



AI (Agent Institution) API Documentation

Index

- [Version](#)
- [Data Flow](#)
- [API Listing](#)
 - 1. [Bill Fetch](#)
 - 2. [Bill Payment](#)
 - 3. [Bill Validation](#)
 - 4. [Bill Status](#)
 - 5. [Complaint Management](#)
 - 6. [Plan](#)
 - 7. [Biller](#)
 - 8. [Biller Fetch](#)

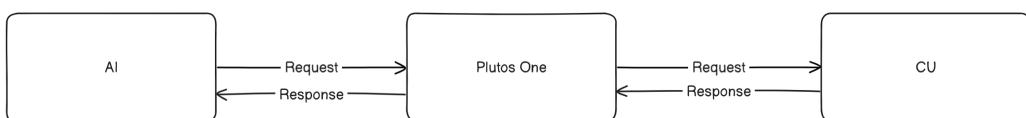
Version

- **V1**

This is our first version of the AI (Agent Institution) API. It includes the initial set of features for bill management and complaint handling. We aim to provide a robust and efficient interface for interacting with various billers and managing related tasks.

Data Flow

API Flow Chart



API Listing

1. Bill Fetch

Endpoint:

```
POST /api/v1/bill/fetch/{int/agt/mob}
```

Description:

This API allows you to retrieve detailed information about a specific bill using its unique identifier. It is essential for verifying bill information before making a payment or conducting any further actions.

Response:

- `200 OK` : Successfully fetched the bill details.
- `400 Bad Request` : Invalid bill ID or missing required parameters.
- `404 Not Found` : The bill with the provided ID does not exist.
- `500 Internal Server Error` : An error occurred on the server.

Request Payload :

```
{
  "refId": "JSBBDUJJHU277T36TYF72HU4573947SFSFS",
```

```
"analytics": [
  {
    "name": "EMAIL",
    "value": "manoj.chekuri@npci.org.in"
  },
  {
    "name": "AADHAAR",
    "value": "123456789012"
  },
  {
    "name": "PAN",
    "value": "BXXCG7754K"
  }
],
"txrn": {
  "ts": "2021-01-10T22:02:35+05:30",
  "msgId": "8ENSVVR4Q0S7X1UGPY7JGUUV444P10102202",
  "directBillChannel": "L1QR",
  "scores": [
    {
      "provider": "OU01",
      "type": "TXNRISK",
      "value": "030"
    },
    {
      "provider": "BBPS",
      "type": "TXNRISK",
      "value": "030"
    }
  ]
},
"customer": {
  "mobile": "9505987798",
  "tags": [
    {
      "name": "EMAIL",
      "value": "manoj.chekuri@npci.org.in"
    },
    {

```

```
        "name": "AADHAAR",
        "value": "123456789012"
    },
    {
        "name": "PAN",
        "value": "BXXCG7754K"
    }
],
},
"agent": {
    "id": "OU01AI34INT001123456",
    "device": [
        {
            "name": "RefFld1",
            "value": "123"
        },
        {
            "name": "RefFld2",
            "value": "123"
        },
        {
            "name": "RefFld3",
            "value": "123"
        }
    ],
    "description": "Agent"
},
"billDetails": {
    "billerId": "VODA00000MUM03",
    "customerParams": [
        {
            "name": "RefFld1",
            "value": "123"
        },
        {
            "name": "RefFld2",
            "value": "123"
        },
        {

```

```

        "name": "RefF1d3",
        "value": "123"
    }
]
}
}

```

Payload Description

Name	Data Type	Description	Mandatory(M)/Optional(O)
refId	String	Unique identification assigned by the initiating BBPOU to unambiguously identify the transaction which is passed on, unchanged, throughout the entire end-to-end chain, binding the Fetch and Payment messages Fixed length 35.	M
analytics	Array	Meta data primarily for analytics.	O
<u>analytics.name</u>	String	Name of the analytics parameter (e.g., EMAIL, AADHAAR).	M
analytics.value	String	Value corresponding to the analytics parameter.	M

txn	Object	Transaction information, passed throughout the system, visible to all entities of the eco-system.	M
txn.ts	String (DateTime)	Transaction initiation timestamp which will remain constant throughout all legs of the transaction.	M
txn.msgId	String	Unique identification assigned by the initiating BBPOU for chaining a request and response message.	M
txn.directBillChannel	String	Type of the transaction in case of QR/PL, i.e. L{1/2}{QR/PL}.	O
txn.scores	Array	Risk evaluation associated with the transaction and the related parties in the transaction.	M
txn.scores.provider	String	Entity providing the risk score.	M
txn.scores.type	String	Type of the score (e.g., TXNRISK).	M
txn.scores.value	String	Value of risk evaluation ranging from "000" (No Risk) to "100"	M

		(Maximum Risk) with default score being "030".	
customer	Object	Details of the Customer viewing / paying the bill.	M
customer.mobile	String	Customer mobile number.	M
customer.tags	Array	Customer related details.	M
<u>customer.tags.name</u>	String	Name of the specific data requested from Customer.	M
customer.tags.value	String	Value of the specific data requested from Customer.	M
agent	Object	Agent related data.	M
<u>agent.id</u>	String	Unique identification code allocated to the Agent.	M
agent.device	Array	Details of Device from which the transaction was initiated.	M
<u>agent.device.name</u>	String	Name of the device which is used for transaction initiation	M
agent.device.value	String	Unique code or value assigned to the device.	M
agent.description	String	Description of the agent.	O
billDetails	Object	Biller ID and bill related details to	M

		identify a Customer.	
billDetails.billerId	String	Unique identification code allocated to the Biller.	M
billDetails.customerParams	Array	Customer bill fetch related details.	M
<u>billDetails.customerParams.name</u>	String	Name of the reference field as configured for the Biller.	M
billDetails.customerParams.value	String	Value of the reference field which uniquely identifies the customer for the Biller	M

Response Payload:

```
{
  "refId": "JSBBDUJJHU277T36TYF72HU4573947SFSFS",
  "reason": {
    "approvalRefNum": "AB123456",
    "responseCode": "000/200",
    "responseReason": "Successful/Failure",
    "complianceRespCd": "BFR001",
    "complianceReason": "Incorrect / invalid customer account"
  },
  "billerresponse": {
    "billerResponseData": {
      "customerName": "Manoj Chekuri",
      "amount": "120000",
      "dueDate": "2021-09-24",
      "billDate": "2021-01-02",
      "billNumber": "1232332",
      "billPeriod": "ONETIME|DAILY|WEEKLY|BIMONTHLY|MONTHLY|QUARTERLY|HALFYEARLY|YEARLY|ASPRESENTED"
    }
  }
}
```

```

"tags": [
    {
        "name": "Amount 1",
        "value": "5000"
    },
    {
        "name": "Amount 2",
        "value": "4000"
    },
    {
        "name": "Amount 3",
        "value": "3000"
    }
],
"billdetails": {
    "customerParams": {
        "tag": [
            {
                "name": "RefFld1",
                "value": "53"
            },
            {
                "name": "RefFld2",
                "value": "43"
            },
            {
                "name": "RefFld3",
                "value": "43"
            }
        ]
    }
}
}

```

1. Bill Payment

Endpoint:

```
POST /api/v1/bill/payment/{int/agt/mob}
```

Description:

This API enables the payment of a specific bill using its unique identifier. It is essential for processing bill payments after verifying the bill details through the bill fetch API. The payment API ensures that the transaction is securely executed, and it returns the status and details of the payment.

Response:

- `200 OK`: Successfully fetched the bill details.
- `400 Bad Request`: Invalid bill ID or missing required parameters.
- `404 Not Found`: The bill with the provided ID does not exist.
- `500 Internal Server Error`: An error occurred on the server.

Request Payload:

```
{
    "refId": "HENSVVR4Q0S7X1UGPY7JGUV444P10102209",
    "origRefId": "HENSVVR4Q0S7X1UGPY7JGUV444P10102202",
    "siTxn": "Yes",
    "msgId": "AGENTID123",
    "agentId": "P001P002INT000000001",
    "billerId": "BILLERID01",
    "customerParams": {
        "Mobile Number": "9999999999"
    },
    "deviceDetails": {
        "INITIATING_CHANNEL": "INT",
        "MAC": "0.0.0.0",
        "IP": "121.0.0.1"
    },
    "customerDetails": [
        {
            "name": "EMAIL",
            "value": "customer@example.com"
        }
    ]
}
```

```

    },
    {
        "name": "AADHAAR",
        "value": "123456789012"
    },
    {
        "name": "PAN",
        "value": "BXXCG7754K"
    }
],
"customerMobile": "8953176688",
"timeStamp": "2023-12-05 12:32:33",
"isQuickPay": false,
"paidAmount": 100.33,
"paymentName": "AIRTEL",
"planId": "NA",
"analytics": [
    {
        "name": "PAYREQUESTSTART",
        "value": "2021-01-10T22:02:00+05:30"
    },
    {
        "name": "PAYREQUESTEND",
        "value": "2021-01-10T22:02:00+05:30"
    }
],
"directBillChannel": "L1QR",
"directBillContentId": "UNIQUE_ID",
"txnReferenceId": "OU211920X2112010UI09",
"billerResponse": {
    "customerName": "Customer Name",
    "amount": "100.33",
    "dueDate": "2024-02-15T00:00:00Z",
    "billDate": "2024-02-15",
    "billNumber": "UNIQUEIDENTBILL",
    "billPeriod": "MONTHLY",
    "tags": [
        {
            "name": "Amount 1",

```

```
        "value": "5000"
    },
    {
        "name": "Amount 2",
        "value": "5000"
    },
    {
        "name": "Amount 3",
        "value": "5000"
    }
]
},
"amount": {
    "amount": "100.33",
    "custConvFee": "1.33",
    "COUcustConvFee": "1.33",
    "currency": "356",
    "splitPayAmount": "50.21",
    "tags": [
        {
            "name": "Amount 1",
            "value": "5000"
        },
        {
            "name": "Amount 2",
            "value": "5000"
        },
        {
            "name": "Amount 3",
            "value": "5000"
        }
    ]
},
"paymentInformation": [
    {
        "name": "Remarks",
        "value": "Cash Payment"
    },
    {

```

```

        "name": "CardNum",
        "value": "4386280020697301"
    },
    {
        "name": "IFSC",
        "value": "POBK0123456"
    },
    {
        "name": "MMID",
        "value": "9240111"
    },
    {
        "name": "WalletName",
        "value": "WalletAAA"
    },
    {
        "name": "VPA",
        "value": "account@provider"
    },
    {
        "name": "Aadhaar",
        "value": "123456789123"
    }
],
"txn": {
    "txnReferenceId": "OU011010ABCD12345678",
    "ts": "2021-01-10T22:02:45+05:30",
    "type": "FORWARD TYPE REQUEST",
    "msgId": "8ENSVVR4Q0S7X1UGPY7JGUUV444P10102202",
    "directBillChannel": "L1QR/L1PL/L2QR/L2PL/L3QR/L3PL",
    "directBillContentId": "21010ABCDXXXX0001",
    "paymentRefId": "ABCD1234abcd",
    "riskScores": [
        {
            "provider": "OU01",
            "type": "TXNRISK",
            "value": "030"
        },
        {

```

```

        "provider": "BBPS",
        "type": "TXNRISK",
        "value": "030"
    },
]
},
"riskScore": [
{
    "provider": "BBPS",
    "type": "TXNRISK",
    "value": "030"
},
{
    "provider": "P001",
    "type": "TXNRISK",
    "value": "030"
}
],
"paymentMethod": {
    "quickPay": "Yes",
    "splitPay": "No",
    "OFFUSPay": "Yes",
    "paymentMode": "Credit Card"
},
"upms": {
    "txnType": "BILL_PAYMENT",
    "cprn": "M20061642BR05BK05YEFLBQOG"
}
}
}

```

Payload Description

Name	Data Type	Description	Mandatory(M)/Optional(0)
refId	String	Unique identification assigned by the initiating BBPOU to	M

		unambiguously identify the transaction which is passed on, unchanged, throughout the entire end-to-end chain, binding the Fetch and Payment messages Fixed length 35.	
origRefId	String	Code assigned to the BBPOU / BBPCU which forwards the transaction	M
siTxn	String	Indicates if it is a Standing Instruction (SI) transaction	M
msgId	String	Unique identification assigned by the initiating BBPOU for chaining a request and response message	M
agentId	String	Unique identification code allocated to the Agent.	M
billerId	String	Unique identification code allocated to the Biller.	M
customerParams	Object	Customer bill fetch related	M

		details	
customerParams.Mobile Number	String	Customer's mobile number, Fixed Length -1	O
deviceDetails	Object	Details of Device from which the transaction was initiated	M
deviceDetails.INITIATING_CHANNEL	String	Initiating channel of the device	M
deviceDetails.MAC	String	MAC address of the device	M
deviceDetails.IP	String	IP address of the device	M
customerDetails	Array of Objects	List of customer details	M
customerDetails[].name	String	Name of customer detail	O
customerDetails[].value	String	Value of customer detail	O
customerMobile	String	Customer's mobile number	M
timeStamp	String (DateTime)	Timestamp of the request	M
isQuickPay	Boolean	Indicates if the payment is a quick pay	O
paidAmount	Number	Amount paid	M
paymentName	String	Name of the payment	M
planId	String	Plan ID	M
analytics	Array of Objects	Meta data primarily for analytics	O
analytics[].name	String	Name of the analytic	M

analytics[].value	String (DateTime)	Value of the analytic	M
directBillChannel	String	Type of the transaction in case of QR/PL, i.e. L{1/2} {QR/PL}Unique ID generated at the time of Payment Confirmaton, such as PG Reference Number, RRN, etc..	O
directBillContentId	String	Unique ID pertaining to the QR/PL	O
txnReferenceId	String	Transaction reference number used by the Customer for referring to a Payment transaction	M
billerResponse	Object	Biller response parameters sent by the Biller supporting fetch is copied in the payment request "as-is" – not applicable for payment only Billers	O
billerResponse.customerName	String	Name of the customer	M
billerResponse.amount	String	Amount of the bill	M

billerResponse.dueDate	String (DateTime)	Due date of the bill	M
billerResponse.billDate	String (DateTime)	Generation date of the bill	M
billerResponse.billNumber	String	Unique identifier of the bill	M
billerResponse.billPeriod	String	Billing period of the bill	M
billerResponse.tags	Array of Objects	Biller response related tag indicating the various amount options provided by the Biller	M
billerResponse.tags[].name	String	Name of the amount field assigned by the Biller	M
billerResponse.tags[].value	String	Value of the amount field	M
amount	Object	Amount related details for the payment	M
amount.amount	String	Actual amount paid by the Customer for the transaction	M
amount.custConvFee	String	Customer convenience fee (CCF1) paid by the Customer BBPOU to Biller BBPOU	M
amount.COUCustConvFee	String	Customer convenience fee (CCF2) paid by the Customer to	M

		Customer BBPOU	
amount.currency	String	Currency code of the transaction	M
amount.splitPayAmount	String	Amount paid through the second payment mode	M
amount.tags	Array of Objects	Amount paid by the customer indicating different amount option combinations	O
amount.tags[].name	String	Name of the amount field assigned by the Biller	M
amount.tags[].value	String	Value of the amount field	M
paymentInformation	Array of Objects	Payment information of the instrument which is used for making the bill payment (this block is not passed by BBPCU to Biller BBPOU)	M
paymentInformation[].name	String	Name of the parameter for the chosen payment instrument	M
paymentInformation[].value	String	Value of the parameter for the chosen payment instrument	M

txn	Object	Transaction information, passed throughout the system, visible to all entities of the eco-system	M
txn.txnReferenceId	String	Transaction reference number used by the Customer for referring to a Payment transaction	M
txn.ts	String (DateTime)	Transaction initiation timestamp which will remain constant throughout all legs of the transaction	M
txn.type	String	Type of the message (Forward or Reversal Type)	M
txn.msgId	String	Unique identification assigned by the initiating BBPOU for chaining a request and response message	M
txn.directBillChannel	String	Type of the transaction in case of QR/PL, i.e. L{1/2} {QR/PL}	O

txn.directBillContentId	String	Unique ID pertaining to the QR/PL	O
txn.paymentRefId	String	Unique ID generated at the time of Payment Confirmaton, such as PG Reference Number, RRN, etc..	O
txn.riskScores	Array	Risk evaluation associated with the transaction and the related parties in the transaction	M
paymentMethod	Object	Payment method opted by the Customer	O
paymentMethod.quickPay	String	Flag indicating if the payment is initiated without a fetch or notFlag indicating if the bill is paid using two different payment modes	O
paymentMethod.splitPay	String	Flag indicating if the bill is paid using two different payment modes	O
paymentMethod.OFFUSPay	String	Flag indicating if it is an electronic ON-	

		US or OFF-US transaction	
paymentMethod.paymentMode	String	The payment mode which is accepted from the Customer	O
upms	Object	Unified Presentment Management System	O
upms.txnType	String	transaction type of upms	O
cprn	String	cprn number from the upms	O

Response Payload:

```
{
  "refId": "HENSVVR4QOS7X1UGPY7JGU444P10102209",
  "reason": {
    "approvalRefNum": "AB123456",
    "responseCode": "000/200",
    "responseReason": "Successful/Failure",
    "complianceRespCd": "BPR001",
    "complianceReason": "Incorrect / invalid customer account"
  },
  "billDetails": {
    "customerParams": {
      "tag": [
        {
          "name": "RefFld1",
          "value": "111"
        },
        {
          "name": "RefFld2",
          "value": "111"
        },
        {
          "name": "RefFld3",

```

```
        "value": "111"
    }
]
}
},
"billerResponse": {
    "customerName": "Anshul",
    "amount": "120000",
    "dueDate": "2021-09-24",
    "custConvFee": "1000",
    "billDate": "2021-01-02",
    "billNumber": "1232332",
    "billPeriod": "ONETIME"
}
}
```

3. Bill Validation

Endpoint:

```
POST /api/v1/bill/validation
```

Description:

This API allows you to validate the details of a specific bill using its unique identifier. It ensures that all bill information is correct before proceeding with a payment or any other actions.

Response:

- `200 OK` : Successfully fetched the bill details.
- `400 Bad Request` : Invalid bill ID or missing required parameters.
- `404 Not Found` : The bill with the provided ID does not exist.
- `500 Internal Server Error` : An error occurred on the server.

Request Payload :

```
{
    "agentId": "P001P002INT000000001",
    "refId": "A1B2C3D4E5F6G7H8I9J0KLMN0PQRSTUVWXYZ",
```

```

    "billerId": "RELIANCEJI0120i5",
    "customerParams": [
        {
            "name": "RefFld1",
            "value": "xljjflasjfafw74324327"
        },
        {
            "name": "RefFld2",
            "value": "fdfasdfasdf8r230hfw"
        },
        {
            "name": "RefFld3",
            "value": "2fsdadaslfdjls327492374"
        }
    ]
}

```

Payload Description

Name	Data Type	Description	Mandatory(M)/Optional(0)
refId	String	Unique identification assigned by the initiating BBPOU to unambiguously identify the transaction which is passed on, unchanged, throughout the entire end-to-end chain, binding the Fetch and Payment messages Fixed length 35.	M
agentId	String	Unique identification code allocated to the Agent.	M
billerId	String	Unique identification code allocated to the Biller.	M

customerParams	Array	Customer bill fetch related details.	M
customerParams[n].name	String	Name of the reference field as configured for the Biller.	M
customerParams[n].value	String	Value of the reference field which uniquely identifies the customer for the Biller	M

Response Payload:

```
{
  "refId": "A1B2C3D4E5F6G7H8I9J0KLMNOPQRSTUWXY",
  "reason": {
    "approvalRefNum": "AB123456",
    "responseCode": "000/200",
    "responseReason": "Successful/Failure",
    "complianceRespCd": "BVR001",
    "complianceReason": " Incorrect / invalid customer account"
  },
  "additionalInfo": [
    {
      "tag": [
        {
          "name": "BlRspFld1",
          "value": "57"
        }
      ]
    },
    {
      "tag": [
        {
          "name": "BlRspFld2",
          "value": "88"
        }
      ]
    },
    {
      "tag": [
        {
          "name": "BlRspFld3",
          "value": "99"
        }
      ]
    }
  ]
}
```

```
        {
            "name": "BlRspFld3",
            "value": "99"
        }
    ]
}
}
```