-----------------	--------	------------	---------------

Specify the following details:

Host Code

System auto populates the Host Code defined for India Payments.

Network Code

System auto populates the Network Code defined for India IMPS.

Transaction Branch

System displays the transaction branch of logged in user.

File Name

You can type in the file name to be uploaded.

File Path

You can type in the file path to be uploaded.

Upload Reference

System generates unique Upload Reference for new upload every-time and display in this field.

File Upload Date

System displays the current date as file upload date.

Total No of Records

System displays the total no of records present in the upload file.

No of Successful Records

System displays the count of records which are uploaded successfully.

No of Failed Records

System displays the count of records which failed during upload.

Adjustment upload details

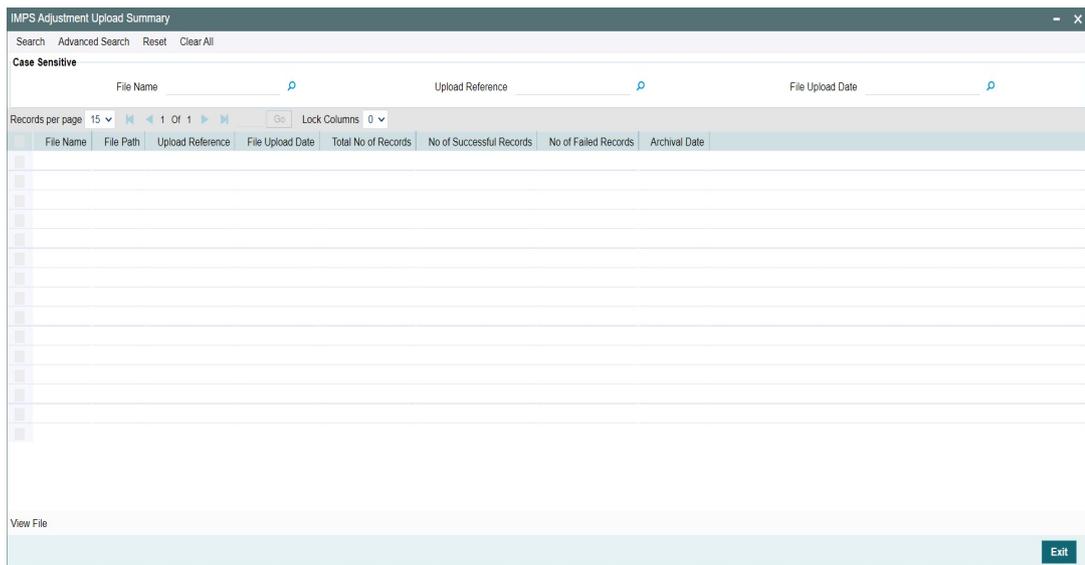
You can view the following display fields:

- Record Id
- Retrieval Reference
- Adjustment Type
- Response Code
- Transaction Amount
- Adjustment Date
- Status
- Error Code
- Error Message

4.4.2 IMPS Adjustment Upload Summary

You can view summary of the TCC files uploaded in this screen.

You can invoke 'IMPS Adjustment Upload Summary' screen by typing 'PJSAJUPD' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.



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

- File Name
- Upload Reference
- File Upload Date

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

Following actions can be done from this screen:

View File

This action displays the TCC file that is upload from the given path.

4.5 IMPS Acknowledgement Message for Outbound Transaction

If any outbound IMPS XML message is sent to NPCI, system receives the acknowledgement message.

This acknowledgement message is received for:

- Request Pay
- Response Pay
- Check Transaction Request
- Check Transaction Response
- Heartbeat Request and Response.

XSD validation is done for the received Ack response.

System matches the Ack response with original outbound request by using reqMsgId field.

Acknowledgement response format is defined by NPCI.

For Negative Acknowledgement response, system receives the Error Details in Ack response only if any error in the original request message sent. When Ack response is received with error details then system rejects the transaction and reverse the accounting entries.

Ack Message is available to view on screen PJDIVIEW -> All messages -> Response Messages Tab.

5. IMPS Inbound Payments

The inbound IMPS payments are received as Request Pay from NPCI. System receives and processes the payments based on predefined processing steps.

5.1 IMPS Inbound Transaction Input

This chapter contains the following sections:

- [Section 5.1.1, "Inbound IMPS Transaction View"](#)

5.1.1 Inbound IMPS Transaction View

Inbound payment status can be viewed from this screen. Payments received from all channels are listed in this screen. The related messages are listed in the 'All Messages' sub-screen.

You can invoke 'Inbound IMPS Transaction View' screen by typing the function ID 'PJDIVIEW' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

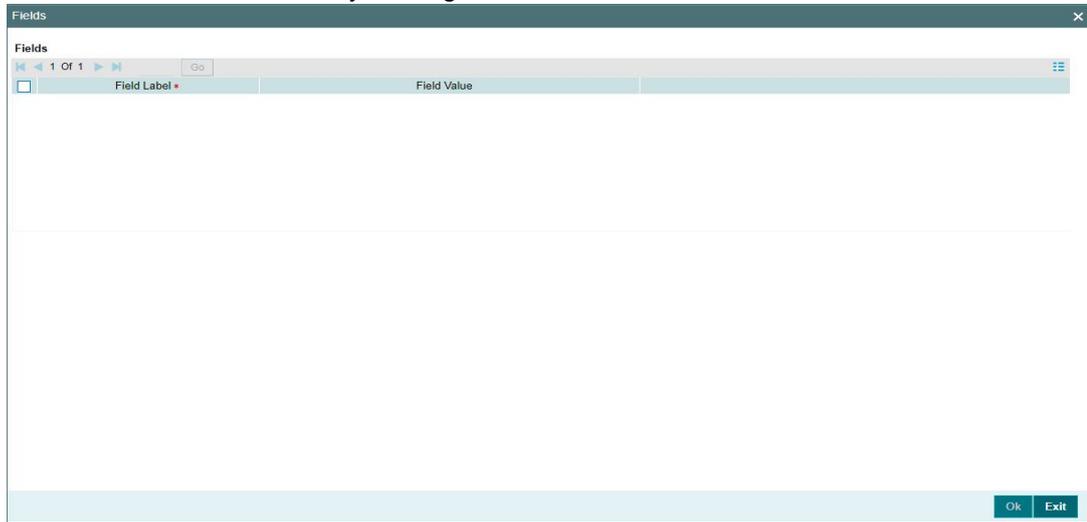
- From this screen, click Enter Query. The Transaction Reference field gets enabled which opens an LOV screen.
- Click the Fetch button and select the required value.
- Along with the transaction details in the Main and Pricing tabs user can also view the Status details for the following:
 - External System Status
 - Transaction Status
 - Error Details

- Click Execute Query to populate the details of the transaction in the Inbound IMPS Transaction View screen.

For more details on Main, Pricing tabs refer to 'PJDITONL' screen.

5.1.1.1 **UDF Tab**

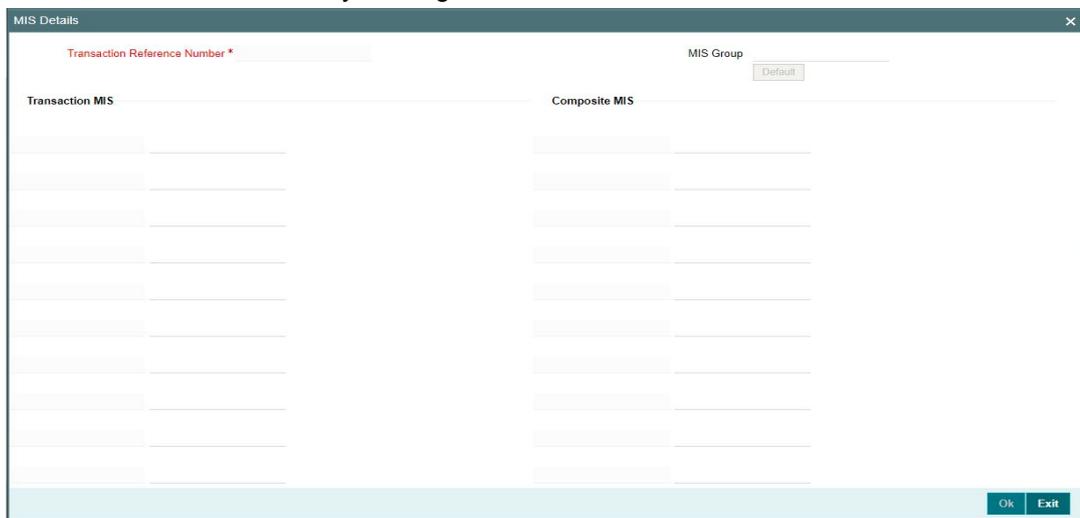
You can invoke this screen by clicking 'UDF' tab in the screen.



The screenshot shows a window titled 'Fields'. At the top, there is a navigation bar with a 'Go' button and a '1 Of 1' indicator. Below this is a table with two columns: 'Field Label' and 'Field Value'. The table is currently empty. At the bottom right of the window, there are 'Ok' and 'Exit' buttons.

5.1.1.2 **MIS Tab**

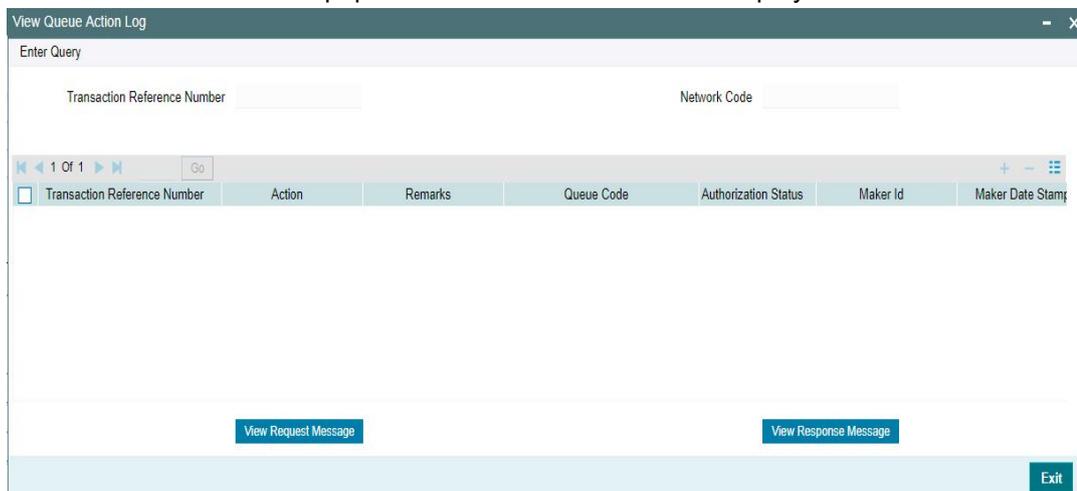
You can invoke this screen by clicking 'MIS' tab in the screen.



The screenshot shows a window titled 'MIS Details'. At the top, there are input fields for 'Transaction Reference Number' (with a red asterisk) and 'MIS Group' (with a 'Default' button). Below these are two columns: 'Transaction MIS' and 'Composite MIS'. Each column contains a list of input fields. At the bottom right of the window, there are 'Ok' and 'Exit' buttons.

5.1.1.3 View Queue Action Log

You can view all the queue actions for the respective transaction initiated. You can invoke this screen by clicking the 'View Queue Action' button in View screen, where the Transaction Reference Number is auto populated and related details are displayed.:



For more details on the fields, refer to section 2.2.2.3

5.1.1.4 Accounting Entries Tab

You can view the Accounting Entries posted for the Inbound IMPS in Accounting entries Tab.



For more details on the fields and tabs, refer to section 2.2.2.5

5.1.1.5 All Messages

Click the 'All Messages' link in the Inbound IMPS Transaction View screen, to invoke this sub-screen.

The screenshot shows the 'All Messages' sub-screen. At the top, there are input fields for 'Transaction Reference' and 'Retrieval Reference'. Below these are two sections: 'Request Messages' and 'Response Messages'. Each section contains a table with columns for message details and a 'Message' button below it. The 'Request Messages' table has columns: Message Reference, Message Type, VR Sequence, and Message Date and Time. The 'Response Messages' table has columns: Message Reference, Message Type, Response Code, Response Code Description, Response Status, and Message Date and Time. There are also navigation buttons and an 'Exit' button at the bottom right.

You can view the generated messages and the response messages for the transaction in this sub screen for the Transaction Reference Number specified. For more details on the fields, refer to section 2.2.2.4

5.1.1.6 View Repair Log

You can view all the Repair actions for the respective transaction initiated. You can invoke this screen by clicking the 'View Repair Log' button in View screen, where the Transaction Reference Number is auto populated and related details are displayed.

The screenshot shows the 'View Repair Log' sub-screen. At the top, there is an 'Enter Query' section with a 'Transaction Reference Number' input field. Below this is a table with columns: Queue Reference No, Field Name, Old Value, Repaired Data, and Error. There is an 'Exit' button at the bottom right.

For more details on the fields, refer to section 2.2.6.6

5.1.1.7 IMPS Inbound Transaction View Summary

You can invoke 'IMPS Inbound Transaction View Summary' screen by typing 'PJSIVIEW' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

IMPS Inbound Transaction View Summary

Search Advanced Search Reset Clear All

Case Sensitive

Transaction Reference

Retrieval Reference

Booking Date

Transaction Status

Queue Code

Response Code

Network Code

Debtor Account Type

Transaction Branch

Source Reference

Instruction Date

Debtor Account Number

Beneficiary Account Number

Customer No

Beneficiary IFSC Code

Beneficiary MMID

Source Code

Transaction ID

Response Status

Transaction Amount

IMPS Transaction Type

Beneficiary Account Type

Beneficiary Mobile Number

Transaction Sub-Type

Records per page: 15 | 1 Of 1 | Lock Columns: 0

Host Code	Transaction Reference	Booking Date	Debtor Account Number	Retrieval Reference	Instruction Date	Debtor Account Type	Source Reference	IMPS Transaction Type	Beneficiary Account Number	Transaction ID

Exit

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

- Transaction Reference
- Retrieval Reference
- Source Reference Number
- Transaction ID
- Message ID
- Network Code
- Source Code
- Booking Date
- Instruction Date
- IMPS Transaction Type
- Transaction Currency
- Transaction Branch
- Transaction Amount
- Debtor Account Number
- Beneficiary Account Number
- Beneficiary IFSC Code
- Beneficiary MMID
- Beneficiary Mobile Number
- Sanction Seizure
- Response Code
- Response Status
- Transaction Status
- Debtor Account Type

- Queue Code
- Beneficiary Account Type
- Transaction Sub-Type

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 select a record and click on 'Details' button to view the detailed maintenance screen.

5.2 **IMPS Inbound Payments Processing**

5.2.1 **Inbound IMPS Payment Processing**

The inbound IMPS payments are received as Request pay message from NPCI. System receives and processes the payments based on predefined processing steps.

- Inbound payments follows the below listed processing steps:
 - Message Parsing and Message Type/Transaction Type Derivation
 - Initial Validations
 - Host/Branch Derivation
 - Duplicate Check
 - Sanctions Check
 - External Account Credit Check
 - Response Pay Message Generation and Check Transaction Status Response generation if applicable
 - Internal Pricing, if applicable
 - Accounting

Note

If Inbound IMPS message is having RRN and Sending Bank NBIN matching with existing transaction then it should be returned with "94: Duplicate Transaction Response code".

5.2.1.1 **Message Type/Transaction Type Derivation**

- System will parse the inbound Request Pay XML and derive the API name from the first tag of the XML.
- Also, Transaction Type as ' CREDIT' from the XML tag <Txn> type.

5.2.1.2 **Initial Validations**

The validations are similar to that of Outbound Payments. Mandatory field checks/ Referential data checks are done as below:

'OrgID' Validation:

System performs following steps:

- Derive the 'OrgID' field value from Header (<Head>) tag.

- Validate if the 'OrgID' field value from the XML is same as maintained on India Payments Out bank Identifier screen (PMDIOBID).
 - If above step is successful, then payment is processed ahead.
 - If above step fails, then payment is rejected.

Transaction Type (P2P/P2A) derivation -

System derives the IMPS transaction type from the 'Payee Address type' tag from XML file.

- If the <Payee. AC> -> addrType is 'Account' then the inbound transaction is P2A.
- If the <Payee. AC> -> addrType is 'Mobile' then the inbound transaction is P2P.

Beneficiary Details Derivation

System derives the beneficiary account number, beneficiary Branch IFSC, Beneficiary MMID and Beneficiary Mobile Number from the '<Payee.Ac.Detail>' tag of the inbound XML file.

- For P2P – Based on the MMID and Mobile Number combination in XML file, derive beneficiary account number from the India Payments account preferences screen (PMDEXACP).
- For P2A – Payee IFSC and Account Number is present in XML file.

Beneficiary account type is present in the inbound XML message. System derives the beneficiary account type and populate the same in the Response File.

Transaction Account Branch Derivation

For P2A - Derive Based on IFSC Code present in '<Payee.Ac.Detail>' tag.

For P2P - Based on the MMID and Mobile Number combination in XML file, derive beneficiary account number from the India Payments account preferences screen (PMDEXACP).

5.2.1.3 Customer and Account Status Check

System checks customer and Credit account are valid i.e. open and authorized. If 'Invalid' it is moved to Process Exception queue.

Beneficiary Account Currency: Validation is available to check only INR accounts are allowed for incoming credits.

System validates if the derived beneficiary account type as explained in the previous step 2.3, is allowed for the Inbound Payment and Network Code as maintained in Account Type Restrictions screen (PJDACSTR) for inbound payments.

If the account type is not allowed for the network, system displays 'This Account Type is not allowed for IMPS transfer'. Transaction gets rejected with appropriate response code.

If the validation is successful, it moves to the next step.

After the above step, If the beneficiary account type is found to be '40' i.e. NRE account type, then system applies Non NRE to NRE payments Check validation as below:

Debtor Account Type	Beneficiary Account Type	Result
<>40*	'40'	Transaction rejected (Response Code 'M4')
Equal to '40'	Equal to '40','10', '11'*	Transaction Processed (Response Code '00')
Equal to '10', '11'*	Equal to '10', '11'*	Transaction Processed (Response Code '00')

Note

'*' - As per the allowed account types maintained for Inbound Payment and Network Code in PJDACSTR.

5.2.1.4 Duplicate Check

- Duplicate parameters can be maintained for the source (PMDSORCE). Based on the duplicate days and fields set, duplicate check for the transaction is done. If the transaction is identified as a duplicate transaction, it is rejected. (ISO Response Code: '94').
- The following parameters are available for duplicate check:
 - Debtor Account - DBTR_ACC
 - Beneficiary Account - CRDTR_ACC (Aadhaar number, MMID& Mobile Number is used to derive the account as explained earlier.)
 - Transaction Amount - TFR_AMT
 - Retrieval Reference Number - RRRN
 - Transaction ID - TXN_ID
 - Message ID - MSG_ID
 - Instruction Date - VALUE_DATE
 - CRDTR_BANK_CODE
 - Debtor Bank Identification Code - DBTR_BANK_CODE (Existing element is used. For IMPS Payments DE – 32 is mapped to this element.)
 - Related Reference Number - END_TO_END_ID (Existing element is used. Related reference number is mapped to this element. This is applicable for India IMPS payments only.)

5.2.1.5 Sanction Check

- If 'Approved' response is received from Sanctions, transaction is processed further.
- If 'Seizure' response is received from Sanctions system then Nostro account is debited, and the Seizure GL is credited. Generate 'RespPay' message with ISO Response code: ZI (SUSPECTED FRAUD).
- If the Sanctions response is rejected, interim or timed out, the transaction is rejected. Response to NPCI is generated as below –

- Rejected – Generate 'RespPay' message with ISO Response code: UB (UNABLE TO PROCESS)
- Interim– Generate 'RespPay' message with ISO Response code: UB (UNABLE TO PROCESS).
- Pending – System waits for response from Sanctions and based on the response received, it processes further as above.

5.2.1.6 External Account Check

- Transaction details is sent 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 is generated.
- If the EAC status is 'Rejected', 'Interim', then the transaction is rejected with ISO Response Code: UB (UNABLE TO PROCESS. System do not consider EAC/DDA Final Response for the 'interim' status.
- If the EAC status is 'Pending', OBPM awaits a response from EAC/DDA system and based on the response received, it processes further as above.

Note

Customer and account status checks are done by the external ECA system along with account balance check.

Transaction Status - Queue Code

Transaction Status	Applicable Queue Code for IMPS	Remarks
In Progress	<SC/EA>	Transaction is under progress (or) response is pending from External systems. Queue Code is applicable if response is pending from External systems - Sanction Check - EAC
Processed	##	OUT success response message is generated.
Seized	##	Sanction Seized.
Rejected	##	On any validation failure / Non-positive response from external system.

5.2.1.7 Response Message generation and Response Code mapping

System generates 'RespPay' message with response code '00' for successfully 'processed' transaction.

System generates 'RespPay' message with appropriate error code and response code where transaction processing fails.

When response message is sent to NPCI then under <Ref> tag, only 'Type = Payee' details needs to be populated. Further when NPCI will forward the response message to remitter bank then NPCI enriches the <Ref> tag by adding 'Type = Payer' details.

Response Codes (Reject Codes) for auto rejects are maintained in the existing reject code maintenance screen (PMDRJMNT). The error codes received in ECA response can also be configured in the PMDRJMNT.

If IMPS Reject codes are not maintained/closed in PMDRJMNT and if any incoming IMPS transaction gets rejected and could not able to find MATCHING error code, then system rejects the transaction and send the Common Error Code as 'MT - TRANSACTION NOT ALLOWED AS GENERAL ERROR'.

5.2.1.8 Inbound Check Transaction Status Request Processing and Response generation

When system receives Check Transaction request, system parses it and match it with the original Inbound message using Message ID (msgId) in the header tag.

Based on the transaction status, system generates the response file with correct Response code and send the message to NPCI switch

Inbound Request Pay XML/ Message	Inbound Transaction Status	Check Transaction Request Sent by Debtor Bank	Inbound Check Transaction Request Received	System Action for Inbound Transaction
Yes	In Progress, Exception	56 to 65 sec	Yes (Check Transaction Request Sequence 1)	1. Log Check Transaction request sequence 1 2. Check Transaction Response (Sequence 1) will not be generated.
Yes	Processed	66-75 secs	Yes (Check Transaction Request Sequence 2)	1. Log Check Transaction request sequence 2. 2. Generate Check Transaction Response and hand off.

Yes	Processed	76-85 secs	Yes (Check Transaction Request Sequence 3)	1. Log Check Transaction request sequence 3. 2. Generate Check Transaction Response and hand off.
Yes	Rejected	66-75 secs/76-85 secs	Yes (Check Transaction Request Sequence 2, 3)	1. Log Check Transaction request sequence 2, 3. 2. Generate Check Transaction Response with response code 'M0' and hand off.

5.2.1.9 Pricing

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

5.2.1.10 Accounting Handoff

Accounting is handed off to the external system

- Dr. Inward Settlement GL
- Cr. Intermediary GL
- Dr. Intermediary GL
- Cr. Customer Account

5.2.1.11 Notification

Notification to Beneficiary is generated after the credit accounting is successfully posted (Transaction Status 'Processed', Event 'CRLQ').

5.2.2 Response Codes Mapping

Supported Response codes that are sent in the response messages are as below:

Response Codes (Reject Codes) for auto rejects for IMPS network are maintained in the Reject Code maintenance screen (PMDRJMNT). For more details on this, refer to Payments Core User Guide.

Processing Monitoring

- System reads the incoming Request Pay messages and populates the data into the staging table.
- System checks the incoming Check Transaction Request messages and send Check Transaction Response based on the conditions as explained above under Check Transaction response handling.

5.2.3 Debit Reversal Processing

The existing 'ReqPay' API includes <Txn.type = DISPUTE | AUTOUPDATE> and <Txn.subType = DR_REVERSAL> for crediting the customer account (Debit Reversal).

NPCI triggers this debit reversal, when transaction is deemed approved at NPCI and has failed at beneficiary and has given return (RET) confirmation in Autoupdate or in DisputeStatusChk.

Original Outbound Transaction is fetched based on <Txn.orgTxnID>, <Txn.orgTxnDate>, <Txn.orgRrn>, <Txn.orgTxnAmt> and <Payee.Ac.Detail>.

Upon successful match, system processes Inbound ReqPay successfully and Original Outbound Transaction status gets updated as Reversed.

5.3 IMPS Inbound Message Browser

5.3.1 IMPS Inbound Message Browser

You can view all the inbound messages generated in this screen.

You can invoke 'IMPS Inbound Message Browser' screen by typing 'PJSINBRW' in the field at the top right corner of the Application tool bar and clicking on the adjoining arrow button.

IMPS Inbound Message Browser

Search Advanced Search Reset Clear All

Case Sensitive

Transaction Reference No IMPS Transaction Type Debtor Account Number

Retrieval Reference Transaction Branch Beneficiary Account Number

Message Reference Liquidation Status Beneficiary MMID

Network Code Received Date Time YYYY-MM-DD Beneficiary Mobile Number

Source Code Response Status Response Code

Original Retrieval Reference Transaction Sub-Type

Records per page 15 1 Of 1 Lock Columns 0

Host Code	Transaction Reference No	IMPS Transaction Type	Request Type	Check Transaction Sequence	Debtor Account Number	Retrieval Reference	Transaction Amount	Transaction Branch	Beneficiary Account Number
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View Request Message | View Response Message | View Transaction | View Reversal Reject Details

Exit

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

- Message Reference
- Retrieval Reference
- Transaction Reference No
- Network Code
- Source Code
- IMPS Transaction Type
- Transaction Branch
- Received Date Time

- Response Code
- Response Status
- Liquidation Status
- Debtor Account Number
- Beneficiary Account Number
- Beneficiary MMID
- Beneficiary Mobile Number
- Original Retrieval Reference
- Transaction Sub-Type

Following messages can be viewed from this browser:

- RequestPay – Inbound Original Request and Verification Request
- ResponsePay – Outbound Original Response and Verification Response

Once you have specified the search parameters, click 'Search' button. The system displays the records that match the search criteria. Following actions can be done from this screen:

View Request Message

Select a record and click on 'View Request Message' button to view the request message details. System displays the following details with the respective fields.

- Message Reference Number
- Transaction Reference Number
- Message Type
- Message

View Response Message

Select a record and click on 'View Response Message' button to view the request message details. System displays the following details with the respective fields.

- Message Reference Number
- Transaction Reference Number
- Message Type
- Message

View Transaction

Select a record and click on 'View Transaction' to view the complete transaction details.

System launches the IMPS Inbound View Detailed screen (PJDIVIEW) on clicking the 'View Transaction' tab for the selected record.

View Reversal Reject Details

For the rejected remitter online credit API transaction, Click 'View Reversal Reject Details' button to invoke 'Reject Reversal Details' (Function ID:PJDREVDL) sub screen. You can view reversal transactions.

5.4 Notifications

Following are the events for which the notifications are triggered:

- Notification is triggered to Creditor after successful accounting posting on CRLQ event.
- Notification is triggered to Debtor after the receipt of original response message (MTI 0210) with response codes as below:
 - Positive response codes '00' ('Approved' response from Beneficiary bank, '91' (Time-out response from NPCI: 'Deemed Approved')
 - Negative Response Codes: Any response codes other than '00', '91'

Field	XML Tag
Retrieval Reference Number	<Retrieval Reference Number>

5.5 IMPS Acknowledgement Message for Inbound Transaction

If any incoming IMPS XML message is received, system generates acknowledgement response within 5 sec.

This acknowledgement message is generated for:

- Request Pay
- Response Pay
- Check Transaction Request
- Check Transaction Response
- Heartbeat Request and Response.

This Ack response is the only acknowledgement of receipt of the message. No validation is performed on inbound XML message received.

Acknowledgement response format is defined by NPCI.

XSD validation will be done for Outbound Ack message before sending to NPCI.

Ack Message is available to view on screen PJDIVIEW -> All messages -> Response Messages Tab.

6. Function ID Glossary

P

PJDACSTR	3-9
PJDAJUPD	4-27
PJDITONL	5-2
PJDIVIEW	5-1
PJDNBIFS	3-11
PJDNWIPF	3-6
PJDNWOPF	3-2
PJDNWSCD	3-13
PJDOTONL	4-1, 4-10
PJDXMLCN	3-17
PJSACSTR	3-10

PJSINBRW	5-12
PJSIVIEW	5-5
PJSNBIFS	3-12
PJSNWIPF	3-8
PJSNWOPF	3-5
PJSNWSCD	3-16
PJSOTONL	4-8
PJSOVIEW	4-16
PJSXMLCN	3-19

S

STDBKMNT	3-11
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