# Participant (FI) Implementation Guide for

# Interoperable Digital Transaction Platform (IDTP) Pilot Phase

**January 07, 2021**

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## <u>Document Change History</u>

| <u>Version</u> | <u>Date</u> | <u>Modifications</u> | <u>Author</u> |
|---|---|---|---|
| 1.0 | Oct 18, 2020 | Initial Version | Orion Informatics Ltd |
| 2.0 | Oct 26, 2020 | Added Message Flows | Orion Informatics Ltd |
| 3.0 | Jan 07, 2021 | Added New APIs | Orion Informatics Ltd |

# Table of Contents

## Acronyms

| | |
|---|---|
| API | Application Programming Interface |
| ATM | Automated Teller Machine |
| BACH | Bangladesh Automated Clearing House |
| BB | Bangladesh Bank |
| BD-RTGS | Bangladesh Real Time Gross Settlement System |
| BEFTN | Bangladesh Electronic Fund Transfer Network |
| BIN | Bank Identification Number |
| CBS | Core Banking System |
| DC | Data Center |
| DR | Disaster Recovery |
| DHCP | Dynamic Host Configuration Protocol |
| DS | Directory Service |
| EPG | Electronic Payment Gateway |
| E-Wallet | Electronic Wallet |
| FI | Financial Institution |
| GoB | Government of Bangladesh |
| HTTPS | Hyper Text Transfer Protocol Secure |
| ICT | Information and Communication Technology Division, GoB |
| ICP | IDTP Client Platform |
| IDTP | Interoperable Digital Transactions Platform system |
| ISO | International Organization for Standardization |
| LAN | Local Area Network |
| MFS | Mobile Financial Services |
| MFSP | Mobile Financial Services Provider |
| NDC | Near Data Center |
| NID | National Identification |

| OS | Operating System |
|---|---|
| OTP | One Time Password |
| PAD | Public Accounts Department |
| PIN | Personal Identification Number |
| PSP | Payment Services Provider |
| RTP | Request to Pay |
| SDK | Software Development Kit |
| SSL | Secure Socket Layer |
| TIN | Taxpayer's Identification Number |
| TLS | Transport Layer Security |
| TPS | Transaction Per Second |
| URL | Uniform Resource Locator |
| XML | Extensible Markup Language |

# 1. Overview

This guide describes the capabilities and interfaces of the IDTP Client Platform (ICP). ICP facilitates a Participant's (Financial Institutions) integration with the IDTP platform in order to execute interoperable digital transactions.

ICP provides ISO 20022-based message translation and encryption for financial messages. Moreover, ICP offers several management APIs for operational support. All APIs are REST-based, enhancing interoperability and scalability.

In addition to API interfaces, ICP provides a management portal for system Setup and Reports (transactional, reconciliation, settlement).

# 2. Deployment Topology
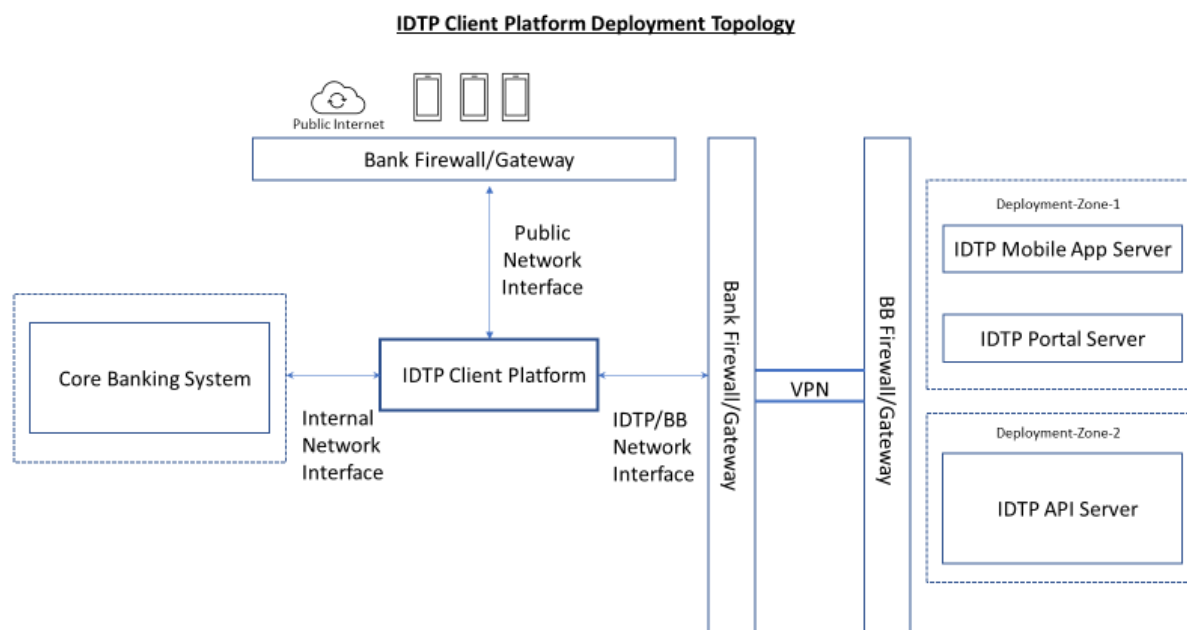
*Figure: IDTP Client Platform Deployment Topology*

ICP resides within a Participant's network and connects to the following networks:

1. Internal Network Interface – for communicating with Participant's Core Banking System
2. Public Internet Interface – for communicating with White-labeled IDTP Mobile App
3. BB/IDTP Network Interface (via VPN) – for communicating with IDTP Server platform hosted in Bangladesh Bank network

The APIs for each network interface are described in the following sections.

# 2. Message Flows

Financial Message flows (ISO 20022 based) for various transaction types are depicted below.

## 2.1 Direct Pay – Request
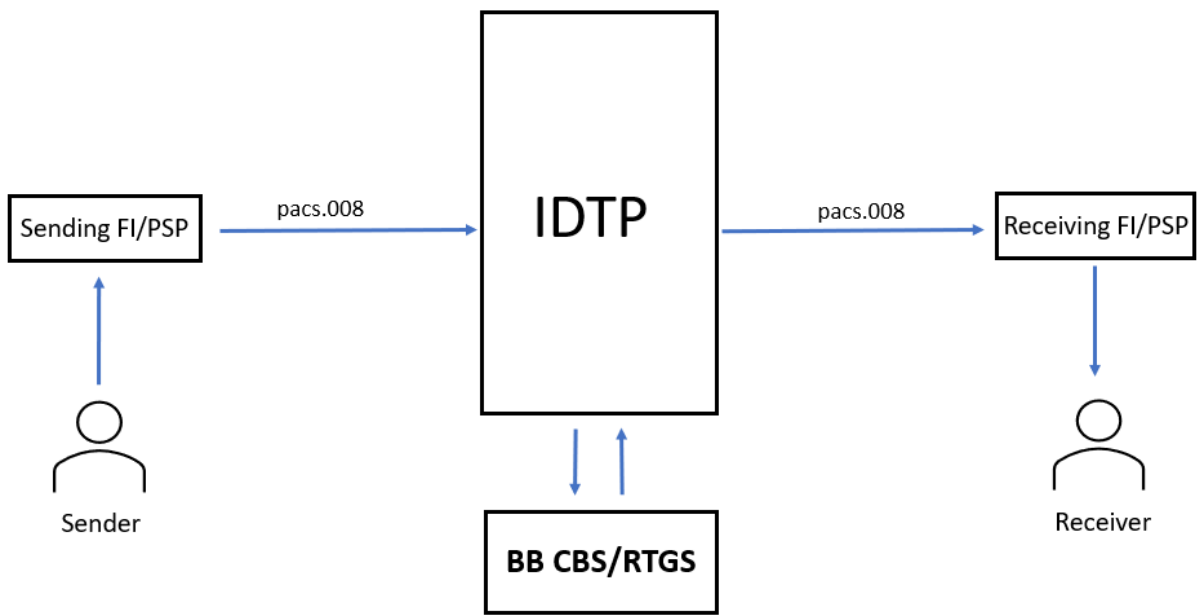


*Figure: Direct Pay (Request) Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|-------------------------|--------------|
| 1 | Customer Credit Transfer | pacs.008 |

## 2.2 Direct Pay – Response
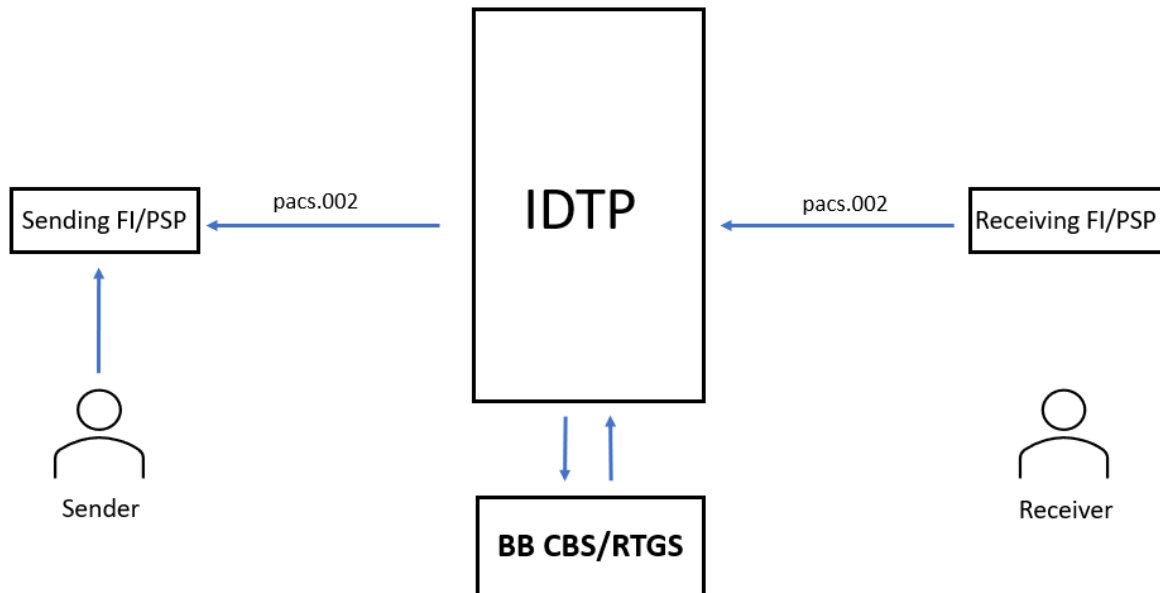


*Figure: Direct Pay (Response) Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------|--------------|
| 1 | Payment Status Report | pacs.002 |

## 2.3 Request to Pay – Request
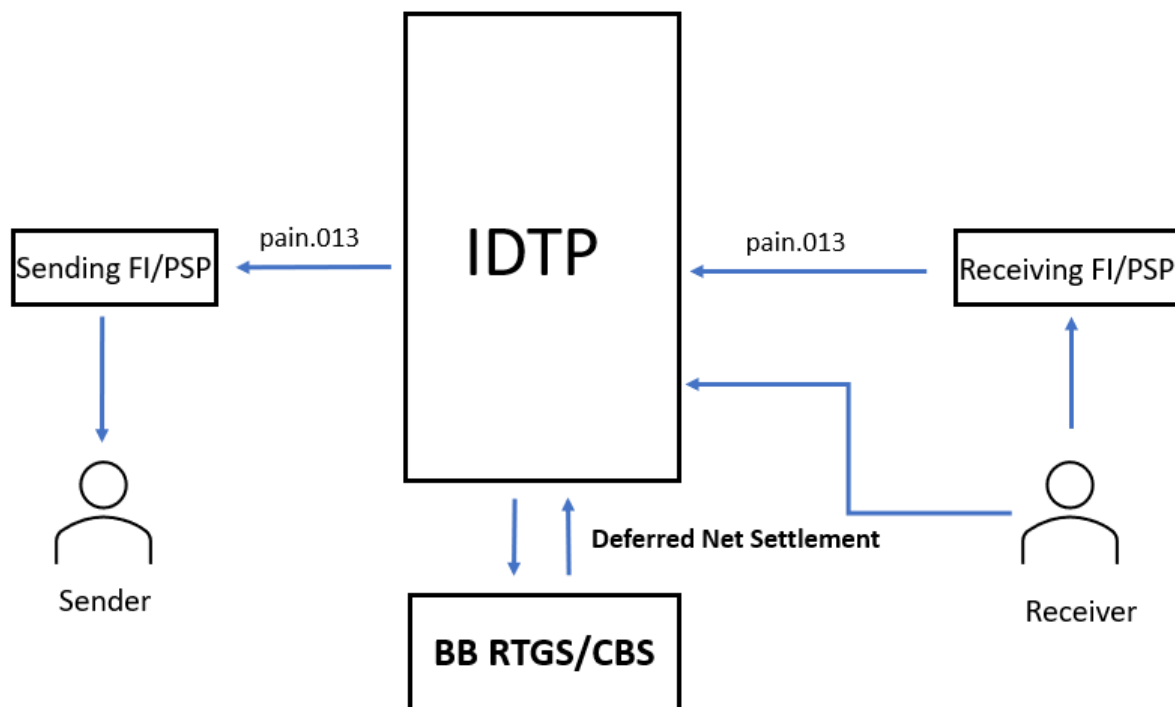


*Figure: Request to Pay (Request) Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------|--------------|
| 1 | Request for Payment | pain.013 |

## 2.4 Request to Pay – Declined Response
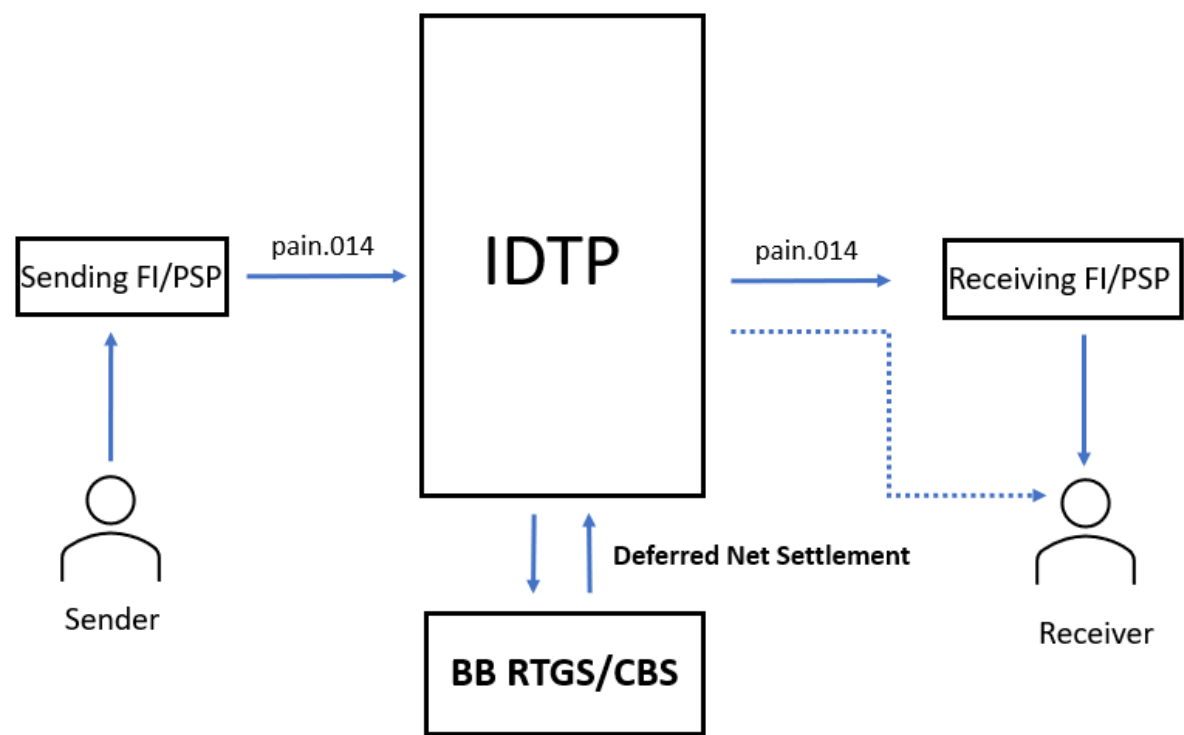


*Figure: Request to Pay (Response) Declined Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------|--------------|
| 1 | Response to RTP (Request to Pay) | pain.014 |

## 2.5 Govt Entity Fund Disbursement via IDTP Portal
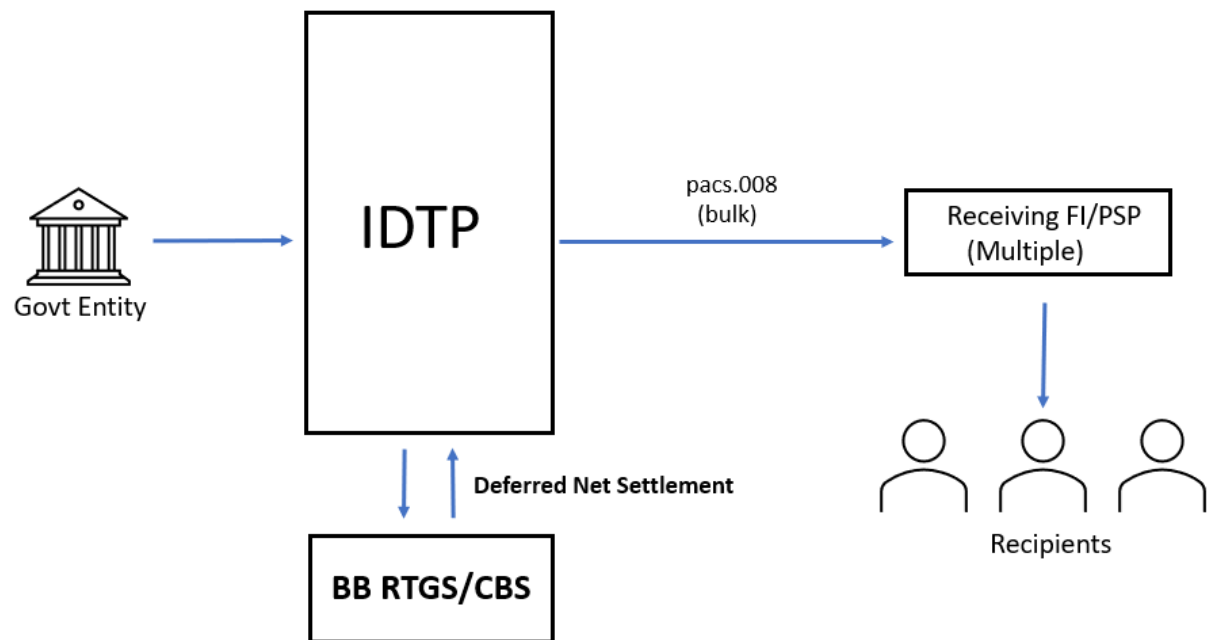


*Figure: Govt Entity Fund Disbursement via IDTP Portal Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------|--------------|
| 1 | Customer Credit Transfer | pacs.008 |

## 2.6 Govt Entity Salary Payment via IDTP Portal
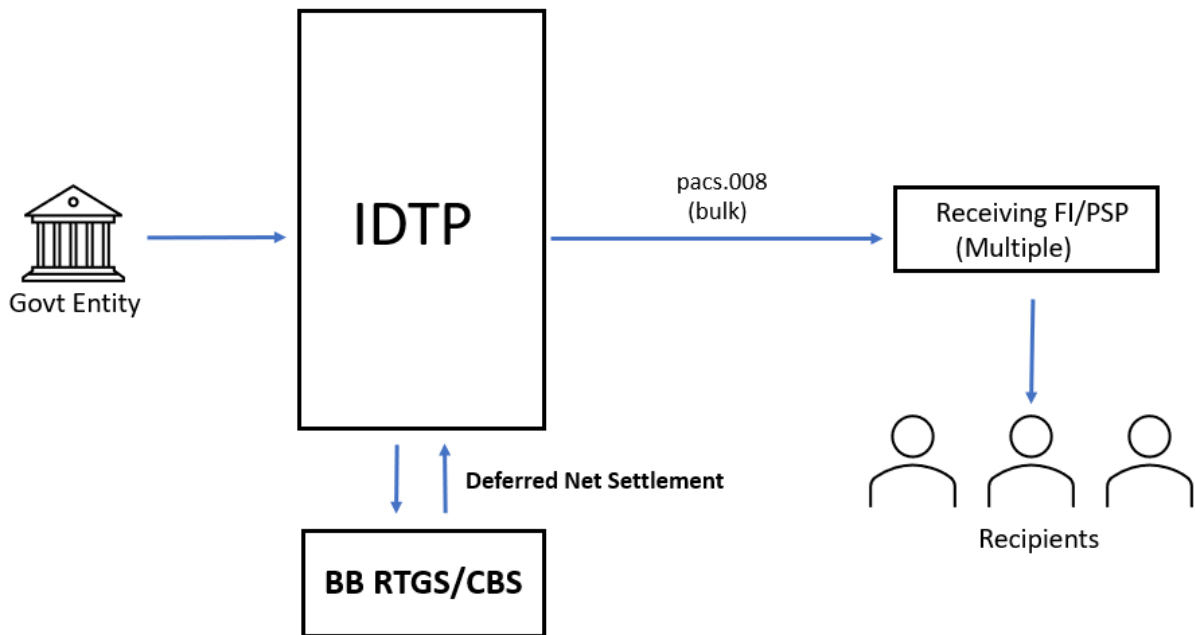


*Figure: Govt Entity Salary Payment Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------------------|--------------|
| 1 | Customer Credit Transfer | pacs.008 |

## 2.7 Business Entity Salary Payment via FI
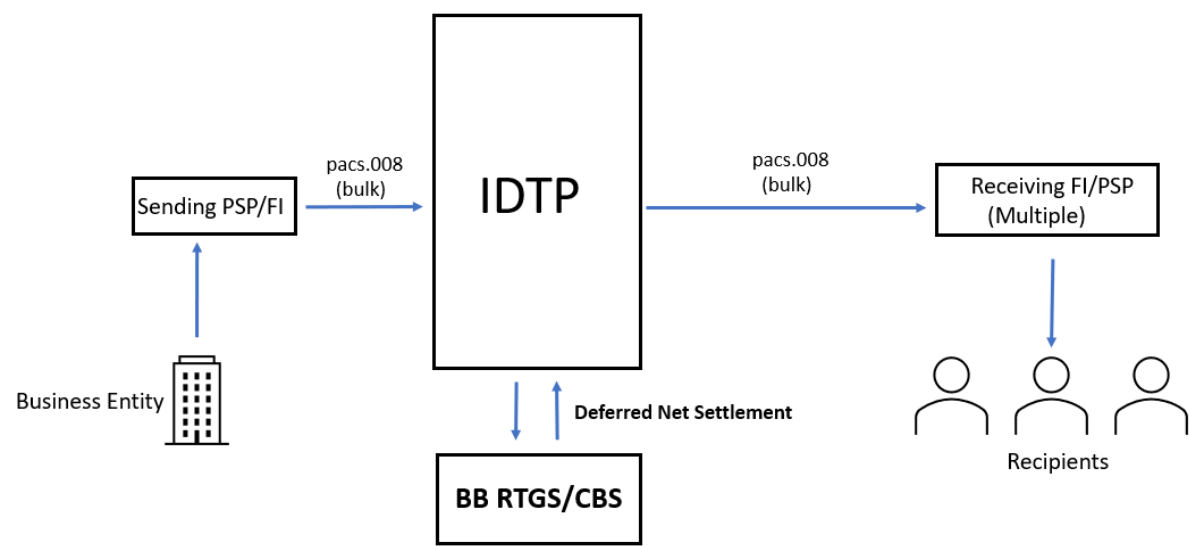


*Figure: Business Entity Salary Payment Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------|--------------|
| 1 | Customer Credit Transfer (Bulk) | pacs.008 |

## 2.8 Business Entity Salary Payment via IDTP Portal
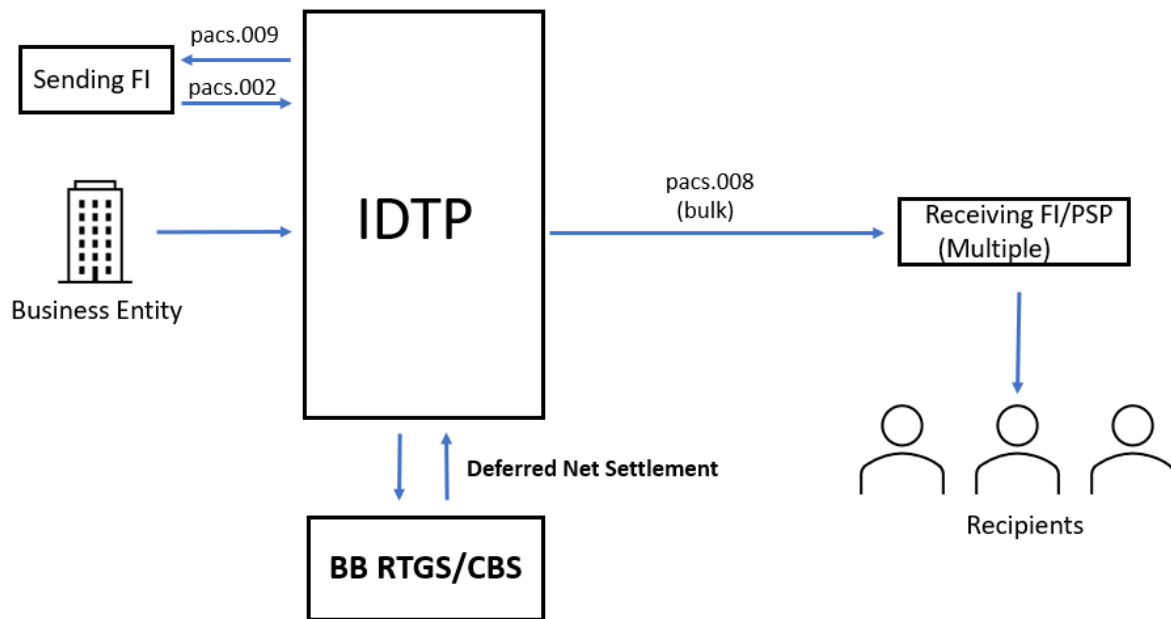


*Figure: Business Entity Salary Payment via IDTP Portal Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|---|---|---|
| 1 | Financial Institution Credit Transfer | pacs.009 |
| 2 | Payment Status Report | pacs.002 |

## 2.9 eCommerce/mCommerce/fCommerce Payment – Request Payment
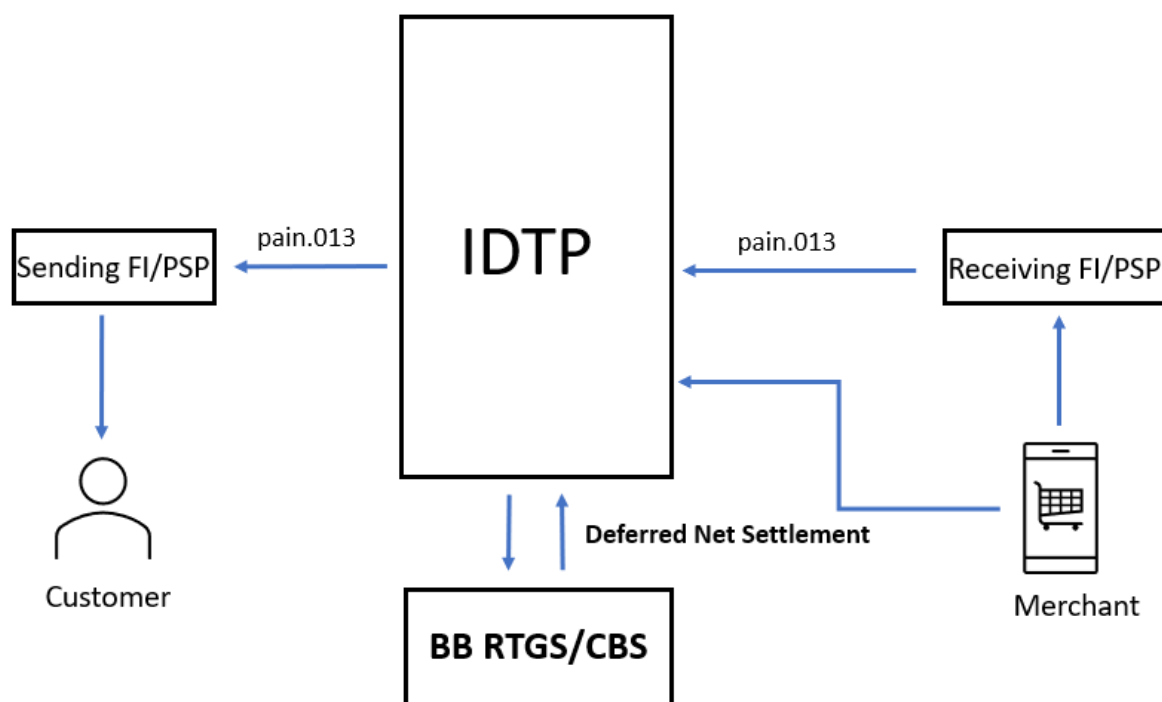


*Figure: eCommerce/mCommerce/fCommerce Request Payment Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------|--------------|
| 1 | Request for Payment | pain.013 |

## 2.10 eCommerce/mCommerce/fCommerce Payment – Customer Payment
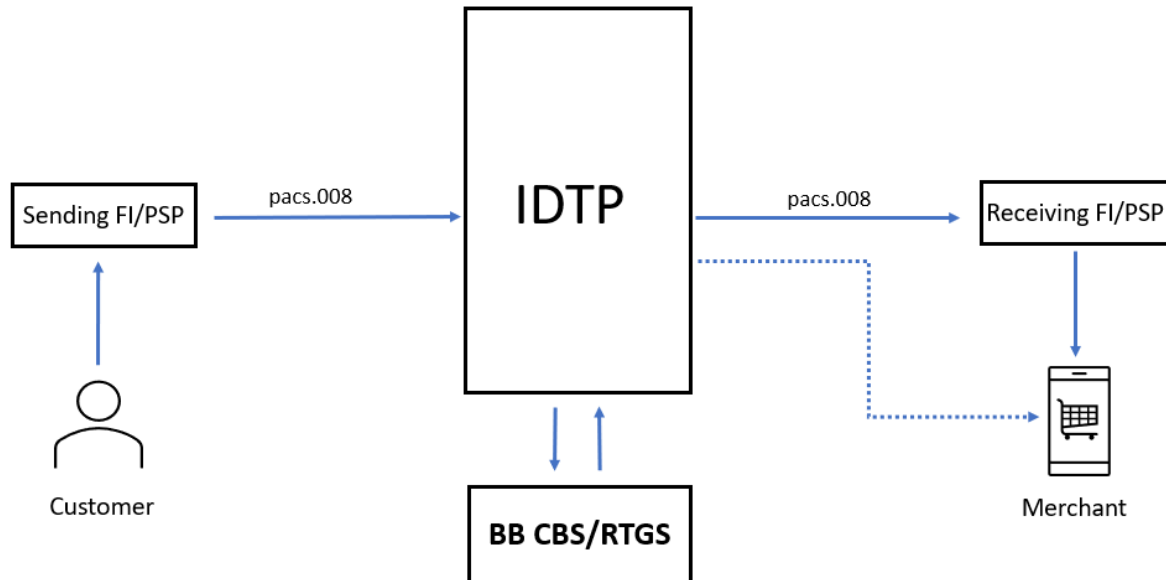


*Figure: eCommerce/mCommerce/fCommerce Customer Payment Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------|--------------|
| 1 | Customer Credit Transfer | pacs.008 |

## 2.11 Scan and Pay
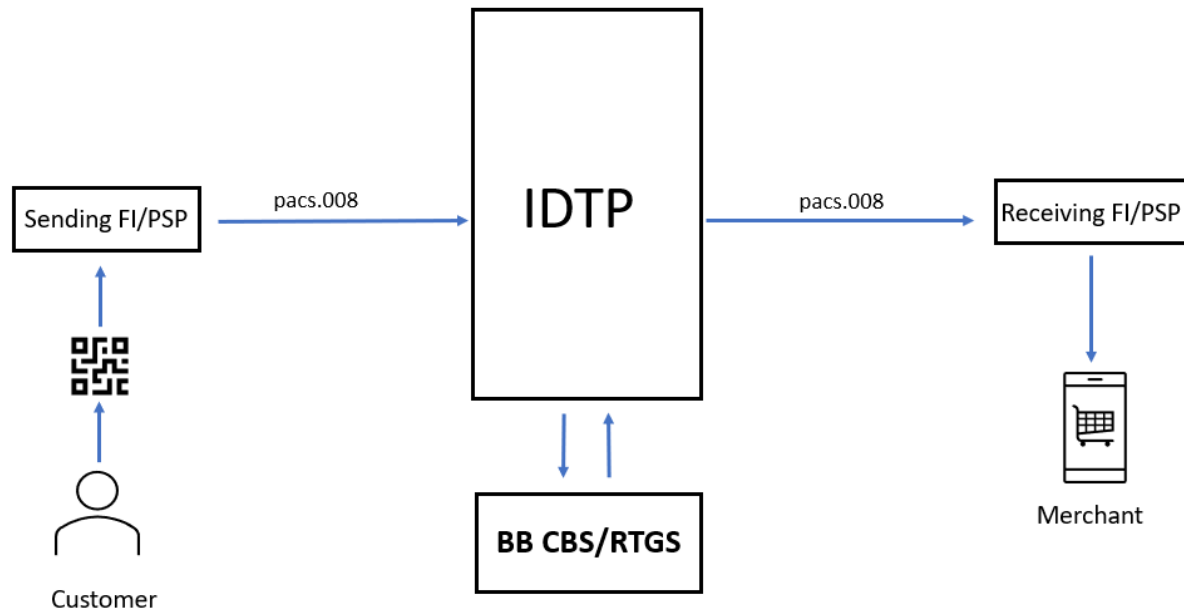


*Figure: Scan and Pay Merchant Payment Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------|--------------|
| 1 | Customer Credit Transfer | pacs.008 |

## 2.12 Get Account Balance from IDTP Mobile App - Request
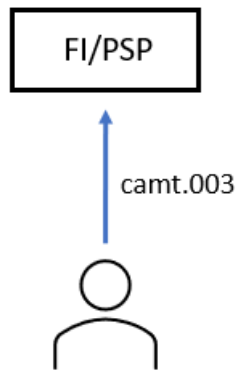


*Figure: Get Account Balance from IDTP Mobile App (Request) Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------------------|--------------|
| 1 | Get Account Information | camt.003 |

## 2.13 Get Account Balance from IDTP Mobile App - Response
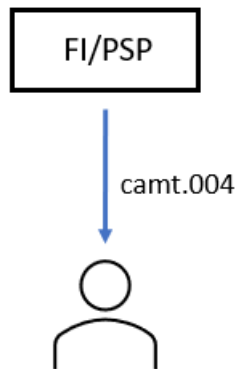


*Figure: Get Account Balance from IDTP Mobile App (Response) Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------------------|--------------|
| 1 | Return Account Information | camt.004 |

## 2.14 Payment using IDTP Mobile App
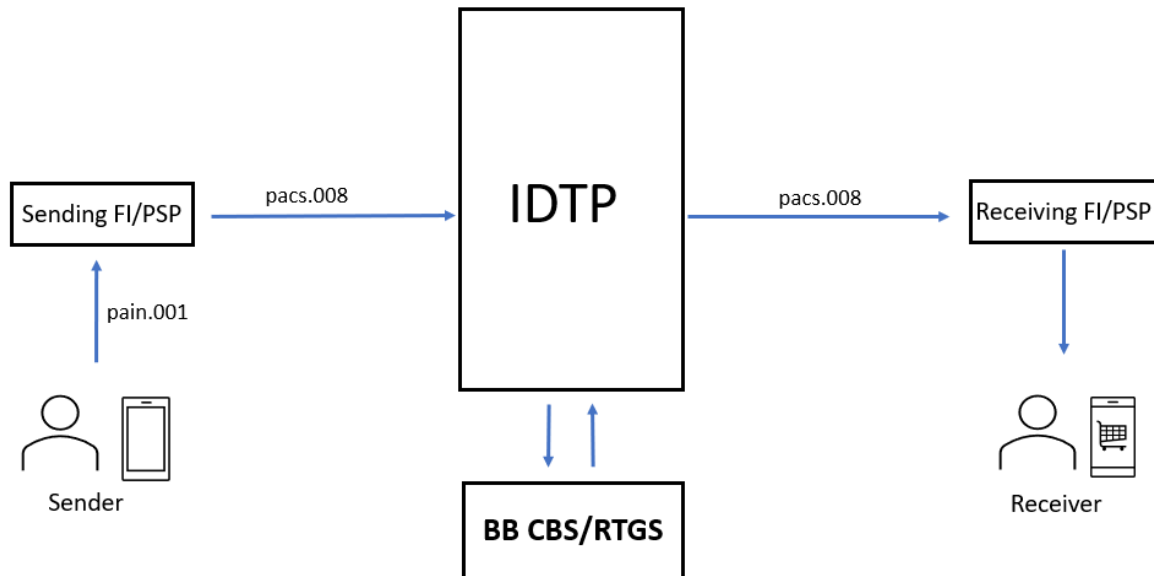


*Figure: Scan and Pay Merchant Payment Message Flow*

**Messages**

| Sl No | Message Name | Message Type |
|-------|--------------|--------------|
| 1 | Customer Credit Transfer Initiation | pain.001 |
| 2 | Customer Credit Transfer | pacs.008 |

# 3. Internal Network Interface

The Internal Network Interface communicates with a Participant's Core Banking System (CBS) to execute interoperable digital transactions.

The APIs are categorized into two broad types: financial and non-financial APIs.

## Financial APIs

### i. GetPaymentAuthorization ()

Method Name: GetPaymentAuthorization

Uri: https://$root/financial/GetPaymentAuthorization

Method Type: POST

Description: Invoked by Participant Core Banking System to obtain authorization for a transaction.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for GetPaymentAuthorization request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. A financial institution core banking system will invoke the *GetPaymentAuthorization* API prior to initiating a digital payment transaction.
2. IDTP will validate the transaction request based on a set of rules.
3. The API will return the result of payment authorization request

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
<PaymentAuthorization xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
    <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
        orgId="sample1" msgId="1" />

    <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Payment
    Authorization" ts="2020-05-
    16T14:15:42+05:30"
    type="AuthorizePayment"/>
    <ChannelInfo>
```

```
        <ChannelID>Online/Mobile/Other</ChannelID>
    </ChannelInfo>
    <AuthInfo addr="" type="">
        <SenderInfo>
            <SenderVID value="sampleUser@user.idtp"/>
        </SenderInfo>
        <DeviceInfo>
            <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
            <Mobile_No>8801864578345</Mobile_No>
            <Location>23.7805,90.4267</Location>
            <IP>10.0.0.1</IP>
        </DeviceInfo>
        <ReceiverInfo>
            <ReceiverVID value="sampleUser2@user.idtp"/>
        </ReceiverInfo>
        <TxnInfo addrType="">
            <ReferenceNo value="ASDF45567"/>
            <TxnAmount value="5000.00"/>
        </TxnInfo>
    <OtherInfo/>
    <Creds>
        <Cred type="IDTP_PIN" subtype="">
        <Data>…</Data>
        </Cred>
    </Creds>
  </AuthInfo>
</PaymentAuthorization>
```

**API Response:**

| Type | Success | Failure |
|---|---|---|
| Message | ```< PaymentAuthorizationResponse>     <Code>200</Code>     <Refno>REF12345</Refno> </PaymentAuthorizationResponse>``` | ```<PaymentAuthorizationResponse>   <Code>605</Code>   <Message>      Receiver Account on Hold   </Message>   <Code>606</Code>   <Message>     Debit Limit Exceeded.   </Message>   <Code>607</Code>   <Message>        Receiver is        restricted.    </Message>    <Code>608</Code>    <Message>       Credit Limit Exceeded.     </Message> </PaymentAuthorizationResponse>``` |

## ii. RecordPayment ()

Method Name: RecordPayment

Uri: https://$root/financial/RecordPayment

Method Type: POST

Description: Invoked by Participant Core Banking System to report completion of a transaction.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for the RecordPayment request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. A financial institution core banking system will invoke the *RecordPayment* API after completing a digital payment transaction.
2. The API will return the result of the record payment request.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
<RecordPayment xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
          orgId="sample1" msgId="1"/>

     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Record
        Payment" ts="2020-05-16T14:15:42+05:30"
        type="RecordPayment"/>
      <ChannelInfo>
            <ChannelID>Online/Mobile/Other</ChannelID>
      </ChannelInfo>
      <PaymentInfo addr="" type="">
      <SenderInfo>
            <SenderVID value="sampleUser@user.idtp"/>
      </SenderInfo>
      <DeviceInfo>
            <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
```

```
                <Mobile_No>8801864578345</Mobile_No>
                <Location>23.7805,90.4267</Location>
                <IP>10.0.0.1</IP>
        </DeviceInfo>
        <ReceiverInfo>
                <ReceiverVID value="sampleUser2@user.idtp"/>
   </ReceiverInfo>
        <TxnInfo addrType="">
                <ReferenceNo value="ASDF45567"/>
                <TxnAmount value="5000.00"/>
        </TxnInfo>
        <OtherInfo/>
        <Creds>
            <Cred type="IDTP_PIN" subtype="">
             <Data>…</Data>
            </Cred>
        </Creds>
    </ PaymentInfo>
 </RecordPayment>
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | ```<RecordPaymentResponse><Code>200</Code><Message>Success</Message><Refno>REF12345</Refno></RecordPaymentResponse>``` | ```<RecordPaymentResponse><Code>609</status><Message>Invalid IDTP_PIN</Message></RecordPaymentResponse>``` |

### iii. PayGovtDues()

Method Name: PayGovtDues

Uri: https://$root/financial/PayGovtDues

Method Type: POST

Description: Pay Govt dues such as utility bills, fees, taxes etc.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for the PayGovtDues request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. A Payer may initiate a govt payment request (bills/fees/taxes etc) from the Payer's FI core banking system in non-ISO format.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
<PayGovtDues xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
           orgId="sample1" msgId="1" />
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Pay Govt Dues"
      ts="2020-05-16T14:15:42+05:30" type="PAYGOVTDUES"/>
      <TransactionInfo addr="" type="">
            <ChannelInfo>
                  <ChannelID>Online/Mobile/Other</ChannelID>
            </ChannelInfo>
            <SenderInfo>
                  <SenderVID value="sampleUser@user.idtp"/>
            </SenderInfo>
            <DeviceInfo>

                  <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
                  <Mobile_No>8801864578345</Mobile_No>
                  <Location>23.7805,90.4267</Location>
                  <IP>10.0.0.1</IP>
            </DeviceInfo>
```

```
                <ReceiverInfo>
                    <ReceiverVID value="sampleGov@gov.idtp"/>
                </ReceiverInfo>
                <TxnInfo addrType="">
                    <ReferenceNo value="ASDF45567"/>
                    <TxnAmount value="5000.00"/>
                </TxnInfo>
                <OtherInfo>
                    <Purpose>Sample Purpose</Purpose>
                    <BillNo>241234123</BillNo>
                </OtherInfo>
                <Creds>
                    <Cred type="IDTP_PIN" subtype="">
                    <Data>…</Data>
                    </Cred>
                </Creds>
        </TransactionInfo>
</PayGovtDues>
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | `<TransactionResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success</Message>`<br>`    <MsgId>TRAN12345</ MsgId>`<br>`    <OrgnlTxId>SBL12345`<br>`    </OrgnlTxId>`<br>`    <OrgnlEndToEndId>SBL12345</`<br>`    OrgnlEndToEndId>`<br>`</TransactionResponse>` | `<TransactionResponse>`<br>`    <Code>606</Code>`<br>`    <Message>`<br>`        Debit Limit Exceeded.`<br>`    </Message>`<br>`    < MsgId></MsgId>`<br>`    <OrgnlTxId></OrgnlTxId>`<br>`    <OrgnlEndToEndId`<br>`    ></OrgnlEndToEndId>`<br>`</TransactionResponse>` |

### iv. PayGovtDuesISO()

Method Name: PayGovtDuesISO

Uri: https://$root/financial/PayGovtDuesISO

Method Type: POST

Description: Pay Govt dues such as utility bills, fees, taxes etc using ISO 20022 message format.

Parameters: The body element is a standard digitally signed ISO 20022/ PACS.008.001.06 message and the response will be a digitally signed ISO 20022/ PACS.002.001.05 version message.

**Request Flow:**

2. A Payer may initiate a govt payment request (bills/fees/taxes etc) from the Payer's FI core banking system.

**API Request:**

The request format will be ISO 20022/PACS.008.001.06, A sample request is provided in APPENDIX – A of this document.

**API Response:**

The response format will be ISO 20022/PACS.002.001.05, A sample response is provided in APPENDIX – B of this document.

### v. TransferFunds()

Method Name: TransferFunds

Uri: https://$root/financial/TransferFunds

Method Type: POST

Description: API to initiate transfer funds request from participant core banking system via Direct Credit Push with non-ISO message.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for the TransferFunds request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Sending participant core banking system will send a Direct Pay request in XML format to IDTP. The message will contain Sender's account information and Receiver's virtual ID.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|---|---|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
<TransferFunds xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
          orgId="sample1" msgId="1" />
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Transfer
     Funds" ts="2020-05-16T14:15:42+05:30" type="TRANSFERFUNDS"/>
     <ChannelInfo>
          <ChannelID>Online/Mobile/Other</ChannelID>
     </ChannelInfo>
     <TransactionInfo addr="" type="">
          <SenderInfo>
               <SenderVID value="sampleUser@user.idtp"/>
          </SenderInfo>
          <DeviceInfo>
               <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
               <Mobile_No>8801864578345</Mobile_No>
```

```
                <Location>23.7805,90.4267</Location>
                <IP>10.0.0.1</IP>
            </DeviceInfo>
            <ReceiverInfo>
                <ReceiverVID value="sampleUser2@user.idtp"/>
            </ReceiverInfo>
            <TxnInfo addrType="">
                <ReferenceNo value="ASDF45567"/>
                <TxnAmount value="5000.00"/>
            </TxnInfo>
            <OtherInfo>
                <Purpose>Sample Purpose</Purpose>
                <BillNo></BillNo>
            </OtherInfo>
            <Creds>
                <Cred type="IDTP_PIN" subtype="">
                <Data>…</Data>
                </Cred>
            </Creds>
        </TransactionInfo>
    </TransferFunds>
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | `<TransactionResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success</Message>`<br>`    <MsgId>TRAN12345</ MsgId>`<br>`    <OrgnlTxId>SBL12345`<br>`    </OrgnlTxId>`<br>`    <OrgnlEndToEndId>SBL12345</`<br>`    OrgnlEndToEndId>`<br>`</TransactionResponse>` | `<TransactionResponse>`<br>`    <Code>606</Code>`<br>`    <Message>`<br>`        Debit Limit Exceeded.`<br>`    </Message>`<br>`    < MsgId></MsgId>`<br>`    <OrgnlTxId></OrgnlTxId>`<br>`    <OrgnlEndToEndId`<br>`    ></OrgnlEndToEndId>`<br>`</TransactionResponse>` |

### vi. TransferFundsISO()

Method Name: TransferFundsISO

Uri: https://$root/financial/TransferFundsISO

Method Type: POST

Description: API to initiate transfer funds request from participant core banking system via Direct Credit Push in ISO 20022 message format.

Parameters: The body element is a standard digitally signed ISO 20022/ PACS.008.001.06 message and the response will be a digitally signed ISO 20022/ PACS.002.001.05 version message.

**Request Flow:**

2. The Sending participant core banking system will send a Direct Pay request in PACS.008.001.06 format to IDTP. The message will contain Sender's account information and Receiver's virtual ID.

**API Request:**

The request format is ISO 20022/PACS.008.001.06, A sample request is provided in APPENDIX – A of this document.

**API Response:**

The response format is ISO 20022/PACS.002.001.05, A sample response is provided in APPENDIX – B of this document.

## vii. CreateRTP()

Method Name: CreateRTP

Uri: https://$root/financial/CreateRTP

Method Type: POST

Description: Invoked by Payee to request payment from Payer.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for the CreateRTP request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Payee will send a Request to Pay (RTP) message to IDTP in XML format via the Payee's financial institution. The message will contain Payee's account information and Payer's virtual ID.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
<CreateRTP xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
          orgId="sample1" msgId="1" />
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Request To
      Pay" ts="2020-05-16T14:15:42+05:30" type="REQUESTTOPAY"/>
      <ChannelInfo>
          <ChannelID>Online/Mobile/Other</ChannelID>
      </ChannelInfo>
      <RequestInfo addr="" type="">
          <SenderInfo>
                <SenderVID value="sampleUser@user.idtp"/>
          </SenderInfo>
          <DeviceInfo>
                <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
                <Mobile_No>8801864578345</Mobile_No>
                <Location>23.7805,90.4267</Location>
                <IP>10.0.0.1</IP>
```

```
            </DeviceInfo>
            <ReceiverInfo>
                <ReceiverVID value="sampleUser2@user.idtp"/>
            </ReceiverInfo>
            <ReqInfo addrType="">
                <ReferenceNo value="ASDF45567"/>
                <ReqAmount value="5000.00"/>
            </ReqInfo>
            <OtherInfo>
                <Purpose>Sample Purpose</Purpose>
            </OtherInfo>
            <Creds>
                <Cred type="IDTP_PIN" subtype="">
                <Data>123456</Data>
                </Cred>
            </Creds>
        </RequestInfo>
</ CreateRTP >
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | ```<CreateRTPResponse>    <Code>200</Code>    <ReqId>REF12345</ReqId></ CreateRTPResponse >``` | ```< CreateRTPResponse >    <Code>606</Code>    <Message>        Debit Limit Exceeded.    </Message></CreateRTPResponse >``` |

### viii. CreateRTPISO()

Method Name: CreateRTPISO

Uri: https://$root/financial/CreateRTPISO

Method Type: POST

Description: Invoked by Payee to request payment from Payer.

Parameters: The body element is a standard digitally signed ISO 20022/ PAIN.013.001.06 message and the response will be a digitally signed ISO 20022/PAIN.014.001.06 message.

**Request Flow:**

2. The Payee will send a Request to Pay (RTP) message to IDTP in PAIN.013.001.06 format via the Payee's financial institution. The message will contain Payee's account information and Payer's virtual ID.

**API Request:**

The request format is ISO 20022/PAIN.013.001.06, A sample request is provided in APPENDIX – C of this document.

**API Response:**

The response format (for declined payment requests) is ISO 20022/PAIN.014.001.06, A sample response is provided in APPENDIX – D of this document.

### ix. SendRTPDeclinedResponse()

Method Name: SendRTPDeclinedResponse

Uri: https://$root/financial/SendRTPDeclinedResponse

Method Type: POST

Description: Invoked by Payer in response to the RTP request received from Payee.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for the SendRTPDeclinedResponse request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

The send Request To Pay Response process will be as follows:

1. Once a Request to Pay request is received, the Payer will be required to provide a response
2. If the Payer declines the payment, the Payer's financial institution will invoke the *SendRTPDeclinedResponseISO* API; IDTP will forward the response to the Payee's financial institution.
3. If the Payer accepts the payment, the Payer's financial institution will initiate a Direct Pay request by calling the *TransferFunds* API.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
< SendRTPDeclinedResponse xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
          orgId="sample1" msgId="1" />
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="RTP Declined
     Response" ts="2020-05-16T14:15:42+05:30" type="
     SENDRTPDECLINEDRESPONSE "/>
     <ChannelInfo>
        <ChannelID>Online/Mobile/Other</ChannelID>
     </ChannelInfo>
```

```
        <RequestInfo addr="" type="">
            <SenderInfo>
                <SenderVID value="sampleUser@user.idtp"/>
            </SenderInfo>
            <DeviceInfo>

                <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
                <Mobile_No>8801864578345</Mobile_No>
                <Location>23.7805,90.4267</Location>
                <IP>10.0.0.1</IP>
            </DeviceInfo>
            <ReceiverInfo>
                <ReceiverVID value="sampleUser2@user.idtp"/>
            </ReceiverInfo>
            <ReqInfo addrType="">
                <RTPId value="RTP1431243123"/>
                <ReqAmount value="5000.00"/>
            </ReqInfo>
            <OtherInfo/>
        </RequestInfo>
</ SendRTPDeclinedResponse >
```

## API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | `<RTPDeclinedResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Sender Rejection`<br>`    Success</Message>`<br>`</RTPDeclinedResponse>` | `<RTPDeclinedResponse>`<br>`    <Code>601</Code>`<br>`    <Message>`<br>`        Sender Rejection Failed`<br>`    </Message>`<br>`</RTPDeclinedResponse>` |

### x. SendRTPDeclinedResponseISO()

Method Name: SendRTPDeclinedResponseISO

Uri: https://$root/financial/SendRTPDeclinedResponseISO

Method Type: POST

Description: Invoked by Payer in response to the RTP request received from Payee.

Parameters: The body element is a standard digitally signed ISO 20022/ PAIN.013.001.06 message and the response will be a digitally signed ISO 20022/PAIN.014.001.06 message

**Request Flow:**

The send Request To Pay Response process will be as follows:

4. Once a Request to Pay request is received, the Payer will be required to provide a response
5. If the Payer declines the payment, the Payer's financial institution will invoke the *SendRTPDeclinedResponseISO* API; IDTP will forward the response to the Payee's financial institution.
6. If the Payer accepts the payment, the Payer's financial institution will initiate a Direct Pay request by calling the *TransferFunds* API.

**API Request:**

The request format is ISO 20022/ PAIN.013.001.06, A sample request is provided in APPENDIX – C of this document.

**API Response:**

The response format is ISO 20022/ PAIN.014.001.06, A sample response is provided in APPENDIX – D of this document.

## xi. DisburseGovtFunds()

Method Name: DisburseGovtFunds

Uri: https://$root/financial/DisburseGovtFunds

Method Type: POST

Description: Invoked by a FI to distribute Govt funds to specified recipients.

Parameters: The request body element will be as the sample XML is provided below for DisburseGovtFunds request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. If the request is initiated by FI core banking system, it will invoke the *DisburseGovtFunds* API.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualIDs (multiple) |
| 3 | Amounts (multiple) |
| 4 | Channel Info |
| 6 | Other Info |

**Sample API Request :**

```
<DisburseGovtFunds xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30" orgId="sample1"
          msgId="1"/>
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Disburse
          Government Funds" ts="2020-05-16T14:15:42+05:30
          type="DISBURSEGOVTFUNDS"/>
     <ChannelInfo>
          <ChannelID>Online/Mobile/Other</ChannelID>
     </ChannelInfo>
     <DisbursementInfo addr="" type="">
          <SenderInfo>
               <SenderVID value="sampleGovt@gov.idtp"/>
          </SenderInfo>
          <ReceiverInfo>
             <ReceiverVIDs value="Bulk1">
               <ReceiverVID value="sampleUser2@user.idtp" amount="yyy"/>
               <ReceiverVID value="sampleUser3@user.idtp" amount="yyy"/>
               <ReceiverVID value="sampleUser4@user.idtp" amount="yyy"/>
               <ReceiverVID value="sampleUser5@user.idtp" amount="yyy"/>
                    …
```

```
            </ReceiverVIDs>
        </ReceiverInfo>
        <TxnInfo addrType="">
              <ReferenceNo value="ASDF45567"/>
        </TxnInfo>
        <OtherInfo>
              <Purpose>Sample Purpose</Purpose>
        </OtherInfo>
        <Creds>
          <Cred type="IDTP_PIN" subtype="">
              <Data>…</Data>
          </Cred>
        </Creds>
    </DisbursementInfo>
</DisburseGovtFunds>
```

## API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | `< DisburseGovtFundsResponse >`<br>`    <Code>200</Code>`<br>`    <Message>`<br>`        Success`<br>`    </Message>`<br>`    <Refno>REF12345</Refno>`<br>`</ DisburseGovtFundsResponse >` | `<DisburseGovtFundsResponse >`<br>`    <Code>610</status>`<br>`    <Message>`<br>`      Invalid Sender VirtualID`<br>`    </Message>`<br>`    <Code>606</Code>`<br>`    <Message>`<br>`        Debit Limit Exceeded.`<br>`    </Message>`<br>`    <Code>608</Code>`<br>`    <Message>`<br>`        Credit Limit Exceeded.`<br>`    </Message>`<br>`    <Code>611</Code>`<br>`    <Message>`<br>`        File Format is wrong`<br>`    </Message>`<br>`</DisburseGovtFundsResponse >` |

## xii. DisburseSalary()

Method Name: DisburseSalary

Uri: https://$root/financial/DisburseSalary

Method Type: POST

Description: Invoked by a FI to distribute salary payment to specified recipients.

Parameters: The request body element will be as the sample XML is provided below for DisburseSalary request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. If the request is initiated by FI core banking system, it will invoke the *DisburseGovtFunds* API.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|---|---|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualIDs (multiple) |
| 3 | Amounts (multiple) |
| 4 | Channel Info |
| 6 | Other Info |

**Sample API Request :**

```
<DisburseSalary xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30" orgId="sample1"
            msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Disburse
            Salary" ts="2020-05-16T14:15:42+05:30"
            type="DISBURSESALARY"/>
      <ChannelInfo>
            <ChannelID>Online/Mobile/Other</ChannelID>
      </ChannelInfo>
      <DisbursementInfo addr="" type="">
            <SenderInfo>
                  <SenderVID value="sampleGovt@gov.idtp"/>
            </SenderInfo>
            <ReceiverInfo>
                  <ReceiverVIDs value="Bulk1">
                  <ReceiverVID value="sampleUser2@user.idtp" amount="yyy"/>
                  <ReceiverVID value="sampleUser3@user.idtp" amount="yyy"/>
                  <ReceiverVID value="sampleUser4@user.idtp" amount="yyy"/>
                  <ReceiverVID value="sampleUser5@user.idtp" amount="yyy"/>
                        …
                  </ReceiverVIDs>
```

```
        </ReceiverInfo>
        <TxnInfo addrType="">
            <ReferenceNo value="ASDF45567"/>
        </TxnInfo>
        <OtherInfo>
            <Purpose>Sample Purpose</Purpose>
        </OtherInfo>
        <Creds>
          <Cred type="IDTP_PIN" subtype="">
            <Data>…</Data>
          </Cred>
        </Creds>
    </DisbursementInfo>
</ DisburseSalary >
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | `< DisburseSalaryResponse >`<br>`    <Code>200</Code>`<br>`    <Message>Success`<br>`    </Message>`<br>`    <Refno>REF12345</Refno>`<br>`</ DisburseSalaryResponse >` | `< DisburseSalaryResponse >`<br>`    <Code>610</status>`<br>`    <Message>`<br>`      Invalid Sender VirtualID`<br>`    </Message>`<br>`    <Code>606</Code>`<br>`    <Message>`<br>`        Debit Limit Exceeded.`<br>`    </Message>`<br>`    <Code>608</Code>`<br>`    <Message>`<br>`        Credit Limit Exceeded.`<br>`    </Message>`<br>`    <Code>611</Code>`<br>`    <Message>`<br>`        File Format is wrong`<br>`    </Message>`<br>`</DisburseSalaryResponse >` |

## xiii. PayUtilityBills()

Method Name: PayUtilityBills

Uri: https://$root/financial/PayUtilityBills

Method Type: POST

Description: Pay Utility Bills.

Parameters: The request body element will be as the sample XML is provided below for *PayUtilityBills* request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1.    If the request is initiated by FI core banking system, it will invoke the *PayUtilityBills* API.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|---|---|
| 1 | Channel Info |
| 2 | Sender VID |
| 3 | Receiver VID |
| 4 | Bill Reference No |
| 5 | Bill Amount |
| 6 | Purpose |
| 7 | Other Info |

**Sample API Request:**

```
<PayUtilityBills xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
<Head ver="1.0" ts="2020-05-16T14:15:43+05:30" orgId="SBL1BDDH" msgId="1"
/>
  <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Pay Utility Bills"
ts="2020-05-16T14:15:42+05:30" type="PAYUTILITYBILLS"/>
        <TransactionInfo addr = "" type = "">
            <ChannelInfo>
              <ChannelID>Online/Mobile/Other</ChannelID>
            </ChannelInfo>
            <SenderInfo>
              <SenderVID value ="sampleUser2@user.idtp"/>
            </SenderInfo>
            <DeviceInfo>
               <Device_ID></Device_ID>
               <Mobile_No></Mobile_No>
               <Location></Location>
```

```
        <IP></IP>
    </DeviceInfo>
    <ReceiverInfo>
        <ReceiverVID value ="sampleGovt2@gov.idtp"/>
    </ReceiverInfo>
    <TxnInfo addrType = "">
        <ReferenceNo value ="105142020"/>
        <TxnAmount value ="100.20"/>
    </TxnInfo>
    <OtherInfo>
        <Purpose>Bill Pay</Purpose>
        <BillNo>729142021</BillNo>
    </OtherInfo>
    <Creds>
        <Cred type = "IDTP_PIN" subtype = "">
            <Data>XXXXXX</Data>
        </Cred>
    </Creds>
    </TransactionInfo>
</PayUtilityBills>
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | ```<TransactionResponse> <Code>200</Code> <Message>Success</Message> <RefNo_SendingBank> 105142020 </RefNo_SendingBank> <RefNo_SendingPSP> </RefNo_SendingPSP> <RefNo_ReceivingBank> SGBL20210103190601191 </RefNo_ReceivingBank> <RefNo_ReceivingPSP> </RefNo_ReceivingPSP> <RefNo_IDTP> IDTP202101040106002884 </RefNo_IDTP> </TransactionResponse>``` | ```<TransactionResponse> <Code>400</Code> <Message>Sending FI debit cap exceeded </Message> <RefNo_SendingBank> 105142020 </RefNo_SendingBank> <RefNo_SendingPSP> </RefNo_SendingPSP> <RefNo_ReceivingBank> </RefNo_ReceivingBank> <RefNo_ReceivingPSP> </RefNo_ReceivingPSP> <RefNo_IDTP></RefNo_IDTP> </TransactionResponse>``` |

## xiv. PayUtilityBillsISO()

Method Name: PayUtilityBillsISO

Uri:  https://$root/financial/PayUtilityBillsISO

Method Type: POST

Description: Pay utility bills.

Parameters: The body element is a standard digitally signed ISO 20022/ PACS.008.001.06 message and the response will be a digitally signed ISO 20022/ PACS.002.001.05 version message.

**Request Flow:**
The utility bills payment process will be as follows:
1. A Payer may initiate a utility bill payment request from the Payer's FI app or IDTP Pay Utility Bill Payment portal.
2. If initiated from Payer's FI app, the Payer's FI will start a Direct Pay transaction

**API Request:**
The request format will be ISO 20022/PACS.008.001.06, A sample request is provided in APPENDIX – A of this document.

**API Response:**
The response format will be ISO 20022/PACS.002.001.05, A sample response is provided in APPENDIX – B of this document.

## xv. GetTransactionFee()

Method Name: GetTransactionFee

Uri: https://$root/financial/GetTransactionFee

Method Type: POST

Description: Invoked by a FI to get transaction fee based on the transaction type and transaction amount.

Parameters: The request body element will be as the sample XML is provided below for *GetTransactionFee* request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. If the request is initiated by FI core banking system, it will invoke the *GetTransactionFee* API.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|---|---|
| 1 | Channel Info |
| 2 | User VID |
| 3 | Transaction Type |
| 4 | Transaction Amount |
| 5 | Other Info |

**Sample API Request :**

```
<GetTransactionFee
            xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
            <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="SBL1BDDH" msgId="1" />
            <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
Transaction Fee" ts="2020-05-16T14:15:42+05:30" type="GETTRANSACTIONFEE" />
            <ChannelInfo>
                <ChannelID>Online/Mobile/Other</ChannelID>
            </ChannelInfo>
            <ReqInfo>
                <DeviceInfo>
                    <Device_ID></Device_ID>
                    <Mobile_No></Mobile_No>
                    <Location></Location>
                    <IP></IP>
                </DeviceInfo>
                <UserInfo>
                    <UserVID value="sampleUser1@user.idtp" />
                </UserInfo>
```

```
<TransactionInfo>
    <TransactionType value="Pay Utility Bills" />
    <Amount value="100" />
</TransactionInfo>
<OtherInfo/>
<Creds>
    <Cred type="IDTP_PIN" subtype="">
        <Data>XXXXXX</Data>
    </Cred>
</Creds>
    </ReqInfo>
</GetTransactionFee>
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | ```<GetTransactionFeeResponse>``` <br> ```<Code>200</Code>``` <br> ```<Message>Success</Message>``` <br> ```<FeeInfo>``` <br> ```<Amount>0.50</Amount>``` <br> ```</FeeInfo>``` <br> ```</ GetTransactionFeeResponse >``` | ```< GetTransactionFeeResponse >``` <br> ```<Code>90150</Code>``` <br> ```<Message>Fee Not Found</Message>``` <br> ```<FeeInfo/>``` <br> ```</ GetTransactionFeeResponse >``` |

# Non-Financial APIs

### i. RegisterIDTPUser()

Method Name: RegisterIDTPUser

Uri: https://$root/management/RegisterIDTPUser

Method Type: POST

Description: Invoked by Participant Core Banking System to register their respective users.

Parameters: The request body element contains below input parameters.
The Sample XML is provided for the registration of Individual users and a
sample table provided for the XML response which defines the success and
failure response.

**Request Flow:**

1. A Participant FI Core Banking System will be able to register its users into
   IDTP via this RegisterIDTPUser API.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Name |
| 2 | Type of User |
| 3 | Address |
| 4 | District |
| 5 | Postal Code |
| 6 | Mobile Number |
| 7 | Email |
| 8 | NID |
| 9 | TIN |
| 10 | BIN |
| 11 | Type of Ownership |
| 12 | Type of Business |
| 13 | Name of Ministry |
| 14 | Name of Division |

| 15 | | Type of Financial Institution |
|----|--|-------------------------------|
| 16 | | BIC/Swift Code |
| 17 | | CB Account Number |
| 18 | | Requested VirtualId |
| 19 | | Password |
| 20 | | Financial Institution |
| 21 | | Branch Name |
| 22 | | Routing Number |
| 23 | | Account Number |
| 24 | | Contact Person Name |
| 25 | | Designation |
| 26 | | Contact Number |
| 27 | | Email |
| 28 | | Date of Birth |
| 29 | | Date of Incorporation |
| 30 | | Other Info |

**Sample API Request - Individual:**

```
<RegisterUser xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
  <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
        orgId="SampleFI1" msgId="1" />
  <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Register User"
       ts="2020-05-16T14:15:42+05:30" type="RegisterUser" />
  <ChannelInfo>
         <ChannelID>Online/Mobile/Other</ChannelID>
  </ChannelInfo>
  <Entity seqNum="1">
  <Info>
      <EntityType>Individual</EntityType>
      <Name> IndividualUser </Name>
      <AddressLine1> Dhaka </AddressLine1>
      <AddressLine2> Bangladesh </AddressLine2>
      <District> Dhaka </District>
      <PostalCode> 1200 </PostalCode>
      <MobileNumber> 017112345678 </MobileNumber>
      <Email> user@abc.com </Email>
      <TypeOfOwnership></TypeOfOwnership>
      <TypeOfBusiness></TypeOfBusiness>
      <NameOfMinistry></NameOfMinistry>
      <NameOfDivision></NameOfDivision>
      <TypeOfFinancialInstitution></TypeOfFinancialInstitution>
      <SwiftCode></SwiftCode>
      <CBAccountNumber></CBAccountNumber>
      <NID>41231231412421</NID>
      <TIN>532153131</TIN>
      <BIN></BIN>
```

```
        <Password>123456</Password>
        <DateOfBirth>12/1/1990</DateOfBirth>
    </Info>
    <FinancialInstitutionInfo>
        <FinancialInstitution> Sample Bank 1 </FinancialInstitution>
        <BranchName> Central </BranchName>
        <RoutingNumber> 090212478 </RoutingNumber>
        <AccountNumber> 1125469870466 </AccountNumber>
    </FinancialInstitutionInfo>

    <ContactReference>
        <ContactPersonName></ContactPersonName>
        <Designation></Designation>
        <ContactNumber></ContactNumber>
        <Email></Email>
    </ContactReference>

    <Creds>
        <Cred type="IDTP_PIN" subtype="">
          <Data>…</Data>
        </Cred>
      <Cred type="APP_PASS" subtype="">
        <Data>…</Data>
      </Cred>
    </Creds>
    <RequestedVirtualID value="sampleUser@user.idtp" />
    <OtherInfo/>
    </Entity>
 </RegisterUser>
```

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**Sample API Request  - Business:**

```xml
<RegisterUser xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
  <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
        orgId="sample1" msgId="1" />
  <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Register User"
       ts="2020-05-16T14:15:42+05:30" type="RegisterUser" />
  <ChannelInfo>
      <ChannelID>Online/Mobile/Other</ChannelID>
  </ChannelInfo>
  <Entity seqNum="1" >
  <Info>
      <EntityType>Business</EntityType>
      <Name> SampleBusiness </Name>
      <AddressLine1> Dhaka </AddressLine1>
      <AddressLine2> Bangladesh </AddressLine2>
      <District> Dhaka </District>
      <PostalCode> 1200 </PostalCode>
      <MobileNumber></MobileNumber>
      <Email></Email>
      <TypeOfOwnership> Partnership </TypeOfOwnership>
      <TypeOfBusiness> Service Business </TypeOfBusiness>
      <NameOfMinistry></NameOfMinistry>
      <NameOfDivision></NameOfDivision>
      <TypeOfFinancialInstitution></TypeOfFinancialInstitution>
      <SwiftCode></SwiftCode>
      <CBAccountNumber></CBAccountNumber>
      <NID></NID>
      <TIN>532153131</TIN>
      <BIN>412312232</BIN>
      <Password>123456</Password>
      <IDTPKey>8654885c-370f-4890-96a8-fc187398494f</IDTPKey>
      <DateOfIncorporation>12/1/2020</DateOfIncorporation>
  </Info>
  <DeviceInfo>
      <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
      <Mobile_No>8801864578345</Mobile_No>
      <Location>23.7805,90.4267</Location>
      <IP>10.0.0.1</IP>
  </DeviceInfo>
  <FinancialInstitutionInfo>
      <FinancialInstitution> Sample Bank </FinancialInstitution>
      <BranchName> Central </BranchName>
      <RoutingNumber> 090212478 </RoutingNumber>
      <AccountNumber> 1125469870466 </AccountNumber>
  </FinancialInstitutionInfo>
  <ContactReference>
      <ContactPersonName> Sample Name </ContactPersonName>
      <Designation> Sample Designation </Designation>
      <ContactNumber> +8801723753954 </ContactNumber>
      <Email> sampleName@gmail.com </Email>
  </ContactReference>
  <Setup>
       <CommURL>SampleUrl</CommURL>
       <ECommKey>SampleKey<ECommKey>
  </Setup>
  <Creds>
      <Cred type="IDTP_PIN" subtype="">
        <Data>…</Data>
      </Cred>
```

```
        <Cred type="APP_PASS" subtype="">
          <Data>…</Data>
        </Cred>
    </Creds>
    <RequestedVirtualID value="sampleBusiness@biz.idtp" />
    <OtherInfo/>
    </Entity>
</RegisterUser>
```

**API Response:**

| Type | Success | Failure |
|------|---------|---------|
| Message | ```<RegisterUserResponse><Code>200</Code><Message>Success</Message><VirtualID>sample@user.idtp</VirtualID></RegisterUserResponse>``` | ```<RegisterUserResponse><Code>601</Code><Message>Invalid NID</Message><Code>602</Code><Message>Invalid TIN</Message><Code>603</Code><Message>Invalid BIN</Message><Code>604</Code><Message>Invalid Account Number</Message></RegisterUserResponse>``` |

## ii. ValidateIDTPUser()

Method Name: ValidateIDTPUser

Uri: https://$root/management/ValidateIDTPUser

Method Type: POST

Description: Invoked by core banking system to validate a user from IDTP.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for Validating IDTP User and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Participant will call this ValidateIDTPUser API when it needs to validate any IDTP user existence.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|---|---|
| 1 | VirtualID |
| 2 | Channel Info |
| 3 | Other Information |

**Sample API Request**

```
<ValidateIDTPUser xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM"
     note="Validate IDTP User" ts="2020-05-16T14:15:42+05:30"
     type="VALIDATEIDTPUSER"/>
   <ChannelInfo>
        <ChannelID>Online/Mobile/Other</ChannelID>
   </ChannelInfo>
     <IDTPUserInfo>
          <</DeviceInfo>
               <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
               <Mobile_No>8801864578345</Mobile_No>
               <Location></Location>
               <IP></IP>
          </DeviceInfo>
          <UserInfo>
               <UserVID value="sampleUser@user.idtp"/>
          </UserInfo>
     <OtherInfo/>
   <Creds>
     <Cred type="IDTP_PIN" subtype="">
       <Data>…</Data>
     </Cred>
   </Creds>
```

```
        </IDTPUserInfo>
    </ValidateIDTPUser>
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```<ValidateIDTPUserResponse>    <Code>200</Code>    <Message>Success    </Message>    <VID> sampleBiz@biz.idtp    </VID></ValidateIDTPUserResponse >``` | ```< ValidateIDTPUserResponse >    <Code>2012</status>    <Message>      Invalid VirtualId    </Message>    <VID></VID></ValidateIDTPUserResponse >``` |

### iii. GetDailyTransactions()

Method Name: GetDailyTransactions

Uri: https://$root/management/GetDailyTransactions

Method Type: POST

Description: Invoked by Core Banking System to get current day's transactions

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting daily transactions and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Participant will call this GetDailyTransactions API when it will need to get all the transactions of current date.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Request Details |

**Sample API Request**

```
< GetDailyTransactions xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
      Daily FI Transactions" ts="2020-05-16T14:15:42+05:30"
      type=" GETDAILYTRANSACTIONS "/>
      <ChannelInfo>
          <ChannelID>Online/Mobile/Other</ChannelID>
      </ChannelInfo>
      <ReqInfo>
      <OtherInfo/>
      </ ReqInfo >
</ GetDailyTransactions >
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```< GetDailyTransactionsResponse><br>    <Code>200</Code><br>    <Message>Success<br>    </Message><br>    <Transaction seqNum =<br>    "1"><br>    <Date>10/1/2020 9:06:54<br>    AM </Date><br>    <SenderVID><br>    sampleUser@user.idtp<br>    </SenderVID><br>    <SenderFI>Sample<br>    FI</SenderFI><br>    <SenderAcc>XXXXXXXX123</<br>    SenderAcc><br>    <ReceiverVID>sampleUser2<br>    @user.idtp</ReceiverVID><br>    <ReceiverFI>Sample FI<br>    2</ReceiverFI><br>    <ReceiverAcc>XXXXXXXX134<br>    </ReceiverAcc><br>    <TxnID>TRAN123456</TxnID<br>    ><br>    <Amount>100.00</Amount><br>    <TxnType>Direct<br>    Pay</TxnType><br>    <Purpose>XXX</Purpose><br>    </Transaction><br></<br>GetDailyTransactionsResponse >``` | ```< GetDailyTransactionsResponse ><br>    <Code>2012</status><br>    <Message><br>      No Transaction Found<br>    </Message><br>    <Transaction></Transaction><br></ GetDailyTransactionsResponse >``` |

## iv. GetUserTransactionHistory()

Method Name: GetTransactionHistory

Uri: https://$root/management/GetUserTransactionHistory

Method Type: POST

Description: Invoked by FI Core Banking System to get the transaction history for a particular user.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting transaction history of a user and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Participant will call this GetTranHistory API when it needs to retrieve the transaction history of a user from IDTP.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | VirtualID |
| 2 | Other Information |

**Sample API Request**

```
<GetUserTransactionHistory xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
     User Transaction History" ts="2020-05-16T14:15:42+05:30"
     type="GETUSERTRANSACTIONHISTORY"/>
   <ChannelInfo>
        <ChannelID>Online/Mobile/Other</ChannelID>
   </ChannelInfo>
   < IDTPUserInfo >
        <UserInfo>
          <UserVID value="sampleUser@user.idtp"/>
        </UserInfo>
     <OtherInfo/>
     <Creds>
          <Cred type="IDTP_PIN" subtype="">
                <Data>…</Data>
          </Cred>
     </Creds>
   </ IDTPUserInfo >
</ GetUserTransactionHistory >
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```<br>< GetUserTransactionHistoryResponse><br>    <Code>200</Code><br>    <Message>Success</Message><br>    <Transaction seqNum = "1"><br>    <Date>10/1/2020 9:06:54 AM </Date><br>    <ReceiverVID>sampleUser@user.idtp</ReceiverVID><br>    <TxnID>TRAN123456</TxnID><br>    <Amount>100.00</Amount><br>    <TxnType>Direct Pay</TxnType><br>    </Transaction><br></ GetUserTransactionHistoryResponse ><br>``` | ```<br>< GetUserTransactionHistoryResponse ><br>    <Code>2012</status><br>    <Message><br>     Invalid VirtualId<br>    </Message><br>    <Transaction></Transaction><br></ GetUserTransactionHistoryResponse ><br>``` |

### v. GetRTPListSent()

Method Name: GetRTPListSent

Uri: https://$root/management/GetRTPListSent

Method Type: POST

Description: Invoked by FI to get RTP sent list for a particular user.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting RTP sent list of a user and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Participant will call this GetRTPListSent API when it needs to retrieve the RTP sent list of a user from IDTP.

<u>API Request:</u>

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | VirtualID |
| 2 | Other Information |

**Sample API Request**

```
< GetRTPListSent xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
      User RTP Sent List" ts="2020-05-16T14:15:42+05:30"
      type=" GETRTPLISTSENT "/>
   <ChannelInfo>
         <ChannelID>Online/Mobile/Other</ChannelID>
   </ChannelInfo>
   < IDTPUserInfo >
         <UserInfo>
               <UserVID value="sampleUser@user.idtp"/>
         </UserInfo>
      <OtherInfo/>
      <Creds>
           <Cred type="IDTP_PIN" subtype="">
               <Data>…</Data>
           </Cred>
      </Creds>
   </ IDTPUserInfo >
</ GetRTPListSent >
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```< GetRTPListSentResponse><br>    <Code>200</Code><br>    <Message>Success<br>    </Message><br>    <RTP seqNum = "1"><br>    <Date>10/1/2020 9:06:54<br>    AM </Date><br>    <ReceiverName>Sample<br>    User </SenderName><br>    <ReceiverVID>sampleUser@<br>    user.idtp</SenderVID><br>    <ReqID>REQ123456</ReqID><br>    <Amount>100.00</Amount><br>    <Reference>Reference<br>    Sample</Reference><br>   <Status>Pending</Status><br>    </RTP><br>    </<br>    GetRTPListSentResponse>``` | ```< GetRTPListSentResponse ><br>    <Code>2012</status><br>    <Message><br>       Invalid VirtualId<br>    </Message><br>    <RTP></RTP><br></ GetRTPListSentResponse >``` |

### vi. GetRTPListReceived()

Method Name: GetRTPListReceived

Uri: https://$root/management/GetRTPListReceived

Method Type: POST

Description: Invoked by FI to get the RTP received list for a particular user.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting RTP received list of a user and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Participant will call this GetRTPListReceived API when it needs to retrieve the RTP received list of a user from IDTP.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | VirtualID |
| 2 | Other Information |

**Sample API Request**

```
< GetRTPListReceived xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
      User RTP Received List" ts="2020-05-16T14:15:42+05:30"
      type=" GETRTPLISTRECEIVED "/>
   <ChannelInfo>
          <ChannelID>Online/Mobile/Other</ChannelID>
   </ChannelInfo>
   < IDTPUserInfo >
          <UserInfo>
                <UserVID value="sampleUser@user.idtp"/>
          </UserInfo>
      <OtherInfo/>
      <Creds>
          <Cred type="IDTP_PIN" subtype="">
                <Data>…</Data>
          </Cred>
      </Creds>
   </ IDTPUserInfo >
</ GetRTPListReceived >
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | `< GetRTPListReceivedResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success`<br>`    </Message>`<br>`    <RTP seqNum = "1">`<br>`    <Date>10/1/2020 9:06:54`<br>`    AM </Date>`<br>`    <SenderName>Sample User`<br>`    </SenderName>`<br>`    <SenderVID>sampleUser@us`<br>`    er.idtp</SenderVID>`<br>`    <ReqID>REQ123456</ReqID>`<br>`    <Amount>100.00</Amount>`<br>`    <Reference>Reference`<br>`    Sample</Reference>`<br>`    <Status>Pending</Status>`<br>`    </RTP>`<br>`    </`<br>`    GetRTPListReceivedRespon`<br>`    se >` | `< GetRTPListReceivedResponse >`<br>`    <Code>2012</status>`<br>`    <Message>`<br>`      Invalid VirtualId`<br>`    </Message>`<br>`    <RTP></RTP>`<br>`</ GetRTPListReceivedResponse >` |

### vii. GetRegisteredGovtEntityList()

Method Name: GetRegisteredGovtEntityList

Uri: https://$root/management/GetRegisteredGovtEntityList

Method Type: POST

Description: Invoked by FI to get the Registered Govt Entity list that are registered in IDTP.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting Registered Govt Entity list in IDTP and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Participant will call this GetRegisteredGovtEntityList API when it needs to retrieve the registered Govt Entity list from IDTP.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Request Details |

**Sample API Request**

```
< GetRegisteredGovtEntityList
xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
      Govt Entity List" ts="2020-05-16T14:15:42+05:30" type="
      GETREGISTEREDGOVTENTITYLIST "/>
   <ChannelInfo>
         <ChannelID>Online/Mobile/Other</ChannelID>
   </ChannelInfo>
    < ReqUserInfo >
      <OtherInfo/>
   </ ReqUserInfo >
</ GetRegisteredGovtEntityList >
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```<br>< GetRegisteredGovtEntityListResponse><br>    <Code>200</Code><br>    <Message>Success </Message><br>    <GovtEntity seqNum = "1"><br>    <Name>Sample Govt Entity</Name><br>    <VirtualID>samplegovt@gov.idtp</VirtualID><br>    <EntityType>Bill/Dues</EntityType><br>    </ GovtEntity ><br>    </GetRegisteredGovtEntityListResponse ><br>``` | ```<br>< GetRegisteredGovtEntityListResponse><br>    <Code>2012</status><br>    <Message><br>      Invalid Request<br>    </Message><br>    < GovtEntity></GovtEntity ><br>    </ GetRegisteredGovtEntityListResponse ><br>``` |

### viii. GetRegisteredFIList()

Method Name: GetRegisteredFIList

Uri: https://$root/management/GetRegisteredFIList

Method Type: POST

Description: Invoked by FI to get the Registered Financial Institution list that are registered in IDTP.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting Registered Financial Institution list in IDTP and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Participant will call this GetRegisteredFIList API when it needs to retrieve the registered FI list from IDTP.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|---|---|
| 1 | Request Details |

**Sample API Request**

```
< GetRegisteredFIList xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
     Financial Institution List" ts="2020-05-
     16T14:15:42+05:30" type=" GETREGISTEREDFILIST "/>
   <ChannelInfo>
        <ChannelID>Online/Mobile/Other</ChannelID>
   </ChannelInfo>
    < ReqUserInfo >
     <OtherInfo/>
   </ ReqUserInfo >
</ GetRegisteredFIList >
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | `< GetRegisteredFIListResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success`<br>`    </Message>`<br>`    <FI seqNum = "1">`<br>`    <Name>Sample FI</Name>`<br>`    <VirtualID>samplefin@fin`<br>`    .idtp</VirtualID>`<br>`    <FIType>Direct/Indirect<`<br>`    /FIType>`<br>`    </ FI >`<br>`    </`<br>`    GetRegisteredFIListRespo`<br>`    nse >` | `< GetRegisteredFIListResponse >`<br>`    <Code>2012</status>`<br>`    <Message>`<br>`      Invalid Request`<br>`    </Message>`<br>`    < FI></FI >`<br>`</ GetRegisteredFIListResponse >` |

## ix. GenerateQRCode()

Method Name: GenerateQRCode

Uri: https://$root/management/GenerateQRCode

Method Type: POST

Description: Invoked by a Payee to generate a QR-code based on Payee's Virtual ID and payment amount.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for Generating QR Code and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

The generate QR Code process will be as follows:

1.  A Payee will invoke this API to obtain a static or dynamic QR-Code

2.  The generated QR-Code may be used to receive payments from Payees

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
| --- | --- |
| 1 | Payee VirtualID |
| 2 | Amount |
| 3 | Channel Info |
| 4 | Other Info |

**Sample API Request**

```
<GenerateQRCode xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
     orgId="sample1" msgId="1"/>
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM"
     note="Generate QR Code" ts="2020-05-16T14:15:42+05:30"
     type="GENERATEQRCODE"/>
        <QRInfo
 addr=""type="">
<ChannelInfo>
        <ChannelID>Online/Mobile/Other</ChannelID>
</ChannelInfo>
   <DeviceInfo>
                <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
                <Mobile_No>8801864578345</Mobile_No>
                <Location>23.7805,90.4267</Location>
                <IP>10.0.0.1</IP>
```

```
            </DeviceInfo>
            <ReceiverInfo>
                  <ReceiverVID value="sampleBiz@biz.idtp"/>
            </ReceiverInfo>
            <TxnInfo addrType="">
                  <TxnAmount value="5000.00"/>
                  <BillNo>9031520211123</BillNo>
            </TxnInfo>
        <OtherInfo/>
        <Creds>
              <Cred type="IDTP_PIN" subtype="">
                    <Data>…</Data>
              </Cred>
        </Creds>
      </QRInfo>
</GenerateQRCode>
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```<GenerateQRCodeResponse>       <Code>200</Code>       <Message>Success       </Message>       <QRCode>QRCode</QRCode> </GenerateQRCodeResponse>``` | ```<GenerateQRCodeResponse>       <Code>2012</status>       <Message>         Invalid Receiver VirtualId       </Message>        <Code>609</status>       <Message>           Invalid IDTP_PIN       </Message> </GenerateQRCodeResponse>``` |

## x. GetIDTPClockTime()

Method Name: GetIDTPClockTime

Uri: https://$root/management/GetIDTPClockTime

Method Type: POST

Description: Invoked by core banking system to get the Clock Time of IDTP.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting IDTP server time and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The IDTP will call this GetIDTPClockTime API when it needs to know the clock time of IDTP.

<u>**API Request:**</u>

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Channel Info |

**Sample API Request**
```
<GetIDTPClockTime  xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-
     16T14:15:43+05:30" orgId="SBL1BDDH" msgId="1" ></Head>
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get IDTP Clock
     Time" ts="2020-05-16T14:15:42+05:30" type="GETIDTPCLOCKTIME"></Req>
 <ChannelInfo>
   <ChannelID>Online</ChannelID>
 </ChannelInfo>
 <ReqInfo>
 </ReqInfo>
</GetIDTPClockTime>
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | `< GetIDTPClockTimeResponse>`<br>`  <Code>200</Code>`<br>`  <Message>Success</Message>`<br>`  <ClockTime>2020-12-`<br>`30T18:24:48.933</ClockTime>`<br>`</GetIDTPClockTimeResponse>` | `<GetIDTPClockTimeResponse>`<br>`  <Code>400</Code>`<br>`  <Message>Failure</Message>`<br>`  <ClockTime/>`<br>`</GetIDTPClockTimeResponse>` |

## xi. GetFIUserList()

Method Name: GetFIUserList

Uri: https://$root/management/GetFIUserList

Method Type: POST

Description: Invoked by core banking system to get Registered User List of FI.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for *GetFIUserList* and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The IDTP will call this GetFIUserList API when it needs to know the registered Users of a FI.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Channel Info |
| 2 | FI VID |
| 3 | Other Info |

**Sample API Request**

```
<GetFIUserList xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
              <Head ver ="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="SBL1BDDH" msgId ="1"/>
              <Req id ="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get FI
User List" ts="2020-05-16T14:15:42+05:30" type ="GETFIUSERLIST"/>
              <ChannelInfo>
                <ChannelID>Online/Mobile/Other</ChannelID>
              </ChannelInfo>
              <ReqInfo>
              <DeviceInfo>
                <Device_ID></Device_ID>
                <Mobile_No></Mobile_No>
                <Location></Location>
                <IP></IP>
              </DeviceInfo>
              <FIInfo>
                <FIVID value="SampleFin3@fin.idtp"/>
              </FIInfo>
               <OtherInfo/>
              </ReqInfo>
</GetFIUserList>
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | <GetFIUserListResponse><br> <UserInfo seqNum="1"><br><FullName>sample User 5<br></FullName><br><VirtualID><br>sampleUser5@user.idtp<br></VirtualID><br><AddressLine1/><br><AddressLine2/><br><ContactNo>01800000000<br></ContactNo><br><Email>sample@gmail.com</Email><br><NID>87456532778</NID><br><TIN>896545676543</TIN><br><DateOfBirth>2021-01-26<br>00:00:00</DateOfBirth><br><CreatedOn>2021-01-<br>02T14:57:46.17</CreatedOn><br><FIInfo seqNum="1"><br><FIName>Sample Bank 1</FIName><br><FIBranch/><br><RoutingNumber/><br><AccountNumber>6787687687678</AccountNumber><br>    </FIInfo> </UserInfo><br><UserInfoseqNum="2"><br><FullName>Sample User 6<br></FullName><br><VirtualID><br>SampleUser6@user.idtp<br></VirtualID><br><AddressLine1>Dhaka<br></AddressLine1><br><AddressLine2>Dhaka<br></AddressLine2><br><ContactNo>01700000000<br></ContactNo><br><Email><br>sample@gmail.com<br></Email><br><NID>74983764783658723</NID><br><TIN>324234234234</TIN><br><DateOfBirth>2020-12-24<br>00:00:00</DateOfBirth><br><CreatedOn>2020-12-<br>31T20:36:07.7833333</CreatedOn><br><FIInfo seqNum="1"><br><FIName>Sample Bank 1</FIName><br><FIBranch /><br>    <RoutingNumber /><br><AccountNumber>20202836525235325<br></AccountNumber><br>    </FIInfo> | <GetFIUserListResponse><br><Code>400</Code><br><Message>The provided FI Virtual ID<br>is invalid<br></Message><br></GetFIUserListResponse> |

| | ```
  </UserInfo>
</GetFIUserListResponse >
``` | |
| --- | --- | --- |

# 4. Public Network Interface

The Public Network Interface communicates with the white-labeled IDTP Mobile App to execute interoperable digital transactions.

The APIs are categorized into two broad types: financial and non-financial APIs.

## Financial APIs

### i. GetPaymentAuthorization ()

Method Name: GetPaymentAuthorization

Uri: https://$root/financial/GetPaymentAuthorization

Method Type: POST

Description: Invoked by Participant FI App to obtain authorization for a transaction.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for GetPaymentAuthorization request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

4. A financial institution app will invoke the *GetPaymentAuthorization* API prior to initiating a digital payment transaction.
5. IDTP will validate the transaction request based on a set of rules.
6. The API will return the result of payment authorization request

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
<PaymentAuthorization xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
    <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
        orgId="sample1" msgId="1" />
    <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Payment
    Authorization" ts="2020-05-
    16T14:15:42+05:30"
    type="AuthorizePayment"/>
    <ChannelInfo>
        <ChannelID>Mobile</ChannelID>
    </ChannelInfo>
    <AuthInfo addr="" type="">
        <SenderInfo>
```

```xml
            <SenderVID value="sampleUser@user.idtp"/>
        </SenderInfo>
        <DeviceInfo>

            <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
            <Mobile_No>8801864578345</Mobile_No>
            <Location>23.7805,90.4267</Location>
            <IP>10.0.0.1</IP>
        </DeviceInfo>
        <ReceiverInfo>
            <ReceiverVID value="sampleUser2@user.idtp"/>
        </ReceiverInfo>
        <TxnInfo addrType="">
            <ReferenceNo value="ASDF45567"/>
            <TxnAmount value="5000.00"/>
        </TxnInfo>
    <OtherInfo/>
    <Creds>
        <Cred type="IDTP_PIN" subtype="">
        <Data>…</Data>
        </Cred>
    </Creds>
  </AuthInfo>
</PaymentAuthorization>
```

### API Response:

| Type | Success | Failure |
|------|---------|---------|
| Message | ```xml<br>< PaymentAuthorizationResponse><br>    <Code>200</Code><br>    <Refno>REF12345</Refno><br></PaymentAuthorizationResponse><br>``` | ```xml<br><PaymentAuthorizationResponse><br>    <Code>605</Code><br>    <Message><br>        Receiver Account on Hold<br>    </Message><br>    <Code>606</Code><br>    <Message><br>        Debit Limit Exceeded.<br>    </Message><br>    <Code>607</Code><br>    <Message><br>        Receiver is<br>        restricted.<br>    </Message><br>    <Code>608</Code><br>    <Message><br>        Credit Limit Exceeded.<br>    </Message><br></PaymentAuthorizationResponse><br>``` |

### ii. RecordPayment ()

Method Name: RecordPayment

Uri: https://$root/financial/RecordPayment

Method Type: POST

Description: Invoked by Participant FI app to report completion of a transaction.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for the RecordPayment request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

3. A financial institution app will invoke the *RecordPayment* API after completing a digital payment transaction.
4. The API will return the result of the record payment request.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|---|---|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
<RecordPayment xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
          orgId="sample1" msgId="1" />

     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Record
        Payment" ts="2020-05-16T14:15:42+05:30"
        type="RecordPayment"/>
      <ChannelInfo>
            <ChannelID>Mobile</ChannelID>
      </ChannelInfo>
      <PaymentInfo addr="" type="">
        <SenderInfo>
            <SenderVID value="sampleUser@user.idtp"/>
        </SenderInfo>
        <DeviceInfo>
            <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
            <Mobile_No>8801864578345</Mobile_No>
            <Location>23.7805,90.4267</Location>
```

```
                <IP>10.0.0.1</IP>
            </DeviceInfo>
            <ReceiverInfo>
                <ReceiverVID value="sampleUser2@user.idtp"/>
        </ReceiverInfo>
            <TxnInfo addrType="">
                <ReferenceNo value="ASDF45567"/>
                <TxnAmount value="5000.00"/>
            </TxnInfo>
            <OtherInfo/>
            <Creds>
                <Cred type="IDTP_PIN" subtype="">
                <Data>…</Data>
                </Cred>
            </Creds>
        </ PaymentInfo>
    </RecordPayment>
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | `<RecordPaymentResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success</Message>`<br>`    <Refno>REF12345</Refno>`<br>`</RecordPaymentResponse>` | `<RecordPaymentResponse>`<br>`    <Code>609</status>`<br>`    <Message>`<br>`        Invalid IDTP_PIN`<br>`    </Message>`<br>`</RecordPaymentResponse>` |

### iii. PayGovtDues()

Method Name: PayGovtDues

Uri: https://$root/financial/PayGovtDues

Method Type: POST

Description: Pay Govt dues such as utility bills, fees, taxes etc.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for the PayGovtDues request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

3. A Payer may initiate a govt payment request (bills/fees/taxes etc) from the Payer's FI app in non-ISO format.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|---|---|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
<PayGovtDues xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
    <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
        orgId="sample1" msgId="1" />
    <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Pay Govt Dues"
    ts="2020-05-16T14:15:42+05:30" type="PAYGOVTDUES"/>
    <ChannelInfo>
        <ChannelID>Mobile</ChannelID>
    </ChannelInfo>
    <TransactionInfo addr="" type="">
        <SenderInfo>
            <SenderVID value="sampleUser@user.idtp"/>
        </SenderInfo>
        <DeviceInfo>
            <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
            <Mobile_No>8801864578345</Mobile_No>
            <Location>23.7805,90.4267</Location>
            <IP>10.0.0.1</IP>
        </DeviceInfo>
```

```
        <ReceiverInfo>
              <ReceiverVID value="sampleGov@gov.idtp"/>
        </ReceiverInfo>
        <TxnInfo addrType="">
              <ReferenceNo value="ASDF45567"/>
              <TxnAmount value="5000.00"/>
        </TxnInfo>
        <OtherInfo>
            <Purpose>Sample Purpose</Purpose>
            <BillNo>241234123</BillNo>
        </OtherInfo>
        <Creds>
            <Cred type="IDTP_PIN" subtype="">
            <Data>…</Data>
            </Cred>
        </Creds>
    </TransactionInfo>
</PayGovtDues>
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | `<TransactionResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success</Message>`<br>`    <MsgId>TRAN12345</ MsgId>`<br>`    <OrgnlTxId>SBL12345`<br>`    </OrgnlTxId>`<br>`    <OrgnlEndToEndId>SBL12345</`<br>`    OrgnlEndToEndId>`<br>`</TransactionResponse>` | `<TransactionResponse>`<br>`    <Code>606</Code>`<br>`    <Message>`<br>`        Debit Limit Exceeded.`<br>`    </Message>`<br>`    < MsgId></MsgId>`<br>`    <OrgnlTxId></OrgnlTxId>`<br>`    <OrgnlEndToEndId`<br>`    ></OrgnlEndToEndId>`<br>`</TransactionResponse>` |

### iv. TransferFunds()

Method Name: TransferFunds

Uri: https://$root/financial/TransferFunds

Method Type: POST

Description: API to initiate transfer funds request from participant app via Direct Credit Push with non-ISO message.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for the TransferFunds request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

3. The Sending participant app will send a Direct Pay request in XML format to IDTP. The message will contain Sender's account information and Receiver's virtual ID.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|---|---|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
<TransferFunds xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
          orgId="sample1" msgId="1" />
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Transfer
     Funds" ts="2020-05-16T14:15:42+05:30" type="TRANSFERFUNDS"/>
     <ChannelInfo>
          <ChannelID>Mobile</ChannelID>
     </ChannelInfo>
     <TransactionInfo addr="" type="">
          <SenderInfo>
               <SenderVID value="sampleUser@user.idtp"/>
          </SenderInfo>
          <DeviceInfo>
               <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
               <Mobile_No>8801864578345</Mobile_No>
```

```
            <Location>23.7805,90.4267</Location>
            <IP>10.0.0.1</IP>
        </DeviceInfo>
        <ReceiverInfo>
            <ReceiverVID value="sampleUser2@user.idtp"/>
        </ReceiverInfo>
        <TxnInfo addrType="">
            <ReferenceNo value="ASDF45567"/>
            <TxnAmount value="5000.00"/>
        </TxnInfo>
        <OtherInfo>
            <Purpose>Sample Purpose</Purpose>
            <BillNo></BillNo>
        </OtherInfo>
        <Creds>
            <Cred type="IDTP_PIN" subtype="">
            <Data>…</Data>
            </Cred>
        </Creds>
    </TransactionInfo>
</TransferFunds>
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | `<TransactionResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success</Message>`<br>`    <MsgId>TRAN12345</ MsgId>`<br>`    <OrgnlTxId>SBL12345`<br>`    </OrgnlTxId>`<br>`    <OrgnlEndToEndId>SBL12345</`<br>`    OrgnlEndToEndId>`<br>`</TransactionResponse>` | `<TransactionResponse>`<br>`    <Code>606</Code>`<br>`    <Message>`<br>`       Debit Limit Exceeded.`<br>`    </Message>`<br>`    < MsgId></MsgId>`<br>`    <OrgnlTxId></OrgnlTxId>`<br>`    <OrgnlEndToEndId`<br>`    ></OrgnlEndToEndId>`<br>`</TransactionResponse>` |

### v. CreateRTP()

Method Name: CreateRTP

Uri: https://$root/financial/CreateRTP

Method Type: POST

Description: Invoked by Payee to request payment from Payer.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for the CreateRTP request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

3. The Payee will send a Request to Pay (RTP) message to IDTP in XML format via the Payee's financial institution. The message will contain Payee's account information and Payer's virtual ID.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
<CreateRTP xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
            orgId="sample1" msgId="1" />
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Request To
      Pay" ts="2020-05-16T14:15:42+05:30" type="REQUESTTOPAY"/>
      <ChannelInfo>
          <ChannelID>Mobile</ChannelID>
      </ChannelInfo>

      <RequestInfo addr="" type="">
            <SenderInfo>
                  <SenderVID value="sampleUser@user.idtp"/>
            </SenderInfo>
            <DeviceInfo>

                  <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
                  <Mobile_No>8801864578345</Mobile_No>
                  <Location>23.7805,90.4267</Location>
```

```
            <IP>10.0.0.1</IP>
        </DeviceInfo>
        <ReceiverInfo>
            <ReceiverVID value="sampleUser2@user.idtp"/>
        </ReceiverInfo>
        <ReqInfo addrType="">
            <ReferenceNo value="ASDF45567"/>
            <ReqAmount value="5000.00"/>
        </ReqInfo>
        <OtherInfo>
            <Purpose>Sample Purpose</Purpose>
        </OtherInfo>
        <Creds>
            <Cred type="IDTP_PIN" subtype="">
            <Data>123456</Data>
            </Cred>
        </Creds>
    </RequestInfo>
</ CreateRTP >
```

**API Response:**

| Type | Success | Failed |
|---|---|---|
| Message | `<CreateRTPResponse>`<br>`    <Code>200</Code>`<br>`    <ReqId>REF12345</ReqId>`<br>`</ CreateRTPResponse >` | `< CreateRTPResponse >`<br>`    <Code>606</Code>`<br>`    <Message>`<br>`        Debit Limit Exceeded.`<br>`    </Message>`<br>`</ CreateRTPResponse >` |

### vi. SendRTPDeclinedResponse()

Method Name: SendRTPDeclinedResponse

Uri: https://$root/financial/SendRTPDeclinedResponse

Method Type: POST

Description: Invoked by Payer in response to the RTP request received from Payee.

Parameters: The request body element contains the input parameter listed below. A sample XML is provided for the SendRTPDeclinedResponse request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

The send Request To Pay Response process will be as follows:

7. Once a Request to Pay request is received, the Payer will be required to provide a response
8. If the Payer declines the payment, the Payer's financial institution will invoke the *SendRTPDeclinedResponseISO* API; IDTP will forward the response to the Payee's financial institution.
9. If the Payer accepts the payment, the Payer's financial institution will initiate a Direct Pay request by calling the *TransferFunds* API.

<u>**API Request:**</u>

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Sender VirtualID |
| 2 | Receiver VirtualID |
| 3 | Transaction Amount |
| 4 | Channel Info |
| 5 | Device Info |
| 6 | Other Info |

**Sample API Request:**

```
< SendRTPDeclinedResponse xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
    <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
         orgId="sample1" msgId="1" />
    <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="RTP Declined
    Response" ts="2020-05-16T14:15:42+05:30" type="
    SENDRTPDECLINEDRESPONSE "/>
    <ChannelInfo>
        <ChannelID>Mobile</ChannelID>
    </ChannelInfo>
```

```
        <RequestInfo addr="" type="">
              <SenderInfo>
                    <SenderVID value="sampleUser@user.idtp"/>
              </SenderInfo>
              <DeviceInfo>

                    <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
                    <Mobile_No>8801864578345</Mobile_No>
                    <Location>23.7805,90.4267</Location>
                    <IP>10.0.0.1</IP>
              </DeviceInfo>
              <ReceiverInfo>
                    <ReceiverVID value="sampleUser2@user.idtp"/>
              </ReceiverInfo>
              <ReqInfo addrType="">
                    <RTPId value="RTP1431243123"/>
                    <ReqAmount value="5000.00"/>
              </ReqInfo>
              <OtherInfo/>
        </RequestInfo>
</ SendRTPDeclinedResponse >
```

**API Response:**

| Type | Success | Failed |
|---|---|---|
| Message | ```<RTPDeclinedResponse>    <Code>200</Code>    <Message>Sender Rejection    Success</Message></RTPDeclinedResponse>``` | ```<RTPDeclinedResponse>    <Code>601</Code>    <Message>       Sender Rejection Failed    </Message></RTPDeclinedResponse>``` |

### vii. PayUtilityBills()

Method Name: PayUtilityBills

Uri: https://$root/financial/PayUtilityBills

Method Type: POST

Description: Pay Utility Bills.

Parameters: The request body element will be as the sample XML is provided below for *PayUtilityBills* request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1.      If the request is initiated by FI core banking system, it will invoke the *PayUtilityBills* API.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Channel Info |
| 2 | Sender VID |
| 3 | ReceiverVID |
| 4 | Bill No |
| 5 | Bill Amount |
| 6 | Purpose |
| 7 | Other Info |

**Sample API Request:**

```
<PayUtilityBills xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
<Head ver="1.0" ts="2020-05-16T14:15:43+05:30" orgId="SBL1BDDH" msgId="1"
/>
  <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Pay Utility Bills"
ts="2020-05-16T14:15:42+05:30" type="PAYUTILITYBILLS"/>
       <TransactionInfo addr = "" type = "">
            <ChannelInfo>
              <ChannelID>Online/Mobile/Other</ChannelID>
            </ChannelInfo>
            <SenderInfo>
              <SenderVID value ="sampleUser2@user.idtp"/>
            </SenderInfo>
            <DeviceInfo>
               <Device_ID></Device_ID>
               <Mobile_No></Mobile_No>
               <Location></Location>
               <IP></IP>
            </DeviceInfo>
```

```
        <ReceiverInfo>
            <ReceiverVID value ="sampleUser2@gov.idtp"/>
        </ReceiverInfo>
        <TxnInfo addrType = "">
            <ReferenceNo value ="105142020"/>
            <TxnAmount value ="100.20"/>
        </TxnInfo>
        <OtherInfo>
            <Purpose>Bill Pay</Purpose>
            <BillNo>729142021</BillNo>
        </OtherInfo>
        <Creds>
            <Cred type = "IDTP_PIN" subtype = "">
                <Data>123456</Data>
            </Cred>
        </Creds>
    </TransactionInfo>
</PayUtilityBills>
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | `<TransactionResponse>`<br>`<Code>200</Code>`<br>`<Message>Success</Message>`<br>`<RefNo_SendingBank>`<br>`105142020`<br>`</RefNo_SendingBank>`<br>`<RefNo_SendingPSP>`<br>`</RefNo_SendingPSP>`<br>`<RefNo_ReceivingBank>`<br>`SGBL20210103190601191`<br>`</RefNo_ReceivingBank>`<br>`<RefNo_ReceivingPSP>`<br>`</RefNo_ReceivingPSP>`<br>`<RefNo_IDTP>`<br>`IDTP202101040106002884`<br>`</RefNo_IDTP>`<br>`</TransactionResponse>` | `<TransactionResponse>`<br>`<Code>400</Code>`<br>`<Message>Sending FI debit cap exceeded`<br>`</Message>`<br>`<RefNo_SendingBank>`<br>`105142020`<br>`</RefNo_SendingBank>`<br>`<RefNo_SendingPSP>`<br>`</RefNo_SendingPSP>`<br>`<RefNo_ReceivingBank>`<br>`</RefNo_ReceivingBank>`<br>`<RefNo_ReceivingPSP>`<br>`</RefNo_ReceivingPSP>`<br>`<RefNo_IDTP></RefNo_IDTP>`<br>`</TransactionResponse>` |

## viii. GetTransactionStatus()

Method Name: GetTransactionStatus

Uri: https://$root/management/GetTransactionStatus

Method Type: POST

Description: Invoked by core banking system to get the status of the transaction.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for Get Transaction Status and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The IDTP will call this GetTransactionStatus API when it needs to know status of a transaction.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | ChannelID |
| 2 | UserVID |
| 3 | RefId |
| 4 | RefType |

**Note:**

RefID can be Sending FI Ref ID, Receiving FI Ref ID or IDTP Ref ID. Again, based on the ref ID, ref type will have a defined value ranging 1 to 5.

**Sample API Request**

```xml
<GetTransactionStatus xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
    <Head ver="1.0" ts="2020-05-16T14:15:43+05:30" orgId="SBL1BDDH"
    msgId="1"></Head>
    <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get Transaction
    Status" ts="2020-05-16T14:15:42+05:30"
    type="GETTRANSACTIONSTATUS"></Req>
<ChannelInfo>
  <ChannelID>Online</ChannelID>
</ChannelInfo>
<ReqInfo>
  <UserInfo>
    <UserVID value="sampleUser1@fin.idtp" ></UserVID>
  </UserInfo>
  <TxnInfo addrType="">
    <RefId value="IDTP4234324324234" ></RefId>
     <RefType>5</RefType>
```

```
    </TxnInfo>
    <OtherInfo></OtherInfo>
  </ReqInfo>
</GetTransactionStatus>
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | `<GetTransactionStatusResponse>`<br>`  <Code>200</Code>`<br>`  <Message>Success</Message>`<br>`  <Transaction seqNum="1">`<br>`<TransactionId>IDTP202012032127`<br>`15066</TransactionId>`<br>`    <TxnType>`<br>`       Govt Pay Dues`<br>`    </TxnType>`<br>`    <TxnDate>2020-12-`<br>`03T21:27:15.1533333</TxnDate>`<br>`    <SenderVID>`<br>`       sampleUser4@gov.idtp`<br>`    </SenderVID>`<br>`<SendingAcc>5632147896541</Send`<br>`ingAcc>`<br>`    <SenderFI>Sample Bank 1`<br>`</SenderFI>`<br>`<ReceiverVID>dncc@gov.idtp</Rec`<br>`eiverVID>`<br>`<ReceivingAcc>45745757757545454`<br>`</ReceivingAcc>`<br>`    <ReceiverFI>Sample Bank`<br>`1</ReceiverFI>`<br>`    <Purpose>Direct GovUser to`<br>`direct GovUser, Pay`<br>`Go</Purpose>`<br>`    <Settled>Y</Settled>`<br>`    <TxnStatus>S</TxnStatus>`<br>`    <Amount>1960.22</Amount>`<br>`<SendingBankRefNo>FI123456</Sen`<br>`dingBankRefNo>`<br>`    <SendingPSPRefNo />`<br>`<ReceivingBankReference>SBL1BDD`<br>`H20201203152715125</ReceivingBa`<br>`nkReference>`<br>`    <ReceivingPSPReference />`<br>`<IDTPReference>IDTP202012032127`<br>`15066</IDTPReference>`<br>`  </Transaction>`<br>`</GetTransactionStatusResponse>` | `<GetTransactionStatusResponse>`<br>`  <Code>400</Code>`<br>`  <Message>Invalid Transaction`<br>`ID</Message>`<br>`</GetTransactionStatusResponse>` |

## Non-Financial APIs

### i. RegisterIDTPUser()

Method Name: RegisterIDTPUser

Uri: https://$root/management/RegisterIDTPUser

Method Type: POST

Description: Invoked by Participant App to register their respective users.

Parameters: The request body element contains below input parameters. The Sample XML is provided for the registration of Individual users and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

2. A Participant FI App will be able to register its users into IDTP via this RegisterIDTPUser API.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|---|---|
| 1 | Name |
| 2 | Type of User |
| 3 | Address |
| 4 | District |
| 5 | Postal Code |
| 6 | Mobile Number |
| 7 | Email |
| 8 | NID |
| 9 | TIN |
| 10 | BIN |
| 11 | Type of Ownership |
| 12 | Type of Business |
| 13 | Name of Ministry |
| 14 | Name of Division |

| 15 | Type of Financial Institution |
|----|-------------------------------|
| 16 | BIC/Swift Code |
| 17 | CB Account Number |
| 18 | Requested VirtualId |
| 19 | Password |
| 20 | Financial Institution |
| 21 | Branch Name |
| 22 | Routing Number |
| 23 | Account Number |
| 24 | Contact Person Name |
| 25 | Designation |
| 26 | Contact Number |
| 27 | Email |

## Sample API Request - Individual:

```xml
<RegisterUser xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
  <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
        orgId="SampleFI1" msgId="1" />
  <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Register User"
       ts="2020-05-16T14:15:42+05:30" type="RegisterUser" />
  <ChannelInfo>
       <ChannelID>Mobile</ChannelID>
  </ChannelInfo>
  <Entity seqNum="1">
  <Info>
      <EntityType>Individual</EntityType>
      <Name> IndividualUser </Name>
      <AddressLine1> Dhaka </AddressLine1>
      <AddressLine2> Bangladesh </AddressLine2>
      <District> Dhaka </District>
      <PostalCode> 1200 </PostalCode>
      <MobileNumber> 017112345678 </MobileNumber>
      <Email> user@abc.com </Email>
      <TypeOfOwnership></TypeOfOwnership>
      <TypeOfBusiness></TypeOfBusiness>
      <NameOfMinistry></NameOfMinistry>
      <NameOfDivision></NameOfDivision>
      <TypeOfFinancialInstitution></TypeOfFinancialInstitution>
      <SwiftCode></SwiftCode>
      <CBAccountNumber></CBAccountNumber>
      <NID>41231231412421</NID>
      <TIN>532153131</TIN>
      <BIN></BIN>
      <Password>123456</Password>
  </Info>
  <ChannelInfo>
    <ChannelID>Mobile</ChannelID>
  </ChannelInfo>
```

```
    <DeviceInfo>
        <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
        <Mobile_No>8801864578345</Mobile_No>
        <Location>23.7805,90.4267</Location>
        <IP>10.0.0.1</IP>
    </DeviceInfo>
    <FinancialInstitutionInfo>
        <FinancialInstitution> Sample Bank 1 </FinancialInstitution>
        <BranchName> Central </BranchName>
        <RoutingNumber> 090212478 </RoutingNumber>
        <AccountNumber> 1125469870466 </AccountNumber>
    </FinancialInstitutionInfo>

    <ContactReference>
        <ContactPersonName></ContactPersonName>
        <Designation></Designation>
        <ContactNumber></ContactNumber>
        <Email></Email>
    </ContactReference>

    <Creds>
        <Cred type="IDTP_PIN" subtype="">
          <Data>…</Data>
        </Cred>
      <Cred type="MOBILE_PASSWORD" subtype="">
        <Data>…</Data>
      </Cred>
    </Creds>
    <RequestedVirtualID value="sampleUser@user.idtp" />
    <OtherInfo/>
    </Entity>
</RegisterUser>
```

**API Response:**

| Type | Success | Failure |
|------|---------|---------|
| Message | `<RegisterUserResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success</Message>`<br>`     <VirtualID>sample@user.id`<br>`    tp`<br>`     </VirtualID>`<br>`</RegisterUserResponse>` | `<RegisterUserRespons`<br>`                    e>`<br>`    <Code>601</Code>`<br>`      <Message>`<br>`            Invalid NID`<br>`      </Message>`<br>`    <Code>602</Code>`<br>`      <Message>`<br>`          Invalid TIN`<br>`      </Message>`<br>`    <Code>603</Code>`<br>`      <Message>`<br>`            Invalid BIN`<br>`      </Message>`<br>`    <Code>604</Code>`<br>`      <Message>`<br>`          Invalid Account Number`<br>`      </Message>`<br>`</RegisterUserResponse>` |

## ii. ValidateIDTPUser()

Method Name: ValidateIDTPUser

Uri: https://$root/management/ValidateIDTPUser

Method Type: POST

Description: Invoked by app to validate a user from IDTP.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for Validating IDTP User and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

2. The Participant will call this ValidateIDTPUser API when it needs to validate any IDTP user existence.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|---|---|
| 1 | VirtualID |
| 2 | Other Information |

**Sample API Request**

```
<ValidateIDTPUser xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM"
     note="Validate IDTP User" ts="2020-05-16T14:15:42+05:30"
     type="VALIDATEIDTPUSER"/>
     <ChannelInfo>
         <ChannelID>Mobile</ChannelID>
     </ChannelInfo>
     <IDTPUserInfo>
          <DeviceInfo
             >
              <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
              <Mobile_No>8801864578345</Mobile_No>
              <Location>23.7805,90.4267</Location>
              <IP>10.0.0.1</IP>
          </DeviceInfo>
          <UserInfo>
              <UserVID value="sampleUser@user.idtp"/>
          </UserInfo>
     <OtherInfo/>

   <Creds>
      <Cred type="IDTP_PIN" subtype="">
        <Data>…</Data>
```

```
        </Cred>
    </Creds>
</ IDTPUserInfo >
</ ValidateIDTPUser >
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```<ValidateIDTPUserResponse>     <Code>200</Code>     <Message>Success     </Message>     <VID> sampleBiz@biz.idtp     </VID> </ ValidateIDTPUserResponse >``` | ```< ValidateIDTPUserResponse >     <Code>2012</status>     <Message>       Invalid VirtualId     </Message>     <VID></VID> </ ValidateIDTPUserResponse >``` |

### iii. GetDailyTransactions()

Method Name: GetDailyTransactions

Uri: https://$root/management/GetDailyTransactions

Method Type: POST

Description: Invoked by FI app to get the transactions of current date.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting daily transactions and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

2. The Participant will call this GetDailyTransactions API when it will need to get all the transactions of current date.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Swift/BIC Code |
| 2 | Other Information |

**Sample API Request**

```
< GetDailyTransactions xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
     Daily FI Transactions" ts="2020-05-16T14:15:42+05:30"
     type=" GETDAILYTRANSACTIONS "/>
     <ChannelInfo>
         <ChannelID>Mobile</ChannelID>
     </ChannelInfo>
     <ReqInfo>
          <ChannelInfo>
             <ChannelID>Mobile</ChannelID>
          </ChannelInfo>
          <DeviceInfo
             >
              <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
              <Mobile_No>8801864578345</Mobile_No>
              <Location>23.7805,90.4267</Location>
              <IP>10.0.0.1</IP>
          </DeviceInfo>
          <FIInfo>
              <UserVID value="sampleUser@user.idtp"/>
              <BIC>XXXXDBBH</BIC>
```

```
            </FIInfo>
        <OtherInfo/>
        <Creds>
            <Cred type="IDTP_PIN" subtype="">
                <Data>…</Data>
            </Cred>
        </Creds>
    </ ReqInfo >
</ GetDailyTransactions >
```

<u>API Response:</u>

| Type | Success | Failed |
|------|---------|--------|
| Message | `< GetDailyTransactionsResponse>`<br>`<Code>200</Code>`<br>`<Message>Success`<br>`</Message>`<br>`<Transaction seqNum =`<br>`"1">`<br>`<Date>10/1/2020 9:06:54`<br>`AM </Date>`<br>`<SenderVID>`<br>`sampleUser@user.idtp`<br>`</SenderVID>`<br>`<SenderFI>Sample`<br>`FI</SenderFI>`<br>`<SenderAcc>XXXXXXXX123</`<br>`SenderAcc>`<br>`<ReceiverVID>sampleUser2`<br>`@user.idtp</ReceiverVID>`<br>`<ReceiverFI>Sample FI`<br>`2</ReceiverFI>`<br>`<ReceiverAcc>XXXXXXXX134`<br>`</ReceiverAcc>`<br>`<TxnID>TRAN123456</TxnID`<br>`>`<br>`<Amount>100.00</Amount>`<br>`<TxnType>Direct`<br>`Pay</TxnType>`<br>`<Purpose>XXX</Purpose>`<br>`</Transaction>`<br>`</`<br>`GetDailyTransactionsResponse >` | `< GetDailyTransactionsResponse >`<br>`<Code>2012</status>`<br>`<Message>`<br>`No Transaction Found`<br>`</Message>`<br>`<Transaction></Transaction>`<br>`</ GetDailyTransactionsResponse >` |

## iv. GetUserTransactionHistory()

Method Name: GetTransactionHistory

Uri: https://$root/management/GetUserTransactionHistory

Method Type: POST

Description: Invoked by FI core bankig system to get the transaction history from IDTP for the user.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting transaction history of a user and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

2. The Participant will call this GetTranHistory API when it needs to retrieve the transaction history of a user from IDTP.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | VirtualID |
| 2 | Other Information |

**Sample API Request**

```
<GetUserTransactionHistory xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
      User Transaction History" ts="2020-05-16T14:15:42+05:30"
      type="GETUSERTRANSACTIONHISTORY"/>
   <ChannelInfo>
         <ChannelID>Mobile</ChannelID>
   </ChannelInfo>
   < IDTPUserInfo >
         <DeviceInfo
             >
             <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
             <Mobile_No>8801864578345</Mobile_No>
             <Location>23.7805,90.4267</Location>
             <IP>10.0.0.1</IP>
         </DeviceInfo>
         <UserInfo>
             <UserVID value="sampleUser@user.idtp"/>
         </UserInfo>
   <OtherInfo/>
   </IDTPUserInfo >
```

```
</ GetUserTransactionHistory >
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | `< GetUserTransactionHistoryRespo nse>` `<Code>200</Code>` `<Message>Success </Message>` `<Transaction seqNum = "1">` `<Date>10/1/2020 9:06:54 AM </Date>` `<ReceiverVID>sampleUser@ user.idtp</ReceiverVID>` `<TxnID>TRAN123456</TxnID >` `<Amount>100.00</Amount>` `<TxnType>Direct Pay</TxnType>` `</Transaction>` `</ GetUserTransactionHistoryRespo nse >` | `< GetUserTransactionHistoryResponse >` `<Code>2012</status>` `<Message>` `Invalid VirtualId` `</Message>` `<Transaction></Transaction>` `</ GetUserTransactionHistoryResponse >` |

## v. GetRTPListSent()

Method Name: GetRTPListSent

Uri: https://$root/management/GetRTPListSent

Method Type: POST

Description: Invoked by FI to get the Request to Pay sent list from IDTP for the user.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting RTP sent list of a user and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

2. The Participant will call this GetRTPListSent API when it needs to retrieve the RTP sent list of a user from IDTP.

<u>**API Request:**</u>

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | VirtualID |
| 2 | Other Information |

**Sample API Request**

```
< GetRTPListSent xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
      User RTP Sent List" ts="2020-05-16T14:15:42+05:30"
      type=" GETRTPLISTSENT "/>
    <ChannelInfo>
         <ChannelID>Mobile</ChannelID>
    </ChannelInfo>
    < IDTPUserInfo >
          <DeviceInfo
              >
             <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
             <Mobile_No>8801864578345</Mobile_No>
             <Location>23.7805,90.4267</Location>
             <IP>10.0.0.1</IP>
          </DeviceInfo>
          <UserInfo>
             <UserVID value="sampleUser@user.idtp"/>
          </UserInfo>
      <OtherInfo/>
    </ IDTPUserInfo >
</ GetRTPListSent >
```

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API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```< GetRTPListSentResponse><br>    <Code>200</Code><br>    <Message>Success<br>    </Message><br>    <RTP seqNum = "1"><br>    <Date>10/1/2020 9:06:54<br>    AM </Date><br>    <ReceiverName>Sample<br>    User </SenderName><br>    <ReceiverVID>sampleUser@<br>    user.idtp</SenderVID><br>    <ReqID>REQ123456</ReqID><br>    <Amount>100.00</Amount><br>    <Reference>Reference<br>    Sample</Reference><br>    <Status>Pending</Status><br>    </RTP><br>    </<br>    GetRTPListSentResponse>``` | ```< GetRTPListSentResponse ><br>    <Code>2012</status><br>    <Message><br>      Invalid VirtualId<br>    </Message><br>    <RTP></RTP><br></ GetRTPListSentResponse >``` |

## vi. GetRTPListReceived()

Method Name: GetRTPListReceived

Uri: https://$root/management/GetRTPListReceived

Method Type: POST

Description: Invoked by FI to get the Request to Pay received list from IDTP for the user.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting RTP received list of a user and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

2. The Participant will call this GetRTPListReceived API when it needs to retrieve the RTP received list of a user from IDTP.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | VirtualID |
| 2 | Other Information |

**Sample API Request**

```
< GetRTPListReceived xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
      User RTP Received List" ts="2020-05-16T14:15:42+05:30"
      type=" GETRTPLISTRECEIVED "/>
   <ChannelInfo>
         <ChannelID>Mobile</ChannelID>
   </ChannelInfo>
   < IDTPUserInfo >
         <DeviceInfo
            >
            <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
            <Mobile_No>8801864578345</Mobile_No>
            <Location>23.7805,90.4267</Location>
            <IP>10.0.0.1</IP>
         </DeviceInfo>
         <UserInfo>
            <UserVID value="sampleUser@user.idtp"/>
         </UserInfo>
      <OtherInfo/>
      <Creds>
         <Cred type="IDTP_PIN" subtype="">
```

```
                    <Data>…</Data>
             </Cred>
         </Creds>
      </ IDTPUserInfo >
</ GetRTPListReceived >
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | `< GetRTPListReceivedResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success`<br>`    </Message>`<br>`    <RTP seqNum = "1">`<br>`    <Date>10/1/2020 9:06:54`<br>`    AM </Date>`<br>`    <SenderName>Sample User`<br>`    </SenderName>`<br>`    <SenderVID>sampleUser@us`<br>`    er.idtp</SenderVID>`<br>`    <ReqID>REQ123456</ReqID>`<br>`    <Amount>100.00</Amount>`<br>`    <Reference>Reference`<br>`    Sample</Reference>`<br>`    <Status>Pending</Status>`<br>`    </RTP>`<br>`    </`<br>`    GetRTPListReceivedRespon`<br>`    se >` | `< GetRTPListReceivedResponse >`<br>`    <Code>2012</status>`<br>`    <Message>`<br>`      Invalid VirtualId`<br>`    </Message>`<br>`    <RTP></RTP>`<br>`</ GetRTPListReceivedResponse >` |

### vii. GetRegisteredGovtEntityList()

Method Name: GetRegisteredGovtEntityList

Uri: https://$root/management/GetRegisteredGovtEntityList

Method Type: POST

Description: Invoked by FI to get the Registered Govt Entity list that are registered in IDTP.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting Registered Govt Entity list in IDTP and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

2. The Participant will call this GetRegisteredGovtEntityList API when it needs to retrieve the registered Govt Entity list from IDTP.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | VirtualID |
| 2 | Other Information |

**Sample API Request**

```
< GetRegisteredGovtEntityList
xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
      Govt Entity List" ts="2020-05-16T14:15:42+05:30" type="
      GETREGISTEREDGOVTENTITYLIST "/>
   <ChannelInfo>
        <ChannelID>Mobile</ChannelID>
   </ChannelInfo>
    < ReqUserInfo >
          <DeviceInfo
             >
              <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
              <Mobile_No>8801864578345</Mobile_No>
              <Location>23.7805,90.4267</Location>
              <IP>10.0.0.1</IP>
          </DeviceInfo>
          <UserInfo>
              <UserVID value="sampleUser@user.idtp"/>
          </UserInfo>
       <OtherInfo/>
    </ ReqUserInfo >
</ GetRegisteredGovtEntityList >
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | `< GetRegisteredGovtEntityListResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success`<br>`    </Message>`<br>`    <GovtEntity seqNum = "1">`<br>`    <Name>Sample Govt Entity</Name>`<br>`    <VirtualID>samplegovt@gov.idtp</VirtualID>`<br>`    <EntityType>Bill/Dues</EntityType>`<br>`    </ GovtEntity >`<br>`    </ GetRegisteredGovtEntityListResponse >` | `< GetRegisteredGovtEntityListResponse >`<br>`    <Code>2012</status>`<br>`    <Message>`<br>`      Invalid Request`<br>`    </Message>`<br>`    < GovtEntity></GovtEntity >`<br>`</ GetRegisteredGovtEntityListResponse >` |

## viii. GetRegisteredFIList()

Method Name: GetRegisteredFIList

Uri: https://$root/management/GetRegisteredFIList

Method Type: POST

Description: Invoked by FI to get the Registered Financial Institution list that are registered in IDTP.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting Registered Financial Institution list in IDTP and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

2. The Participant will call this GetRegisteredFIList API when it needs to retrieve the registered FI list from IDTP.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | VirtualID |
| 2 | Other Information |

**Sample API Request**

```
< GetRegisteredFIList xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
    <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
    <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
    Financial Institution List" ts="2020-05-
    16T14:15:42+05:30" type=" GETREGISTEREDFILIST "/>
  <ChannelInfo>
        <ChannelID>Mobile</ChannelID>
  </ChannelInfo>
   < ReqUserInfo >
          <DeviceInfo
             >
             <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
             <Mobile_No>8801864578345</Mobile_No>
             <Location>23.7805,90.4267</Location>
             <IP>10.0.0.1</IP>
          </DeviceInfo>
          <UserInfo>
                <UserVID value="sampleUser@user.idtp"/>
          </UserInfo>
     <OtherInfo/>
   </ ReqUserInfo >
```

```
</ GetRegisteredFIList >
```

API Response:

| Type | Success | Failed |
|---|---|---|
| Message | ```<br>< GetRegisteredFIListResponse><br>    <Code>200</Code><br>    <Message>Success<br>    </Message><br>    <FI seqNum = "1"><br>    <Name>Sample FI</Name><br>    <VirtualID>samplefin@fin<br>    .idtp</VirtualID><br>    <FIType>Direct/Indirect<<br>    /FIType><br>    </ FI ><br>    </<br>    GetRegisteredFIListRespo<br>    nse ><br>``` | ```<br>< GetRegisteredFIListResponse ><br>    <Code>2012</status><br>    <Message><br>       Invalid Request<br>    </Message><br>    < FI></FI ><br></ GetRegisteredFIListResponse ><br>``` |

## ix. GenerateQRCode()

Method Name: GenerateQRCode

Uri: https://$root/management/GenerateQRCode

Method Type: POST

Description: Invoked by a Payee to generate a QR-code based on Payee's Virtual ID and payment amount.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for Generating QR Code and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

The generate QR Code process will be as follows:

1.    A Payee will invoke this API to obtain a static or dynamic QR-Code

2.    The generated QR-Code may be used to receive payments from Payees

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Payee VirtualID |
| 2 | Amount |
| 3 | Other Information |

**Sample API Request**

```
<GenerateQRCode xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM"
      note="Generate QR Code" ts="2020-05-16T14:15:42+05:30"
      type="GENERATEQRCODE"/>
      <ChannelInfo>
          <ChannelID>Mobile</ChannelID>
      </ChannelInfo>
   <QRInfo addr=""
      type="">
          <DeviceInfo>
                <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
                <Mobile_No>8801864578345</Mobile_No>
                <Location>23.7805,90.4267</Location>
                <IP>10.0.0.1</IP>
          </DeviceInfo>
          <ReceiverInfo>
                <ReceiverVID value="sampleBiz@biz.idtp"/>
          </ReceiverInfo>
```

```
        <TxnInfo addrType="">
                <TxnAmount value="5000.00"/>
                <BillNo>9031520211123</BillNo>

        </TxnInfo>
      <OtherInfo/>
      <Creds>
            <Cred type="IDTP_PIN" subtype="">
                <Data>…</Data>
            </Cred>
      </Creds>
    </QRInfo>
</GenerateQRCode>
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | `<GenerateQRCodeResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success`<br>`    </Message>`<br>`    <QRCode>QRCode</QRCode>`<br>`</GenerateQRCodeResponse>` | `<GenerateQRCodeResponse>`<br>`    <Code>2012</status>`<br>`    <Message>`<br>`      Invalid Receiver VirtualId`<br>`    </Message>`<br>`     <Code>609</status>`<br>`    <Message>`<br>`        Invalid IDTP_PIN`<br>`    </Message>`<br>`</GenerateQRCodeResponse>` |

## x. GetUserContactList()

Method Name: GetUserContactList

Uri: https://$root/management/GetUserContactList

Method Type: POST

Description: Invoked by participant app to get the user contact list that are registered in IDTP.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for getting user contact list in IDTP and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Participant will call this GetUserContactList API when it needs to retrieve the user contact list from IDTP.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | VirtualID |
| 2 | Other Information |

**Sample API Request**

```
< GetUserContactList xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
      User Contact List" ts="2020-05-16T14:15:42+05:30" type="
      GETUSERCONTACTLIST "/>
    <ChannelInfo>
        <ChannelID>Mobile</ChannelID>
    </ChannelInfo>
    < IDTPUserInfo >
        <DeviceInfo>
              <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
              <Mobile_No>8801864578345</Mobile_No>
              <Location>23.7805,90.4267</Location>
              <IP>10.0.0.1</IP>
          </DeviceInfo>
          <UserInfo>
              <UserVID value="sampleUser@user.idtp"/>
          </UserInfo>
      <OtherInfo/>
    </ IDTPUserInfo >
</ GetUserContactList >
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```< GetUserContactListResponse>    <Code>200</Code>    <Message>Success    </Message>    <User seqNum = "1">    <Name>Sample User</Name>    <VirtualID>sampleUser@us er.idtp</VirtualID>    <MobileNo>XXXXXXXX111    </MobileNo>    </ User >    </ GetUserContactListRespon se >``` | ```< GetUserContactListResponse >    <Code>2012</status>    <Message>      Invalid Virtual ID    </Message>    < User></User > </ GetUserContactListResponse >``` |

## xi. AddUserAsContact()

Method Name: AddUserAsContact

Uri: https://$root/management/AddUserAsContact

Method Type: POST

Description: Invoked by participant app to add a user as contact that are registered in IDTP.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for adding user as contact and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Participant will call this AddUserAsContact API when it needs to add a user as contact.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | VirtualID |
| 2 | Other Information |

**Sample API Request**

```
< AddUserAsContact xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
      <Head ver="1.0" ts="2020-05-16T14:15:43+05:30"
orgId="sample1" msgId="1"/>
      <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Get
      User Contact List" ts="2020-05-16T14:15:42+05:30" type="
      GETUSERCONTACTLIST "/>
   <ChannelInfo>
        <ChannelID>Mobile</ChannelID>
   </ChannelInfo>
   < IDTPUserInfo vid = "sampleUser@user.idtp">
         <DeviceInfo
            >
             <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
             <Mobile_No>8801864578345</Mobile_No>
             <Location>23.7805,90.4267</Location>
             <IP>10.0.0.1</IP>
         </DeviceInfo>
         <ContactInfo seqNum = "1">
             <VID value="sampleUser@user.idtp"/>
         </ ContactInfo >
      <OtherInfo/>
   </ IDTPUserInfo >
</ GetUserContactList >
```

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API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```< AddUserAsContactResponse>     <Code>200</Code>     <Message>Success     </Message>     </     AddUserAsContactResponse     >``` | ```< AddUserAsContactResponse >     <Code>2012</status>     <Message>         Invalid Contact Virtual ID     </Message> </ AddUserAsContactResponse >``` |

## xii. RegisterDevice()

Method Name: RegisterDevice

Uri: https://$root/management/RegisterDevice

Method Type: POST

Description: Invoked by Mobile App to Register a device.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for Registering Device and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The Mobile App will call this RegisterDevice API when a user will have to register a device in IDTP.

<u>**API Request:**</u>

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Channel Info |
| 2 | User Virtual ID |
| 3 | User Device Info |
| 4 | Security Info |

**Sample API Request**

```
<RegisterDevice xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
    <Head ver="1.0" ts="11/2/2020 4:20:34 PM" orgId="SBL1BDDH"
    msgId="1" />
    <Req id="68677b3f-0858-4aba-8ca7-6ce27624936a" note="RegisterDevice"
    ts="11/2/2020 4:20:34 PM" type="REGISTERDEVICE" />
<ChannelInfo>
  <ChannelID>Mobile</ChannelID>
</ChannelInfo>
<UserInfo>
  <VirtualID>sampleUser@user.idtp</VirtualID>
  <DeviceID>027549638B00</DeviceID>
</UserInfo>
<Creds>
  <Cred type="IDTP_PIN" subtype="">
    <Data>XXXXXX</Data>
  </Cred>
</Creds>

</RegisterDevice>
```

API Response:

| Type | Success | Failed |
|---|---|---|
| Message | < RegisterDeviceResponse><br><Code>200</Code><br><Message>Success</Message><br></RegisterDeviceResponse> | <RegisterDeviceResponse><br><Code>400</Code><br><Message>Invalid User VID</Message><br></RegisterDeviceResponse> |

### xiii. RegisterFirstTimeUser()

Method Name: RegisterFirstTimeUser

Uri: https://$root/management/RegisterFirstTimeUser

Method Type: POST

Description: Invoked by mobile app to update credentials for a user before he/she does the first transaction in IDTP.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for Register First Time User and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The mobile app will call this RegisterFirstTimeUser API when a user needs to register the credentials and device before the first transaction to happen.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Channel Info |
| 2 | User Type |
| 3 | User Virtual ID |
| 4 | User Credentials |
| 5 | NID/BIN |
| 6 | DOB/DOI |
| 7 | Mobile Number |

**Sample API Request**

```
<RegisterFirstTimeUser xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
<Head ver="1.0" ts="11/2/2020 4:20:34 PM" orgId="SBL1BDDH"  msgId="1" />
<Req id="68677b3f-0858-4aba-8ca7-6ce27624936a" note="Register First Time
User" ts="11/2/2020 4:20:34 PM" type="REGISTERFIRSTTIMEUSER" />
<ChannelInfo>
  <ChannelID>Online</ChannelID>
</ChannelInfo>
<UserInfo>
  <UserType>Business</UserType>
  <VirtualID>SampleUser1@biz.idtp</VirtualID>
  <IDTPPIN>123456</IDTPPIN>
  <NID>199013202120120123</NID>
  <BIN>24234324324324324</BIN>
  <DOB></DOB>
  <DateOfIncorporation>1997/07/06</DateOfIncorporation>
  <MobileNo>01723753954</MobileNo>
</UserInfo>
```

```
</RegisterFirstTimeUser>
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | `<RegisterFirstTimeUserResponse>`<br>`    <Code>200</Code>`<br>`    <Message>Success</Message>`<br>`</RegisterFirstTimeUserRespons>` | `<RegisterFirstTimeUserResponse>`<br>`<Code>400</Code>`<br>`<Message>Invalid BIN</Message>`<br>`</RegisterFirstTimeUserResponse>` |

## xiv. ValidateIDTPUserCredentials()

Method Name: ValidateIDTPUserCredentials

Uri: https://$root/management/ValidateIDTPUserCredentials

Method Type: POST

Description: Invoked by mobile app to validate a user credentials.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for Validating IDTP User Credentials and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**
1. The mobile app will call this ValidateIDTPUser API when it needs to validate any IDTP user Credentials.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Channel Info |
| 2 | User VID |
| 3 | User Credentials |

**Sample API Request**
```
<ValidateIDTPUserCredentials xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
<Head ver="1.0" ts="2020-05-16T14:15:43+05:30" orgId="SBL1BDDH" msgId =
"1"/>
<Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Validate IDTP User
Credentials"   ts="2020-05-16T14:15:42+05:30"
type="ValidateIDTPUserCredentials"/>
<ChannelInfo>
<ChannelID>Mobile</ChannelID>
</ChannelInfo>
<UserInfo>
<UserVID value = "sampleUser1@user.idtp"/>
<OtherInfo/>
<Creds>
<Cred type = "APP_PASS" subtype = "">
<Data>Orion123@</Data>
</Cred>
</Creds>
</UserInfo>
</ValidateIDTPUserCredentials>
```

**API Response:**

| Type | Success | Failed |
|---|---|---|
| Message | ```<ValidateIDTPUserCredentialsResponse><Code>200</Code><Message>Success</Message><VirtualID>sampleUser1@user.idtp</VirtualID><Status>true</Status><NewUser>true</NewUser></ValidateIDTPUserCredentialsRespons>``` | ```<ValidateIDTPUserCredentialsResponse><Code>400</Code><Message>Invalid Password</Message><VirtualID>sampleUser1@user.idtp</VirtualID><Status>false</Status><NewUser>false</NewUser></ValidateIDTPUserCredentialsRespons>``` |

### xv. NotifyIDTPAccountChangeToAllFI()

Method Name: NotifyIDTPAccountChangeToAllFI

Uri: https://$root/financial/NotifyIDTPAccountChangeToAllFI

Method Type: POST

Description: Invoked by mobile app to notify about VID change by user to all FI of that he/she has account with.

Parameters: The request body element will be as the sample XML is provided below for *NotifyIDTPAccountChangeToAllFI* request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**
1. If the request is initiated by the mobile app, it will invoke the *NotifyIDTPAccountChangeToAllFI* API to notify the change of VID by the user.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Channel Info |
| 2 | Device Info |
| 3 | User New VID |
| 4 | User Old VID |

**Sample API Request:**

```
<NotifyIDTPAccountChangeToAllFI
xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
<Head ver="1.0" ts="11/2/2020 4:20:34 PM" orgId="SBL1BDDH" msgId="1" />
<Req id="68677b3f-0858-4aba-8ca7-6ce27624936a" note="Notify IDTP Account
Change to All FI" ts="11/2/2020 4:20:34 PM"
type="NOTIFYIDTPACCOUNTCHANGETOALLFI" />
<ChannelInfo>
<ChannelID>Online/Mobile/Other</ChannelID>
</ChannelInfo>
<DeviceInfo>
<Device_ID>012HGRTBHDGBKLBVB</Device_ID>
<Mobile_No>8801864578345</Mobile_No>
<Location>23.7805,90.4267</Location>
<IP>10.0.0.1</IP>
</DeviceInfo>
<UserInfo>
<NewVID>newtestuser12345@user.idtp</NewVID>
```

```
<OldVID>newtestuser123@user.idtp</OldVID>
</UserInfo>
</NotifyIDTPAccountChangeToAllFI>
```

**API Response:**

| Type | Success | Failed |
|---|---|---|
| Message | `<NotifyIDTPAccountChangeToAllFI Response>` <br> `<Code>200</Code>` <br> `<Message>Success</Message>` <br> `</NotifyIDTPAccountChangeToAllFI Response>` | `<NotifyIDTPAccountChangeToAllFI Response>` <br> `<Code>400</Code>` <br> `<Message>Failed</Message>` <br> `</NotifyIDTPAccountChangeToAllFI Response>` |

## xvi. CheckRegistrationStatus()

Method Name: CheckRegistrationStatus

Uri: https://$root/management/CheckRegistrationStatus

Method Type: POST

Description: Invoked by mobile app or core banking system to get Registration Status.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for Checking User Registration Status and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The mobile app or PIM will call this Check Registration Status API when it needs to know status of Registration of user.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Channel Info |
| 2 | User Type |
| 3 | User NID/BIN |

**Sample API Request**

```
<CheckRegistrationStatus xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
   <Head ver="1.0" ts="1/3/2021 11:30:55 PM" orgId="SBL1BDDH"
msgId="1"></Head>
   <Req id="b85edb31-083b-4e54-8fe8-695ca2c59e5e"  note="Check
Registration Status" ts="1/3/2021 11:30:55 PM"
type="CHECKREGISTRATIONSTATUS"></Req>
   <ChannelInfo>
      <ChannelID>Online/Mobile/Other</ChannelID>
   </ChannelInfo>
   <UserInfo>
      <UserType>Individual</UserType>
      <UserIdentNo>914312323411241321</UserIdentNo>
   </UserInfo>
</CheckRegistrationStatus>
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```<br><CheckRegistrationStatusRespons<br>e><br>  <Code>200</Code><br>  <Message>Success</Message><br>  <VirtualID><br>    sampleUser1@user.idtp<br>  </VirtualID><br></CheckRegistrationStatusRespon<br>s><br>``` | ```<br><CheckRegistrationStatusResponse><br>  <Code>400</Code><br>  <Message>Failure</Message><br>  <VirtualID/><br></CheckRegistrationStatusResponse><br>``` |

# 5. BB/IDTP Network Interface

The BB/IDTP Network Interface communicates with the IDTP Server located in Bangladesh Bank network. This interface is connected to BB network via a secure VPN link.

The APIs described in this section are invoked by the IDTP Server. A Participant will implement these APIs and connect them to its CBS, in order to execute interoperable digital transactions.

### i. GetAccountBalance()

Method Name: GetAccountBalance

Uri: https://$root/financial/GetAccountBalance

Method Type: POST

Description: Invoked by IDTP App to get the account balance of users

Parameters: The body element is a standard digitally signed ISO 20022/CAMT.003.001.05 message and the response will be a digitally signed CAMT.004.001.05 message

**Request Flow:**

The account balance retrieving process will be as follows:

1. IDTP will invoke the *GetAccountBalance* API of a Financial Institution to retrieve the available balance of an account

<u>**API Request:**</u>

The request format will be digitally signed ISO 20022/CAMT.003.001.05. A sample request is provided in APPENDIX – E of this document.

<u>**API Response:**</u>

The response format will be digitally signed ISO 20022/CAMT.004.001.05. A sample response is provided in APPENDIX – F of this document.

## ii. InitiateFundTransfer ()

Method Name: InitiateFundTransfer

Uri: https://$root/financial/InitiateFundTransfer

Method Type: POST

Description: Invoked by IDTP on Payer (Sending) FI to initiate a Direct Pay transaction

Parameters: The body element is a standard digitally signed ISO 20022/ PAIN.001.001.04 message and the response will be a digitally signed ISO 20022/ CAMT.054.001.04 message

**Request Flow:**

Process will be as follows:

1. IDTP Mobile App will call *InitiateFundTransfer* API of the Payer (Sending) FI to start a Direct Pay transaction

## <u>API Request:</u>

The request format will be digitally signed ISO 20022/PAIN.001.001.04, A sample request is provided in APPENDIX – G of this document.

## <u>API Response:</u>

The response format will be digitally signed ISO 20022/ CAMT.054.001.04, A sample response is provided in APPENDIX – H of this document.

### iii. ProcessFundTransferRequest()

Method Name: ProcessFundTransferRequest

Uri: https://$root/financial/ProcessFundTransferRequest

Method Type: POST

Description: Invoked by IDTP on Receiving FI to accept a fund transfer

Parameters: The body element is a standard digitally signed ISO 20022/ PACS.008.001.06 message and the response will be a digitally signed ISO 20022/ PACS.002.001.05 message

**Request Flow:**

The Fund Transfer Request will be processed as follows:

1. IDTP Server will call *ProcessFundTransferRequest* API of the Receiving FI to execute a Direct Pay request

**API Request:**

The request message is digitally signed ISO 20022/PACS.008.001.06, A sample request is provided in APPENDIX – A of this document.

**API Response:**

The response message is digitally signed ISO 20022/PACS.002.001.05, A sample response is provided in APPENDIX – B of this document.

### iv. ProcessRTPRequest ()

Method Name: ProcessRTPRequest

Uri: https://$root/financial/ProcessRTPRequest

Method Type: POST

Description: Invoked in IDTP on Payer (Sending) FI to transmit a RTP message to Payer

Parameters: The body element is a standard digitally signed ISO 20022/ PAIN.013.001.06 message and the response will be a digitally signed ISO 20022/ PAIN.014.001.06 message

**Request Flow:**

The Request to Pay process will be as follows:

1.  IDTP Server will call *ProcessRTPRequest* API of the Payer (Sending) FI to deliver the RTP request to the Payer

**API Request:**

The request message is digitally signed ISO 20022/PAIN.013.001.06, A sample request is provided in APPENDIX – C of this document.

**API Response:**

The response message (for declined payment requests) is digitally signed ISO 20022/PAIN.014.001.06, A sample response is provided in APPENDIX – D of this document.

### v. ProcessRTPDeclinedResponse ()

Method Name: ProcessRTPDeclinedResponse

Uri: https://$root/financial/ProcessRTPDeclinedResponse

Method Type: POST

Description: Invoked by IDTP on Payee (Receiving) FI to transmit RTP Declined message to Payee

Parameters: The body element is a standard digitally signed ISO 20022/ PAIN.013.001.06 message and the response will be a digitally signed ISO 20022/ PAIN.014.001.06 message

**Request Flow:**

The Request to Pay Decline Response process will be as follows:

1. IDTP Server will call *ProcessRTPDeclinedResponse* API of the Payee (Receiving) FI to deliver the RTP declined message to the Payee

**API Request:**

The request message is digitally signed ISO 20022/PAIN.013.001.06, A sample request is provided in APPENDIX – C of this document.

**API Response:**

The response message is digitally signed ISO 20022/ PAIN.014.001.06, A sample response is provided in APPENDIX – D of this document.

### vi. ProcessIDTPBulkPaymentRequest()

Method Name: ProcessIDTPBulkPaymentRequest

Uri: https://$root/financial/ProcessIDTPBulkPaymentRequest

Method Type: POST

Description: Invoked by IDTP on Payer (Sending) FI to debit funds for bulk payments (such as salary payments or fund disbursements) initiated from the IDTP portal.

Parameters: The body element is a standard digitally signed ISO 20022/ PACS.009.001.04 message and the response will be a digitally signed ISO 20022/ PACS.002.001.05 message

**Request Flow:**

The Fund Transfer Request will be processed as follows:

1. IDTP Server will call *ProcessIDTPBulkPaymentRequest* API of the Payer (Sending) FI to process bulk payments (such as salary payments) initiated via IDTP portal

**API Request:**

The request message is digitally a signed ISO 20022/PACS.009.001.04 message. A sample request is provided in APPENDIX – I of this document.

**API Response:**

The response message is digitally signed ISO 20022/PACS.002.001.05, A sample response is provided in APPENDIX – B of this document.

### vii. ValidateFIUser()

Method Name: ValidateFIUser

Uri: https://$root/management/ValidateFIUser

Method Type: POST

Description: Invoked by IDTP to validate a FI user from FI.

Parameters: The Request body element contains the below input parameters. A sample XML is provided below for Validating FI User and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**

1. The IDTP will call this ValidateFIUser API when it needs to validate any FI user from that FI.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | User Type |
| 2 | NID/BIN |
| 3 | DOB/DOI |
| 4 | Mobile Number |

**Sample API Request**

```
<ValidateFIUser
   xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
     <Head ver="1.0" ts="2020-05-
     16T14:15:43+05:30" orgId="sample1" msgId="1"/>
     <Req id="8ENSVVR4QOS7X1UGPY7JGUV444PL9T2C3QM" note="Validate IDTP
     User" ts="2020-05-16T14:15:42+05:30" type="VALIDATEUSERINFO"/>
   <UserInfo>
     <UserType>Individual</UserType>
     <NID>234324234234234</NID>
     <BIN></BIN>
     <DOB>1997/07/22</DOB>
     <DateOfIncorporation></DateOfIncorporation>
     <MobileNo>017XXXXX244</MobileNo>
   </UserInfo>
   <OtherInfo/>
</ValidateFIUser>
```

API Response:

| Type | Success | Failed |
|------|---------|--------|
| Message | ```<ValidateFIUserResponse>`<br>`  <Code>200</Code>`<br>`    <Message>Success</Message>`<br>`</ValidateFIUserResponse>``` | ```<ValidateFIUserResponse>`<br>`  <Code>400</Code>`<br>`    <Message>Invalid NID</Message>`<br>`</ValidateFIUserResponse>``` |

**viii.NotifyIDTPAccountChange()**

Method Name: NotifyIDTPAccountChange

Uri: https://$root/management/NotifyIDTPAccountChange

Method Type: POST

Description: Invoked by IDTP to notify about User info change, i.e. VID.

Parameters: The request body element will be as the sample XML is provided below for *NotifyIDTPAccountChange* request and a sample table provided for the XML response which defines the success and failure response.

**Request Flow:**
      1.     If the request is initiated by the IDTP, it will invoke the *NotifyIDTPAccountChange* API exposed by the FI.

**API Request:**

**Input Parameters List:**

| Serial | Parameter Name |
|--------|----------------|
| 1 | Channel Info |
| 2 | User New VID |
| 3 | User Old VID |

**Sample API Request:**

```
<NotifyIDTPAccountChange xmlns:idtp="http://idtp.gov.bd/xxx/schema/">
<Head ver="1.0" ts="11/2/2020 4:20:34 PM" orgId="SBL1BDDH" msgId="1" />
<Req id="68677b3f-0858-4aba-8ca7-6ce27624936a" note="Notify IDTP Account
Change" ts="11/2/2020 4:20:34 PM" type="NOTIFYIDTPACCOUNTCHANGE" />
<ChannelInfo>
<ChannelID>Online/Mobile/Other</ChannelID>
</ChannelInfo>
<DeviceInfo>
<Device_ID></Device_ID>
<Mobile_No></Mobile_No>
<Location></Location>
<IP></IP>
</DeviceInfo>
<UserInfo>
<NewVID>newtestuser12345@user.idtp</NewVID>
<OldVID>newtestuser123@user.idtp</OldVID>
</UserInfo>
</NotifyIDTPAccountChange>
```

**API Response:**

| Type | Success | Failed |
|------|---------|--------|
| Message | `<NotifyIDTPAccountChangeResponse>` `<Code>200</Code>` `<Message>Success</Message>` `</NotifyIDTPAccountChangeResponse>` | `<NotifyIDTPAccountChangeResponse>` `<Code>400</Code>` `<Message>Failed</Message>` `</NotifyIDTPAccountChangeResponse>` |

# 6. ICP Portal

The ICP portal provides the following features:

## System Setup

1. FI Profile Management
2. Register Digital Certificate
3. Register Device ID (Machine Fingerprint)
4. Register IP Address Range
5. Communication Endpoint Setup

## Reports

1. Transaction Summary Report
2. Transaction Details Report
3. Clearing Report
4. Settlement Summary Report
5. Settlement Details Report
6. Reconciliation Report
7. Dispute Management Report

# 7. Security

## 7.1 Transaction Security

IDTP Financial transactions will be secured using 2-factor authentication(2FA) provided by the end-user. The authentication factors are as follows:

1. Mobile Device ID ("something the user has"/possession factor): the unique Device ID (a composite device fingerprint based on Hardware and OS attributes) of each end-user mobile device will be captured and stored in the user's IDTP profile. The Mobile Device ID will be transmitted in every Financial API call for verification purposes.

2. IDTP PIN ("something the user knows"/knowledge factor): each end-user will be assigned a unique IDTP PIN. The IDTP PIN will be transmitted in every Financial API call for verification purposes.

For financial transactions generated using a non-Mobile channel (ex: Online Banking website) the Mobile Device ID will be omitted and the FI will be responsible for authenticating the user's identity.

## 7.2 Communication Channel Security

ICP will be connected to BB/IDTP network via a secure VPN channel. The following additional security measures will be implemented:

1.  The machine hosting ICP will be uniquely identified via a computed Device ID (a composite device fingerprint based on Hardware and OS attributes) generated during the Registration process. IDTP Server will only accept transactions from the registered machine. If the hardware or OS attributes of the ICP host machine are changed subsequently, the machine will need to be re-registered.

2.  ICP will use the FI's Digital Certificate to sign and encrypt messages.

3.  ICP will periodically generate random passwords to communicate with IDTP Server

4.  The machine hosting ICP will integrate a hardware (smartcard or USB key) based secure authentication mechanism for logging into the system.

## 7.3 Message Integrity, Authenticity, Confidentiality & Non-Repudiation

Financial messages will follow the ISO20022 standard and will be protected using ISO20022-compliant message protection techniques based on Digital Certificates.

Each ISO20022 message will contain a computed Digest Value (based on SHA256 hashing algorithm) located in the Business Application Header (BAH) section (see Figure below). The Participant's X509 based Digital Certificate info will also be present in the Business Application Header.

Message Integrity: ICP will compute the Digest Value of the message payload and digitally sign it using Participant's Private key. Upon receipt of the message, IDTP Server will decrypt the Digest Value using the Participant's Public key. IDTP will also recalculate the Digest Value based on received message payload and compare it with the Digest Value sent by the Participant. If the Digest Values match, the message will be processed.

Message Authenticity and Non-Repudiation: ICP will digitally sign each ISO20022 message using Participant's Private key and insert the signed Digest in the Business Application Header (BAH) of the message. IDTP Server will decrypt the message Digest using the Participant's Public key. As such, the Digital Signature of the Participant will ensure message authenticity and non-repudiation.

Message Confidentiality: ICP will encrypt sensitive portions of the message payload using IDTP Public key, thereby ensuring message confidentiality. IDTP Server will decrypt the same using its Private key.

# 8. Hardware Specifications

Recommended Hardware specifications for the machine hosting ICP are presented below:


**Processor:**      2 X Intel Xeon Silver 2.4GHz/12 core (Two 12 core processors)
**Memory:**      128GB
**Hard Disk:**      3TB
**Network Card:**  1GB/10GB Ethernet 4-port
**Smart Card Reader/USB Key**: as specified by Bangladesh Bank

# 9. Implementation Steps

# IDTP Client Platform Participant Network Interface



*Figure: IDTP Client Platform Participant Network Interface*

A Participant needs to create an "IDTP Interface Module" in order to establish communication between its Core Banking System (and/or other internal systems) and IDTP Client Platform. The IDTP Interface Module will act as a bridge between a Participant's Core Banking System (and/or other internal systems) and IDTP Client Platform.

The IDTP Interface Module will operate as follows:

1. Invoke Category-A APIs (as depicted in the above figure) on the IDTP Client Platform and process responses, as described in Section-3 (Internal Network Interface)

2. Expose Category-B APIs (as depicted in the above figure) to the IDTP Client Platform and process requests, as described in Section-5 (BB/IDTP Network Interface)

# APPENDIX

## A. ISO 20022/PACS.008.001.06 XML Sample

**Example 1:**

```
<?xml version="1.0" encoding="utf-8"?>
<DataPDU
    xmlns="urn:swift:saa:xsd:saa.2.0">
    <Revision>2.0.5</Revision>
    <Body>
        <AppHdr
            xmlns="urn:iso:std:iso:20022:tech:xsd:head.001.001.01">
            <Fr>
                <FIId>
                    <FinInstnId>
                        <BICFI>IDTP</BICFI>
                    </FinInstnId>
                </FIId>
            </Fr>
            <To>
                <FIId>
                    <FinInstnId>
                        <BICFI>FI_SWIFT2</BICFI>
                    </FinInstnId>
                </FIId>
            </To>
            <BizMsgIdr>MSG_3348732234822738299</BizMsgIdr>
            <MsgDefIdr>pacs.008.001.06</MsgDefIdr>
            <BizSvc>CBS</BizSvc>
            <CreDt>2020-08-12T14:38:11Z</CreDt>
            <Sgntr>
            <ds:Signature Id="_beddd7de-c63a-43a6-9b62-f69290939eb6"
            xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
            <ds:SignedInfo>
            <ds:CanonicalizationMethod
            Algorithm="http://www.w3.org/2001/ 10/xml -exc-
            c14n#"/>
            <ds:SignatureMethod
            Algorithm="http://www.w3.org/2001/04/xmldsig-more#rsa-
            sha256"/>
            <ds:Reference URI="#_98742d60-2afc -4fa7-a731-828756ce47b1">
            <ds:Transforms>
            <ds:Transform
            Algorithm="http://www.w3.org/2001/10/xml-exc-
            cl4n#"/>
            </ds:Transforms >
            <ds:DigestMethod
            Algorithm="http://www.w3.org/2001/04/xmlenc#sh
            a256" />
            <ds:DigestValue>vB/
            xxu+qkEVUH5i9uVdBHOXOp6+XDsAn/iHxH+UiMGo=</ds
            :DigestValue>
            </ds:Reference>
            <ds:Reference URI="">
            <ds:Transforms>
            <ds: Transform
            Algorithm="http://www.w3.org/2000/09/xmldsig#tenve
            loped- signature" />
            <ds: Transform
            Algorithm="http://www.w3.org/2001/10/xml-exc-
            cl4n#"/>
            </ds: Transforms >
```

```
<ds:DigestMethod
Algorithm="http://www.w3.org/2001/04/xmlenc#sh
a256" />
<ds:DigestValue>hWGkHPu5IMYxe4KF
YyaMOFWYqOw2pi+BYnYvHEwm/Z8=</ds:DigestValue>
</ds:Reference>
<ds:Reference>
<ds:Transforms>
<ds: Transform
Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#"/>
</ds:Transforms >
<ds:DigestMethod
Algorithm="http://www.w3.org/2001/04/xmlenc#sh
a256" />
<ds:DigestValue
>10eHeNdJM1v177MOHzFsmP0IBMYvdPXVuRcR77hAgUg=</ds
:DigestValue>
</ds:Reference>
</ds:SignedInfo>
<ds:SignatureValue>H11itYLicuuSdrRrzuSCFxk5G2Z3LDOOnEPCrXkfwiuS
dyOzA3P2r6Ale1cYidueY8niolEvcZcvKVS4zt6bbHvSRRabinU+J£13x4vTHSg
SWERY1OLPErRbTNcn9r3Nb/hxeBj6Rztv3vR+gW+JY21y3pkTTADSOINOIKkcau
arcwQGEMAWM3UjK315796Ldi7ddvHohgW1ighkzdidBfcONatYnIXZew/770UnB
ecimz4yqJvCo1SritasC@LHFdbeudgBivJtQ/CD1/So9Mkrw6VNUXohv5L3i33
3fNI9geM1oC/ZIGL1HLfOsyJ7GokRsypd 1YWFQvNNhu1OupanRA==
</ds:SignatureValue>
<ds:KeyInfo Id="_98742d60-2afc -4fa7-a731-828756ce47b1">
<ds:X509Data>
<ds:X509Certificate>MIID0DCCArigAwIBAgIBBTANBgkqghkiG9WOBAQsFAD
BMMQswCQYDVQQGEWIGUEcMBoGAIUECewTS2V5bmV4G1zLUSw2W5UcrV2dDEFMBO
GALUEAnwWT381bRydXNOIFR1¢3QZ0CEgUGhBMjAeFwOxitjExMTUwMDU3
MzVaFw
OxNDEXMTUWMOU3MzVaMFexCZAJBgNVBAYTAK]UMQ8wDQYDVQQKDAZPIFR
FU1QXE
JAQBENVBASMCUSVIFRFUIQgMjESMBAGAIUECww)T2UgVEVTVCAXxMRAWD
gYDVQQ
DDAdUZXNGIENO:MIIBI5ANBgkqghkiGowOBAQEFAAOCAQSAMIIBCeKCAQE
AtnB/1
12FOScVqDI12Q)RsZZh9TK7ANLnxxnR2EP1hRP7GRanksgyYMIECiL/AN
nTEhft
Qe7AGSaWeX7x05GHIGd72NwnFQazVjHyaTBXSxaxUoG4kc1F5QaOOvvxU
AHTtM2
qYNjpgFyKkTGbASD7IgS36zTRYauE40kGhU2/pv1nG3jIKAU40f90gkQe
4+hw2I
xkNO'ImRaxPunkYoZWVn3geL/QQ1H/yggkBdpLG2qmTUm09¢vyVdycABd
l+SRSG
NyR42xVRcbS6rv150cbnbsrvkcbms1Gdo/qnKkvxcthXstt3TqGq+kZ1C
IHDoJs
F8ZDQKuljXMEgsurt/OHQIDAQAO4GuiGtMBGGA1UdDgQUBBRsJehOf8/t
O6YtFO
4hEYcc1COz0TAFBgNVHSMEGDANgBRRcvObAGFzbq1TCZOMpE7ji+fpTA
RBglgh
kgBhvhCAQEEBAMCB4AWOegYDVROPAQH/BAQDASbAMEBGA1UdHwRBMDGwP
aA70Dm
GN2h@dHAGLy9wa210ZXNOLm9wZW5GcnVzdC5jb2GvT3B]b1RydXN@X1R1c3RFQO
FFUGHBMI5jcmmwOQYIKOZThvcNAQELBQADggEBAGMAU3YO2Z9Ff1FLX/DHVcwST
SotZ]aYtJindYcEtvhjY24vcXJzwbfopVu91XZFuxXjG12SSyksK4sRHF
UVPQdr
yAMGZMUW+0gjVFjupV54jr6vkaEL2té6oyE52CHqvvlHyLJz5CIW6jDEm
@AZGNI
```

```
            ZlwdRr4afud9zM21m4X5J1Ts2GxY/JHO2F1155QJuVn7NSFFxBPxRsIKY
            NZ+27k
            cZNTSL9ZDWYXob5PUBVEOFXMhWPJtngzBOISNGQDVQIjtnbecsSgDchRM
            Vy4JOU
            DBUK7RAIpG4aR/5RKaMkO@6DLHXJteXfmsKfLyDq3H8B+eHefJIWCeYMn
            vqk755 EVNE=</ds:X509Certificate>
            </ds:X509Data>
            </ds:KeyInfo>
            </ds:Signature>
            </Sgntr>
    </AppHdr>
    <Document
        xmlns="urn:iso:std:iso:20022:tech:xsd:pacs.008.001.06">
        <FIToFICstmrCdtTrf>
            <GrpHdr>
                <MsgId>MSG_334873223482738299</MsgId>
                <CreDtTm>2020-08-12T14:38:11</CreDtTm>
                <NbOfTxs>1</NbOfTxs>
                <TtlIntrBkSttlmAmt>1000.00</TtlIntrBkSttlmAmt>
                <IntrBkSttlmDt>2020-08-12</IntrBkSttlmDt>
                <SttlmInf>
                    <SttlmMtd>IDTP</SttlmMtd>
                </SttlmInf>
            </GrpHdr>
            <CdtTrfTxInf>
                <PmtId>
                    <InstrId>MSG_334873223482738299</InstrId>
                    <EndToEndId>TRAN_34873223482738299</EndToEndId>
                    <TxId>TRAN_34873223482738299</TxId>
                </PmtId>
                <PmtTpInf>
                    <ClrChanl>CBS</ClrChanl>
                    <SvcLvl>
                        <Prtry>0075</Prtry>
                    </SvcLvl>
                    <LclInstrm>
                        <Prtry>IDTP </Prtry>
                    </LclInstrm>
                    <CtgyPurp>
                        <Prtry>001</Prtry>
                    </CtgyPurp>
                </PmtTpInf>
                <IntrBkSttlmAmt Ccy="BDT">1000.00</IntrBkSttlmAmt>
                <ChrgBr>SHAR</ChrgBr>
                <InstgAgt>
                    <FinInstnId>
                        <BICFI>FI_SWIFT1</BICFI>
                    </FinInstnId>
                </InstgAgt>
                <InstdAgt>
                    <FinInstnId>
                        <BICFI>FI_SWIFT2</BICFI>
                    </FinInstnId>
                </InstdAgt>
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                    <Nm>SAMPLE_NAME1</Nm>
                </Dbtr>
                <DbtrAcct>
                    <Id>
                        <Othr>
                            <Id>ACC_0010201000324</Id>
```

```xml
                </Othr>
            </Id>
        </DbtrAcct>
        <DbtrAgt>
            <FinInstnId>
                <BICFI>FI_SWIFT1</BICFI>
            </FinInstnId>
        </DbtrAgt>
        <DbtrAgtAcct>
            <Id>
                <Othr>
                    <Id>ACC_0010201005555</Id>
                </Othr>
            </Id>
        </DbtrAgtAcct>
        <CdtrAgt>
            <FinInstnId>
                <BICFI>FI_SWIFT2</BICFI>
            </FinInstnId>
        </CdtrAgt>
        <CdtrAgtAcct>
            <Id>
                <Othr>
                    <Id>ACC_0010201000924</Id>
                </Othr>
            </Id>
        </CdtrAgtAcct>
        <Cdtr>
            <Nm>SAMPLE_NAME2</Nm>
        </Cdtr>
        <CdtrAcct>
            <Id>
                <Othr>
                    <Id>ACC_0010201006666</Id>
                </Othr>
            </Id>
        </CdtrAcct>
        <RmtInf>
            <Ustrd>SAMPLE_NOTE</Ustrd>
        </RmtInf>
    </CdtTrfTxInf>
    <SplmtryData>
        <PlcAndNm />
        <IDTP_PIN>XXXXXX</IDTP_PIN>
        <Envlp>
            <Tx_Tracking_Info>
            <RefNo_SendingPSP></RefNo_SendingPSP>
            <RefNo_SendingBank></RefNo_SendingBank>
            <RefNo_ReceivingBank></RefNo_ReceivingBank>
            <RefNo_ReceivingPSP></RefNo_ReceivingPSP>
            <RefNo_IDTP>1234567890</RefNo_IDTP>
            </Tx_Tracking_Info>
        </Envlp>
    </SplmtryData>
            </FIToFICstmrCdtTrf>
        </Document>
    </Body>
 </DataPDU>
```

**Example 2:**

```xml
<?xml version="1.0" encoding="utf-8"?>
<Saa:DataPDU
    xmlns:Saa="urn:swift:saa:xsd:saa.2.0"
    xmlns:Sw="urn:swift:snl:ns.Sw"
    xmlns:SwGbl="urn:swift:snl:ns.SwGbl"
    xmlns:SwInt="urn:swift:snl:ns.SwInt"
    xmlns:SwSec="urn:swift:snl:ns.SwSec">
    <Saa:Body>
        <AppHdr:AppHdr
            xmlns="urn:iso:std:iso:20022:tech:xsd:head.001.001.01
            "
            xmlns:AppHdr="urn:iso:std:iso:20022:tech:xsd:head.001.0
            01.01">
            <Fr>
                <FIId>
                    <FinInstnId>
                        <BICFI>IDTP</BICFI>
                    </FinInstnId>
                </FIId>
            </Fr>
            <To>
                <FIId>
                    <FinInstnId>
                        <BICFI>FI_SWIFT2</BICFI>
                    </FinInstnId>
                </FIId>
            </To>
            <BizMsgIdr>MSG_3348473223482738299</BizMsgIdr>
            <MsgDefIdr>pacs.008.001.06</MsgDefIdr>
            <BizSvc>IDTP</BizSvc>
            <CreDt>2020-05-27T14:21:25</CreDt>
            <Sgntr>
            <ds:Signature Id="_beddd7de-c63a-43a6-9b62-f69290939eb6"
            xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
            <ds:SignedInfo>
            <ds:CanonicalizationMethod
            Algorithm="http://www.w3.org/2001/ 10/xml -exc-
            c14n#"/>
            <ds:SignatureMethod Algorithm="http: /
            /www.w3.org/2001/04/xmldsig-
            more#rsa- sha256"/>
            <ds:Reference URI="#_98742d60-2afc -4fa7-a731-828756ce47b1">
            <ds:Transforms>
            <ds:Transform
            Algorithm="http://www.w3.org/2001/10/xml-exc-
            cl4n#"/>
            </ds:Transforms >
            <ds:DigestMethod Algorithm="http:
            //www.w3.org/2001/04/xmlenc#sha256" />
            <ds:DigestValue>vB/xxu+qkEVUH5i9uVdBHOXOp6+XDsAn/iHxH+U
            iMGo=</d s :DigestValue>
            </ds:Reference>
            <ds: Reference URI="">
            <ds:Transforms>
            <ds: Transform
            Algorithm="http://www.w3.org/2000/09/xmldsig#tenve
            loped- signature" />
            <ds: Transform
```

```
Algorithm="http://www.w3.org/2001/10/xml-exc-
cl4n#"/>
</ds:Transforms >
<ds:DigestMethod
Algorithm="http://www.w3.org/2001/04/xmlenc#sh
a256" />
<ds:DigestValue>hWGkHPu5IMYxe4KF
YyaMOFWYqOw2pi+BYnYvHEwm/Z8=</ds:DigestValue>
</ds:Reference>
<ds:Reference>
<ds:Transforms>
<ds: Transform
Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#"/>
</ds:Transforms>
<ds:DigestMethod
Algorithm="http://www.w3.org/2001/04/xmlenc#sh
a256" />
<ds:DigestValue>10eHeNdJM1v177MOHzFsmP0IBMYvdPXVuRcR77h
AgUg=</d s :DigestValue>
</ds:Reference>
</ds:SignedInfo>
<ds:SignatureValue>H11itYLicuuSdrRrzuSCFxk5G2Z3LDOOnEPCrXkfwiuS
dyOzA3P2r6Ale1cYidueY8niolEvcZcvKVS4zt6bbHvSRRabinU+J£13x4vTHSg
SWERY1OLPErRbTNcn9r3Nb/hxeBj6Rztv3vR+gW+JY21y3pkTTADSOINOIKkcau
arcwQGEMAWM3UjK315796Ldi7ddvHohgW1ighkzdidBfcONatYnIXZew/770UnB
ecimz4yqJvCo1SritasC@LHFdbeudgBivJtQ/CD1/So9Mkrw6VNUXohv5L3i33
3fNI9geM1oC/ZIGL1HLfOsyJ7GokRsypd 1YWFQvNNhu1OupanRA==
</ds:SignatureValue>
<ds:KeyInfo Id="_98742d60-2afc -4fa7-a731-828756ce47b1">
<ds:X509Data>
<ds:X509Certificate>MIID0DCCArigAwIBAgIBBTANBgkqghkiG9WOBAQsFAD
BMMQswCQYDVQQGEWIGUEcMBoGAIUECewTS2V5bmV4G1zLUSw2W5UcnV2dDEFMBO
GALUEAnwWT381bRydXNOIFR1¢3QZ0CEgUGhBMjAeFwOxitjExMTUwMDU3
MzVaFw
OxNDEXMTUWMOU3MzVaMFexCZAJBgNVBAYTAK]UMQ8wDQYDVQQKDAZPIFR
FU1QXE
JAQBENVBASMCUSVIFRFUIQgMjESMBAGAIUECww)T2UgVEVTVCAXxMRAWD
gYDVQQ
DDAdUZXNGIENO:MIIBI5ANBgkqhkiGowOBAQEFAAOCAQSAMIIBCeKCAQE
AtnB/1
12FOScVqDI12Q)RsZZh9TK7ANLnxxnR2EP1hRP7GRanksgyYMIECiL/AN
nTEhft
Qe7AGSaWeX7x05GHIGd72NwnFQazVjHyaTBXSxaxUoG4kc1F5QaOOvvxU
AHTtM2
qYNjpgFyKkTGbASD7IgS36zTRYauE40kGhU2/pv1nG3jIKAU40f90gkQe
4+hw2I
xkNO'ImRaxPunkYoZWVn3geL/QQ1H/yggkBdpLG2qmTUm09¢vyVdycABd
l+SRSG
NyR42xVRcbS6rv150cbnbsrvkcbms1Gdo/qnKkvxcthXstt3TqGq+kZ1C
IHDoJs
F8ZDQKuljXMEgsurt/OHQIDAQAO4GuiGtMBGGA1UdDgQUBBRsJehOf8/t
O6YtFO
4hEYcc1COz0TAFBgNVHSMEGDANgBRRcvObAGFzbq1TCZOMpE7ji+fpTA
RBglgh
kgBhvhCAQEEBAMCB4AWOegYDVROPAQH/BAQDASbAMEBGA1UdHwRBMDGwP
aA70Dm
GN2h@dHAGLy9wa210ZXNOLm9wZW5GcnVzdC5jb2GvT3B]b1RydXN@X1R1c3RFQO
FFUGHBMI5jcmmwOQYIKOZThvcNAQELBQADggEBAGMAU3YO2Z9Ff1FLX/DHVcwST
SotZ]aYtJindYcEtvhjY24vcXJzwbfopVu91XZFuxXjG12SSyksK4sRHF
UVPQdr
```

```
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@AZGNI
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NZ+27k
cZNTSL9ZDWYXob5PUBVEOFXMhWPJtngzBOISNGQDVQIjtnbecsSgDchRM
Vy4JOU
DBUK7RAIpG4aR/5RKaMkO@6DLHXJteXfmsKfLyDq3H8B+eHefJIWCeYMn
vqk755 EVNE=</ds:X509Certificate>
                </ds:X509Data>
                </ds:KeyInfo>
                </ds:Signature>
                </Sgntr>
        </AppHdr:AppHdr>
        <Document:Document
            xmlns="urn:iso:std:iso:20022:tech:xsd:pacs.008.001.06"
 xmlns:Document="urn:iso:std:iso:20022:tech:xsd:pacs.008.001.06">
            <FIToFICstmrCdtTrf>
                <GrpHdr>
                    <MsgId>MSG_334873223482738299</MsgId>
                    <CreDtTm>2020-05-21T12:31:53</CreDtTm>
                    <BtchBookg>true</BtchBookg>
                    <NbOfTxs>3</NbOfTxs>
                    <TtlIntrBk
SttlmAmt
Ccy="BDT">3000.00</TtlIntrBkSt
tlmAmt>
                    <IntrBkSttlmDt>2020-03-15</IntrBkSttlmDt>
                    <SttlmInf>
                        <SttlmMtd>IDTP</SttlmMtd>
                    </SttlmInf>
                    <PmtTpInf>
                        <ClrChanl>IDTP</ClrChanl>
                        <SvcLvl>
                            <Prtry>0011</Prtry>
                        </SvcLvl>
                        <LclInstrm>
                            <Prtry>IDTP</Prtry>
                        </LclInstrm>
                        <CtgyPurp>
                            <Prtry>001</Prtry>
                        </CtgyPurp>
                    </PmtTpInf>
                    <InstgAgt>
                        <FinInstnId>
                            <BICFI>FI_SWIFT1</BICFI>
                        </FinInstnId>
                    </InstgAgt>
                    <InstdAgt>
                        <FinInstnId>
                            <BICFI>FI_SWIFT2</BICFI>
                        </FinInstnId>
                    </InstdAgt>
                </GrpHdr>
                <CdtTrfTxInf>
                    <PmtId>
                        <InstrId>MSG_334873223482738299</InstrId>
                        <EndToEndId>TRAN_34873223482738299</EndToEndId>
                        <TxId>TRAN_34873223482738299</TxId>
                    </PmtId>
                    <IntrBkSttlmAmt Ccy="BDT">1000.00</IntrBkSttlmAmt>
                    <ChrgBr>SLEV</ChrgBr>
```

```
            <Dbtr>
                <Nm>SAMPLE_NAME1</Nm>
            </Dbtr>
            <DbtrAcct>
                <Id>
                    <Othr>
                        <Id>ACC_0010201000324</Id>
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                </Id>
            </DbtrAcct>
            <DbtrAgt>
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                </FinInstnId>
            </DbtrAgt>
            <CdtrAgt>
                <FinInstnId>
                    <BICFI> FI_SWIFT2</BICFI>
                </FinInstnId>
            </CdtrAgt>
            <Cdtr>
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            </Cdtr>
            <CdtrAcct>
                <Id>
                    <Othr>
                        <Id>ACC_0010201000325</Id>
                    </Othr>
                </Id>
            </CdtrAcct>
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            </RmtInf>
        </CdtTrfTxInf>
        <CdtTrfTxInf>
            <PmtId>
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                <EndToEndId>TRAN_24873223482738299</EndToEndId>
                <TxId>TRAN_24873223482738299</TxId>
            </PmtId>
            <IntrBkSttlmAmt Ccy="BDT">1000.00</IntrBkSttlmAmt>
            <ChrgBr>SLEV</ChrgBr>
        <Dbtr>
                <Nm>SAMPLE_NAME1</Nm>
            </Dbtr>
            <DbtrAcct>
                <Id>
                    <Othr>
                        <Id>ACC_0010201000324</Id>
                    </Othr>
                </Id>
            </DbtrAcct>
            <DbtrAgt>
                <FinInstnId>
                    <BICFI>FI_SWIFT1</BICFI>
                </FinInstnId>
            </DbtrAgt>
            <CdtrAgt>
                <FinInstnId>
                    <BICFI>FI_SWIFT2</BICFI>
                </FinInstnId>
```

```
                    </CdtrAgt>
                    <Cdtr>
                        <Nm>SAMPLE_NAME3</Nm>
                    </Cdtr>
                    <CdtrAcct>
                        <Id>
                            <Othr>
                                <Id>ACC_0010201000326</Id>
                            </Othr>
                        </Id>
                    </CdtrAcct>
                    <RmtInf>
                        <Ustrd>SAMPLE_NOTE1</Ustrd>
                    </RmtInf>
            </CdtTrfTxInf>
                <CdtTrfTxInf>
                    <PmtId>
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                        <EndToEndId>TRAN_64873223482738299</EndToEndId>
                        <TxId>TRAN_64873223482738299</TxId>
                    </PmtId>
                    <IntrBkSttlmAmt Ccy="BDT">1000.00</IntrBkSttlmAmt>
                    <ChrgBr>SLEV</ChrgBr>
                <Dbtr>
                        <Nm>SAMPLE_NAME1</Nm>
                    </Dbtr>

                    <DbtrAcct>
                        <Id>
                            <Othr>
                                <Id>ACC_0010201000324</Id>
                            </Othr>
                        </Id>
                    </DbtrAcct>
                    <DbtrAgt>
                        <FinInstnId>
                            <BICFI>FI_SWIFT1</BICFI>
                        </FinInstnId>
                    </DbtrAgt>
                    <CdtrAgt>
                        <FinInstnId>
                            <BICFI>FI_SWIFT2</BICFI>
                        </FinInstnId>
                    </CdtrAgt>
                    <Cdtr>
                        <Nm>SAMPLE_NAME4</Nm>
                        <PstlAdr>
                            <AdrLine>12-10232</AdrLine>
                            <StrtNm>Green street</StrtNm>
                            <TwnNm>Dhaka</TwnNm>
                            <Ctry>BD</Ctry>
                        </PstlAdr>
                    </Cdtr>
                    <CdtrAcct>
                        <Id>
                            <Othr>
                                <Id>ACC_0010201000327</Id>
                            </Othr>
                        </Id>
                    </CdtrAcct>
                    <RmtInf>
```

```
                    <Ustrd>SAMPLE_NOTE2</Ustrd>
                </RmtInf>
            </CdtTrfTxInf>
              <SplmtryData>
                <PlcAndNm />
                <IDTP_PIN>XXXXXX</IDTP_PIN>
                <Envlp>
                    <Tx_Tracking_Info>
                    <RefNo_SendingPSP></RefNo_SendingPSP>
                    <RefNo_SendingBank></RefNo_SendingBank>
                    <RefNo_ReceivingBank></RefNo_ReceivingBank>
                    <RefNo_ReceivingPSP></RefNo_ReceivingPSP>
                    <RefNo_IDTP>1234567890</RefNo_IDTP>
                    </Tx_Tracking_Info>
                </Envlp>
            </SplmtryData>
        </FIToFICstmrCdtTrf>
    </Document:Document>
    </Saa:Body>
 </Saa:DataPDU>
```

**Detailed Message Description:**

| Group Header | | |
|---|---|---|
| GrpHdr | **ISO Definition** | Set of characteristics shared by all individual transactions included in the message. |
| | **XML Tag** | <GrpHdr> |
| | **Occurrences** | [1..1] |

| Message Identification | | |
|---|---|---|
| GrpHdr +MsgId | **ISO Definition** | Point to point reference, as assigned by the instructing party, and sent to the next party in the chain to unambiguously identify the message. Usage: The instructing party has to make sure that Message Identification is unique per instructed party for a pre-agreed period. |
| | **XML Tag** | <MsgId> |
| | **Occurrences** | [1..1] |
| | **Type** | Max35Text |
| | **ISO Length:** | 1 ...35 |
| | **IDTP Length:** | 1 ...22 |

| Rule | Rule "Message Identification Guideline" |
|---|---|
| | Definition<br>If no unique Message Identification can be generated, then the element is recommended to be populated with a copy of Instruction Identification.<br><br>If generated, it is recommended that Message Identification to be structured as follows:<br><br>XXXX - First 4 characters of sender's BIC [4]<br>YYYYMMDD - Creation Date [8]<br>X – Channel Identification [1]<br>nnnnnnn- Sequence Number [9]<br><br>The values of Channel Identification (X) are bank-determined and may be used to identify separate channels such as:<br>1 - Default value (only one single channel)<br>Or for example (multiple channels),<br>1 - Internet Banking |
| | 2 - Cash Management<br>3 - Treasury<br>4 - ATM |
| **Example** | <MsgId>ABCD201308201123456789</MsgId> |

| **Creation Date Time** | | |
|---|---|---|
| GrpHdr<br>+CreDtTm | **ISO Definition** | Date and time at which the message was created. |
| | **XML Tag** | <CreDtTm> |
| | **Format:** | YYYY-MM-DDThh:mm:ss |
| | **Type** | ISODateTime |
| | **Occurrences** | [1..1] |
| | **Example** | <CreDtTm>2013-08-20T09:30:32</CreDtTm> |

| **Number of Transactions** | | |
|---|---|---|
| GrpHdr<br>+NbOfTxs | **ISO Definition** | Date and time at which the message was created. |
| | **XML Tag** | <NbOfTxs> |
| | **IDTP Rule** | The number of transactions is limited to one. |
| | **Type** | Max15NumericText |
| | **Occurrences** | [1..1] |

| | Example | <NbOfTxs>1</NbOfTxs> |
|---|---|---|

**Total Interbank Settlement Amount**

| GrpHdr +TtlIntrBkSttlmAmt | ISO Definition | Total amount of money moved between the instructing agent and the instructed agent. |
|---|---|---|
| | XML Tag | <TtlIntrBkSttlmAmt> |
| | Type | ActiveCurrencyAndAmount |
| | Occurrences | [1..1] |
| | Example | <TtlIntrBkSttlmAmt>525.25</TtlIntrBkSttlmAmt> |

**Interbank Settlement Date**

| GrpHdr +IntrBkSttlmDt | ISO Definition | Total amount of money moved between the instructing agent and the instructed agent. |
|---|---|---|
| | XML Tag | <IntrBkSttlmDt> |
| | Format: | YYYY-MM-DD |
| | Type | ISODate |
| | Occurrences | [1..1] |
| | Example | <IntrBkSttlmDt>2020-06-30</IntrBkSttlmDt> |

**Settlement Information**

| GrpHdr + SttlmInf | ISO Definition | Specifies the details on how the settlement of the transaction(s) between the instructing agent and the instructed agent is completed. |
|---|---|---|
| | XML Tag | <SttlmInf > |
| | Occurrences | [1..1] |

**Settlement Method**

| GrpHdr + SttlmInf ++ SttlmMtd | ISO Definition | Method used to settle the (batch of) payment instructions. |
|---|---|---|
| | XML Tag | <SttlmMtd> |
| | **Codes: CLRG** (ClearingSystem) Code Description: Settlement is done through a payment clearing system. | |
| | IDTP Rule | Fixed Value = CLRG |
| | Occurrences | [1..1] |
| | Example | <SttlmMtd>CLRG</SttlmMtd> |

| Credit Transfer Transaction Information | | |
|---|---|---|
| CdtTrfTxInf | **ISO Definition** | Set of elements providing information specific to the individual credit transfer(s). |
| | **XML Tag** | <CdtTrfTxInf> |
| | **Occurrences** | [1..1] |

| Payment Identification | | |
|---|---|---|
| CdtTrfTxInf + PmtId | **ISO Definition** | Set of elements used to reference a payment instruction. |
| | **XML Tag** | <PmtId> |
| | **Occurrences** | [1..1] |

| Instruction Identification | | |
|---|---|---|
| CdtTrfTxInf + PmtId ++ InstrId | **ISO Definition** | Unique identification, as assigned by an instructing party for an instructed party, to unambiguously identify the instruction. Usage: The instruction identification is a point to point reference that can be used between the instructing party and the instructed party to refer to the individual instruction. It can be included in several messages related to the instruction. |
| | **IDTP Rule** | Use MessageId |
| | **XML Tag** | <InstrId> |
| | **Type** | Max35Text |
| | **Occurrences** | [1..1] |

| End To End Identification | | |
|---|---|---|
| CdtTrfTxInf +PmtId ++EndToEndId | **ISO Definition** | Unique identification, as assigned by the initiating party, to unambiguously identify the transaction. This identification is passed on, unchanged, throughout the entire end-to-end chain. Usage: The end-to-end identification can be used for reconciliation or to link tasks relating to the transaction. It can be included in several messages related to the transaction. Usage: In case there are technical limitations to pass on multiple references, the end-to-end identification must be passed on throughout the entire end-to-end chain. |
| | **IDTP Rule** | Use MessageId |

| | **XML Tag** | <EndToEndId> |
|---|---|---|
| | **Type** | Max35Text |
| | **Occurrences** | [1..1] |

| **Transaction Identification** | | |
|---|---|---|
| CdtTrfTxInf<br>+ PmtId<br>++ TxId | **ISO Definition** | Unique identification, as assigned by the first instructing agent, to unambiguously identify the transaction that is passed on, unchanged, throughout the entire interbank chain. Usage: The transaction identification can be used for reconciliation, tracking or to link tasks relating to the transaction on the interbank level. Usage: The instructing agent has to make sure that the transaction identification is unique for a pre-agreed period. |
| | **XML Tag** | <TxId> |
| | **Occurrences** | [1..1] |
| | **Type** | Max35Text |
| | **ISO Length** | 1 ...35 |
| | **IDTP Length** | 1 ...22 |
| | **Rules** | Rule "Message Identification Guideline"<br><br>Definition<br> If no unique Message Identification can be generated, then the element is recommended to be populated with a copy of Instruction Identification.<br><br>If generated, it is recommended that Message Identification to be structured as follows:<br><br>XXXX - First 4 characters of sender's BIC [4]<br>YYYYMMDD - Creation Date [8]<br>X – Channel Identification [1]<br>nnnnnnn- Sequence Number [9]<br><br>The values of Channel Identification (X) are bank-determined and may be used to identify separate channels such as:<br>1 - Default value (only one single channel)<br>Or for example (multiple channels),<br>1 - Internet Banking |

| | | |
|---|---|---|
| | | 2 - Cash Management<br>3 - Treasury<br>4 - ATM |
| | **IDTP Rule** | Use MsgId |
| | **Example** | <TxId>HSBC201308201123456789</TxId> |

| **Payment Type Information** | | |
|---|---|---|
| CdtTrfTxInf<br>+PmtTpInf | **ISO Definition** | Set of elements used to further specify the type of transaction. |
| | **XML Tag** | <PmtTpInf> |
| | **Occurrences** | [1..1] |

| **Clearing Channel** | | |
|---|---|---|
| CdtTrfTxInf<br>+PmtTpInf<br>++ClrChanl | **ISO Definition** | Specifies the clearing channel to be used to process the payment instruction. |
| | **XML Tag** | <ClrChanl> |
| | **IDTP Rule** | IDTP uses CBS (Core Banking System) |
| | **Occurrences** | [1..1] |
| | **Type** | ClearingChannel2Code |
| | **Example** | <ClrChanl>CBS</ClrChanl> |

| **Service Level** | | |
|---|---|---|
| CdtTrfTxInf<br>+PmtTpInf<br>++ SvcLvl | **ISO Definition** | Agreement under which or rules under which the transaction should be processed. |
| | **XML Tag** | <SvcLvl> |
| | **Occurrences** | [1..1] |

| **Code** | | |
|---|---|---|
| CdtTrfTxInf<br>+PmtTpInf<br>++SvcLvl<br>+++Cd | **ISO Definition** | Specifies a pre-agreed service or level of service between the parties, as published in an external service level code list.<br>Usage: The Service level of the transaction. |
| | **XML Tag** | <Cd> |
| | **Rules** | Maximum length is 4, minimum 1 |
| | **IDTP Rule** | Default value is **SDVA** |
| | **Occurrences** | [1..1] |

| | **Example** | <Cd>SDVA</Cd> |
|---|---|---|

| **Local Instrument** | | |
|---|---|---|
| CdtTrfTxInf +PmtTpInf ++LclInstrm | **ISO Definition** | User community specific instrument.<br><br>Usage: This element is used to specify a local instrument, local clearing option and/or further qualify the service or service level. |
| | **XML Tag** | <LclInstrm> |
| | **Rule** | Rule "Local Instrument Rule"<br>Definition<br>Local Instrument must only be used when agreed bilaterally or within a community to reflect a specific payment instrument currently identified through community specific implementation of (proprietary) standards. |
| | **Occurrences** | [1..1] |

| **Proprietary** | | |
|---|---|---|
| CdtTrfTxInf + PmtTpInf ++ LclInstrm +++ Prtry | **ISO Definition** | Specifies the local instrument, as a proprietary code. |
| | **XML Tag** | <Prtry> |
| | **IDTP Rule** | IDTP uses RTGS_CSCT(RTGS Customer Credit Transfer) as fixed value for this element. |
| | **Occurrences** | [1..1] |
| | **Type** | Max35Text |

| **Category Purpose** | | |
|---|---|---|
| CdtTrfTxInf + PmtTpInf ++ CtgyPurp | **ISO Definition** | Specifies the high-level purpose of the instruction based on a set of pre-defined categories. Usage: This is used by the initiating party to provide information concerning the processing of the payment. It is likely to trigger special processing by any of the agents involved in the payment chain. |
| | **XML Tag** | <CtgyPurp> |
| | **IDTP Rule** | IDTP use this element here under Payment Type Information tag instead of shown in index 1.25 |
| | **Occurrences** | [1..1] |

| **Proprietary** | | |
|---|---|---|
| CdtTrfTxInf +<br>PmtTpInf<br>++ CtgyPurp<br>+++ Prtry | **ISO Definition** | Category purpose, in a proprietary form. |
| | **XML Tag** | <Prtry> |
| | **Rule** | Rule "Category Purpose 1 Code Rule"<br><br>Definition<br> Transaction Type Code from MT 103 Field 72 (Sender to Receiver Information) after the designated code word /CODTYPTR/. |
| | **Occurrences** | [1..1] |
| | **Type** | Max35Text |

| **Interbank Settlement Amount** | | |
|---|---|---|
| CdtTrfTxInf<br>+IntrBkSttlmAmt | **ISO Definition** | Amount of money moved between the instructing agent and the instructed agent. |
| | **XML Tag** | <IntrBkSttlmAmt> |
| | **IDTP Rule** | RestrictedFINActiveCurrencyAndAmount (based on decimal)<br><br>- fractionDigits: 5<br>- totalDigits: 14<br>- minInclusive: 0 |
| | **Occurrences** | [1..1] |
| | **Type** | ActiveCurrencyAndAmount |
| | **Attribute:** | Currency<br>The number of fractional digits (or minor unit of currency) must comply with ISO 4217.<br>Note: The decimal separator is a dot. |

| **Interbank Settlement Date** | | |
|---|---|---|
| CdtTrfTxInf<br>+IntrBkSttlmDt | **ISO Definition** | Date on which the amount of money ceases to be available to the agent that owes it and when the amount of money becomes available to the agent to which it is due. |
| | **XML Tag** | <IntrBkSttlmDt> |
| | **Occurrences** | [0..1] |
| | **Type** | ISODate |

**Charge Bearer**

| CdtTrfTxInf<br>+ ChrgBr | **ISO Definition** | Specifies which party/parties will bear the charges associated with the processing of the payment transaction. |
|---|---|---|
| | **XML Tag** | <ChrgBr> |
| | **IDTP Rule** | IDTP uses **SHAR** as default value for this field. |
| | **Occurrences** | [1..1] |
| | **Example** | <ChrgBr>SHAR</ChrgBr> |
| | **Codes** | **Name / Description** |
| | **DEBT** | All transaction charges are to be borne by the debtor. |
| | **CRED** | All transaction charges are to be borne by the creditor. |
| | **SHAR** | In a credit transfer context, means that transaction charges on the sender side are to be borne by the debtor, transaction charges on the receiver side are to be borne by the creditor. In a direct debit context, means that transaction charges on the sender side are to be borne by the creditor, transaction charges on the receiver side are to be borne by the debtor. |

**Instructing Agent**

| CdtTrfTxInf<br>+InstgAgt | **ISO Definition** | Agent that instructs the next party in the chain to carry out the (set of) instruction(s). |
|---|---|---|
| | **XML Tag** | <InstgAgt> |
| | **Occurrences** | [1..1] |
| | **Rule** | The element is used to specify the BIC of the RTGS registered member when the Debtor is used to specify the name or BIC of an indirect RTGS member |

**Financial Institution Identification**

| CdtTrfTxInf<br>+InstgAgt<br>++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
|---|---|---|
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

**BICFI**

| CdtTrfTxInf<br>+InstgAgt | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - |
|---|---|---|

| ++FinInstnId +++BICFI | | Banking telecommunication messages - Business identifier code (BIC)". |
|---|---|---|
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

| **Instructed Agent** | | |
|---|---|---|
| CdtTrfTxInf +InstdAgt | **ISO Definition** | Agent that is instructed by the previous party in the chain to carry out the (set of) instruction(s). |
| | **XML Tag** | <InstdAgt> |
| | **Occurrences** | [1..1] |
| | **Rule** | The element is used to specify the BIC of the RTGS registered member when the Debtor is used to specify the name or BIC of an indirect RTGS member |

| **Financial Institution Identification** | | |
|---|---|---|
| CdtTrfTxInf + InstdAgt ++ FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

| **BICFI** | | |
|---|---|---|
| CdtTrfTxInf +InstdAgt ++FinInstnId +++BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

| **Debtor** | | |
|---|---|---|
| CdtTrfTxInf +Dbtr | **ISO Definition** | Party that owes an amount of money to the (ultimate) creditor. |
| | **XML Tag** | <Dbtr> |
| | **Occurrences** | [1..1] |
| | **Rule** | Conditional Rule "Name And BIC Rule" This is a cross-element rule. Definition |

| | | If Identification\OrganizationIdentification\AnyBIC is not present, DebtorName must be present.<br>If<br> Identification\OrganizationIdentification\AnyBIC is present<br>Then<br> Name is optional.<br>Else<br> Name must be present.<br><br>Conditional Rule "Name And Street Name Rule"<br><br>This is a cross-element rule.<br>Definition<br> If the length of the Name is more than 33 characters, the length of the StreetName is restricted to 33 characters.<br>If<br> Name length is more than 33 characters<br>Then<br> StreetName has a maximum length of 33 characters<br>Else<br> StreetName has a maximum length of 70 characters |
|---|---|---|

| Name | | |
|---|---|---|
| CdtTrfTxInf<br>+Dbtr<br>++Nm | **ISO Definition** | Name by which a party is known and which is usually used to identify that party. |
| | **XML Tag** | \<Nm\> |
| | **Occurrences** | [1..1] |
| | **IDTP Rule** | RestrictedFINXMax70Text (based on string)<br>- pattern: [0-9a-zA-Z/\-\?:\(\)\.\n\r,'\+ ]{1,70}<br>- minLength: 1<br>- maxLength: 70 |
| | **Type** | Max140Text |

| Debtor Account | | |
|---|---|---|
| CdtTrfTxInf<br>+DbtrAcct | **ISO Definition** | Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction. |
| | **XML Tag** | \<DbtrAcct\> |
| | **Occurrences** | [0..1] |

**Identification**

| CdtTrfTxInf<br>+DbtrAcct<br>++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | \<Id> |
| | **Occurrences** | [1..1] |

**Other**

| CdtTrfTxInf<br>+DbtrAcct<br>++Id<br>+++Othr | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | \<Othr> |
| | **Occurrences** | [1..1] |

**Identification**

| CdtTrfTxInf<br>+DbtrAcct<br>++Id<br>+++Othr<br>++++Id | **ISO Definition** | Identification assigned by an institution. |
|---|---|---|
| | **XML Tag** | \<Id> |
| | **Occurrences** | [1..1] |
| | **Type** | Max34Text |
| | **IDTP Rule** | RestrictedFINXMax34Text (based on string)<br><br>- pattern: ([0-9a-zA-Z\-\?:\(\)\.,'\+ ]([0-9a-zA-Z\-\?:\(\)\.,'\+ ]*(/[0-9a-zA-Z\-\?:\(\)\.,'\+ ])?)*)<br>- minLength: 1<br>- maxLength: 34 |

**Debtor Agent**

| CdtTrfTxInf<br>+DbtrAgt | **ISO Definition** | Financial institution servicing an account for the debtor. |
|---|---|---|
| | **XML Tag** | \<DbtrAgt> |
| | **Occurrences** | [1..1] |
| | **IDTP Rule** | For BIC registered members, the BIC must be specified in the 'BICFI' element. For other members, an internal/non-connected identifier (not literal name) must be specified in the 'Name' element. Either the BICFI or Name element must be used, not both. |

**Financial Institution Identification**

| CdtTrfTxInf<br>+DbtrAgt<br>++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
|---|---|---|

| | **XML Tag** | \<FinInstnId> |
|---|---|---|
| | **Occurrences** | [1..1] |

| **BICFI** | | |
|---|---|---|
| CdtTrfTxInf +DbtrAgt ++FinInstnId +++BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| | **XML Tag** | \<BICFI> |
| | **Occurrences** | [1..1] |

| **Branch Identification** | | |
|---|---|---|
| CdtTrfTxInf +DbtrAgt ++BranchId | **ISO Definition** | Information used to identify a member within a clearing system. |
| | **XML Tag** | \<BranchId> |
| | **Occurrences** | [0..1] |

| **Identification** | | |
|---|---|---|
| CdtTrfTxInf +DbtrAgt ++BranchId +++Id | **ISO Definition** | Unique and unambiguous identification of a branch of a financial institution. |
| | **XML Tag** | \<Id> |
| | **Occurrences** | [0..1] |

| **Debtor Agent Account** | | |
|---|---|---|
| CdtTrfTxInf +DbtrAgtAcct | **ISO Definition** | Unique and unambiguous identification of a branch of a financial institution. |
| | **XML Tag** | \<DbtrAgtAcct> |
| | **Occurrences** | [0..1] |

| **Identification** | | |
|---|---|---|
| CdtTrfTxInf +DbtrAgtAcct ++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
| | **XML Tag** | \<Id> |
| | **Occurrences** | [1..1] |

| Other | | |
|---|---|---|
| CdtTrfTxInf<br>+DbtrAgtAcct<br>++Id<br>+++Othr | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

| Identification | | |
|---|---|---|
| CdtTrfTxInf<br>+DbtrAgtAcct<br>++Id<br>+++Othr<br>++++Id | **ISO Definition** | Identification assigned by an institution. |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |
| | **Rule** | RestrictedFINXMax34Text (based on string)<br>- pattern: ([0-9a-zA-Z\-\?:\(\)\.,'\+ ]([0-9a-zA-Z\-\?:\(\)\.,'\+ ]*(/[0-9a-zA-Z\-\?:\(\)\.,'\+ ])?)*)<br>- minLength: 1, maxLength: 34 |

| Creditor Agent | | |
|---|---|---|
| CdtTrfTxInf<br>+CdtrAgt | **ISO Definition** | Financial institution servicing an account for the creditor. |
| | **XML Tag** | <CdtrAgt> |
| | **Occurrences** | [1..1] |
| | **Rule** | For BIC registered members, the BIC must be specified in the 'BICFI' element. For other members, an internal/non-connected identifier (not literal name) must be specified in the 'Name' element. Either the BICFI or Name element must be used, not both. |

| Financial Institution Identification | | |
|---|---|---|
| CdtTrfTxInf<br>+CdtrAgt<br>++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |
| | **Type** | FinancialInstitutionIdentification8 |

| BICFI | | |
|---|---|---|
| | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking |

| CdtTrfTxInf +CdtrAgt ++FinInstnId +++BICFI | | - Banking telecommunication messages - Business identifier code (BIC)". |
|---|---|---|
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

**Branch Identification**

| CdtTrfTxInf +CdtrAgt ++BranchId | **ISO Definition** | Information used to identify a member within a clearing system. |
|---|---|---|
| | **XML Tag** | <BranchId> |
| | **Occurrences** | [0..1] |

**Identification**

| CdtTrfTxInf +CdtrAgt ++BranchId +++Id | **ISO Definition** | Unique and unambiguous identification of a branch of a financial institution. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Occurrences** | [0..1] |

**Creditor Agent Account**

| CdtTrfTxInf +CdtrAgtAcct | **ISO Definition** | Unambiguous identification of the account of the creditor agent at its servicing agent to which a credit entry will be made as a result of the payment transaction. |
|---|---|---|
| | **XML Tag** | < CdtrAgtAcct> |
| | **Occurrences** | [0..1] |

**Identification**

| CdtTrfTxInf +CdtrAgtAcct ++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Other**

| CdtTrfTxInf +CdtrAgtAcct ++Id +++Othr | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
|---|---|---|
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

| Identification | | |
|---|---|---|
| CdtTrfTxInf<br>+CdtrAgtAcct<br>++Id<br>+++Othr<br>++++Id | **ISO Definition** | Identification assigned by an institution. |
| | **XML Tag** | \<Id> |
| | **Occurrences** | [1..1] |
| | **Rule** | RestrictedFINXMax34Text (based on string)<br>- pattern: ([0-9a-zA-Z\-\?:\(\)\.,'\+ ]([0-9a-zA-Z\-\?:\(\)\.,'\+ ]*(/[0-9a-zA-Z\-\?:\(\)\.,'\+ ])?)*)<br>- minLength: 1, maxLength: 34 |

| Creditor | | |
|---|---|---|
| CdtTrfTxInf<br>+Cdtr | **ISO Definition** | Party to which an amount of money is due. |
| | **XML Tag** | \<Cdtr> |
| | **Occurrences** | [1..1] |

| Name | | |
|---|---|---|
| CdtTrfTxInf<br>+Cdtr<br>++Nm | **ISO Definition** | Name by which a party is known and which is usually used to identify that party. |
| | **XML Tag** | \<Nm> |
| | **Occurrences** | [1..1] |

| Creditor Account | | |
|---|---|---|
| CdtTrfTxInf<br>+CdtrAcct | **ISO Definition** | Unambiguous identification of the account of the creditor to which a credit entry will be made as a result of the transaction. |
| | **XML Tag** | \<CdtrAcct> |
| | **Occurrences** | [1..1] |

| Identification | | |
|---|---|---|
| CdtTrfTxInf<br>+CdtrAcct<br>++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
| | **XML Tag** | \<Id> |
| | **Occurrences** | [1..1] |

| Other | | |
|---|---|---|
| CdtTrfTxInf<br>+CdtrAcct | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |

| ++Id<br>+++Othr | XML Tag | <Othr> |
|---|---|---|
| | Occurrences | [1..1] |

**Identification**

| CdtTrfTxInf<br>+CdtrAcct<br>++Id<br>+++Othr<br>++++Id | ISO Definition | Identification assigned by an institution. |
|---|---|---|
| | XML Tag | <Id> |
| | Occurrences | [1..1] |
| | IDTP Rule | RestrictedFINXMax34Text (based on string)<br>- pattern: ([0-9a-zA-Z\-\?:\(\)\.,'\+ ]([0-9a-zA-Z\-\?:\(\)\.,'\+ ]*(/[0-9a-zA-Z\-\?:\(\)\.,'\+ ])?)*)<br>- minLength: 1, maxLength: 34 |

**Remittance Information**

| CdtTrfTxInf<br>+RmtInf | ISO Definition | Information supplied to enable the matching of an entry with the items that the transfer is intended to settle, such as commercial invoices in an accounts' receivable system. |
|---|---|---|
| | XML Tag | <RmtInf> |
| | Occurrences | [0..1] |

**Unstructured**

| CdtTrfTxInf<br>+RmtInf<br>++Ustrd | ISO Definition | Information supplied to enable the matching/reconciliation of an entry with the items that the payment is intended to settle, such as commercial invoices in an accounts' receivable system, in an unstructured form. |
|---|---|---|
| | XML Tag | <Ustrd> |
| | Occurrences | [0..1] |
| | Format: | Maximum 140 characters. |
| | Pattern / Restrictions: | - pattern: [0-9a-zA-Z/\-\?:\(\)\.\n\r,'\+ ]{1,140}<br>- minLength: 1<br>- maxLength: 140 |
| | Example | <Ustrd>Unstructured Information</Ustrd> |

**Supplementary Data**

| CdtTrfTxInf<br>+SplmtryData | ISO Definition | Additional information that cannot be captured in the structured elements and/or any other specific block. |
|---|---|---|
| | XML Tag | <SplmtryData> |
| | Occurrences | [0..n] |

| | Rules | This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element. |
|---|---|---|

| **Place And Name** | | |
|---|---|---|
| CdtTrfTxInf<br>+SplmtryData<br>++PlcAndNm | **ISO Definition** | Unambiguous reference to the location where the supplementary data must be inserted in the message instance.<br>In the case of XML, this is expressed by a valid XPath. |
| | **XML Tag** | <PlcAndNm> |
| | **Occurrences** | [1..1] |
| | **Rules** | Maximum 350 characters allowed. |

| **Envelope** | | |
|---|---|---|
| CdtTrfTxInf<br>+ SplmtryData<br>++ Envlp | **ISO Definition** | Technical element wrapping the supplementary data. |
| | **XML Tag** | <Envlp> |
| | **Occurrences** | [1..1] |

## B. ISO 20022/PACS.002.001.05 XML Sample

**Example 1:**

```
<?xml version="1.0" encoding="latin1"?>
<DataPDU
 xmlns="urn:swift:saa:xsd:saa.2.0">
 <Revision>2.0.5</Revision>
 <Body>
 <AppHdr
  xmlns="urn:iso:std:iso:20022:tech:xsd:head.001.001.01">
  <Fr>
  <FIId>
   <FinInstnId>
   <BICFI>FI_SWIFT2</BICFI>
   </FinInstnId>
  </FIId>
  </Fr>
  <To>
  <FIId>
   <FinInstnId>
   <BICFI>IDTP</BICFI>
   </FinInstnId>
  </FIId>
  </To>
  <BizMsgIdr>MSG_334873223482738299</BizMsgIdr>
  <MsgDefIdr>pacs.002.001.05</MsgDefIdr>
  <BizSvc>IDTP</BizSvc>
  <CreDt>2020-08-12T14:38:12Z</CreDt>
  <Sgntr>
          <ds:Signature Id="_beddd7de-c63a-43a6-9b62-f69290939eb6"
          xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
          <ds:SignedInfo>
          <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/
          10/xml -exc-c14n#"/>
          <ds:SignatureMethod Algorithm="http: /
          /www.w3.org/2001/04/xmldsig-more#rsa-
          sha256"/>
          <ds:Reference URI="#_98742d60-2afc -4fa7-a731-828756ce47b1">
          <ds:Transforms>
          <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-
          cl4n#"/>
          </ds:Transforms >
          <ds:DigestMethod Algorithm="http:
          //www.w3.org/2001/04/xmlenc#sha256" />
          <ds:DigestValue>vB/
          xxu+qkEVUH5i9uVdBHOXOp6+XDsAn/iHxH+UiMGo=</ds :DigestValue>
          </ds:Reference>
          <ds: Reference URI="">
          <ds:Transforms>
          <ds: Transform
          Algorithm="http://www.w3.org/2000/09/xmldsig#tenveloped-
          signature" />
          <ds: Transform Algorithm="http://www.w3.org/2001/10/xml-exc-
          cl4n#"/>
          </ds: Transforms >
          <ds:DigestMethod Algorithm="http://www.
          w3.org/2001/04/xmlenc#sha256" />
```

```
                    <ds:DigestValue>hWGkHPu5IMYxe4KF
                    YyaMOFWYqOw2pi+BYnYvHEwm/Z8=</ds:DigestValue>
                    </ds:Reference>
                    <ds:Reference>
                    <ds:Transforms>
                    <ds: Transform Algorithm="http://www.w3.org/2001/10/xml-exc-
                    c14n#"/>
                    </ds:Transforms >
                    <ds:DigestMethod
                    Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
                    <ds:DigestValue
                    >10eHeNdJM1v177MOHzFsmP0IBMYvdPXVuRcR77hAgUg=</ds :DigestValue>
                    </ds:Reference>
                    </ds:SignedInfo>
                    <ds:SignatureValue>H11itYLicuuSdrRrzuSCFxk5G2Z3LDOOnEPCrXkfwiuS
                    dyOzA3P2r6Ale1cYidueY8niolEvcZcvKVS4zt6bbHvSRRabinU+J£13x4vTHSg
                    SWERY1OLPErRbTNcn9r3Nb/hxeBj6Rztv3vR+gW+JY21y3pkTTADSOINOIKkcau
                    arcwQGEMAWM3UjK315796Ldi7ddvHohgW1ighkzdidBfcONatYnIXZew/770UnB
                    ecimz4yqJvCo1SritasC@LHFdbeudgBivJtQ/CD1/So9Mkrw6VNUXohv5L3i33
                    3fNI9geM1oC/ZIGL1HLfOsyJ7GokRsypd 1YWFQvNNhu1OupanRA==
                    </ds:SignatureValue>
                    <ds:KeyInfo Id="_98742d60-2afc -4fa7-a731-828756ce47b1">
                    <ds:X509Data>
                    <ds:X509Certificate>MIID0DCCArigAwIBAgIBBTANBgkqghkiG9WOBAQsFAD
                    BMMQswCQYDVQQGEWIGUEcMBoGAIUECewTS2V5bmV4G1zLUSw2W5UcnV2dDEFMBO
                    GALUEAnwWT381bRydXNOIFR1¢3QZ0CEgUGhBMjAeFwOxitjExMTUwMDU3MzVaFw
                    OxNDEXMTUWMOU3MzVaMFexCZAJBgNVBAYTAK]UMQ8wDQYDVQQKDAZPIFRFU1QXE
                    JAQBENVBASMCUSVIFRFUIQgMjESMBAGAIUECww)T2UgVEVTVCAXxMRAWDgYDVQQ
                    DDAdUZXNGIENO:MIIBI5ANBgkqhkiGowOBAQEFAAOCAQSAMIIBCeKCAQEAtnB/1
                    12FOScVqDI12Q)RsZZh9TK7ANLnxxnR2EP1hRP7GRanksgyYMIECiL/ANnTEhft
                    Qe7AGSaWeX7x05GHIGd72NwnFQazVjHyaTBXSxaxUoG4kc1F5QaOOvvxUAHTtM2
                    qYNjpgFyKkTGbASD7IgS36zTRYauE40kGhU2/pv1nG3jIKAU40f90gkQe4+hw2I
                    xkNO'ImRaxPunkYoZWVn3geL/QQ1H/yggkBdpLG2qmTUm09¢vyVdycABdl+SRSG
                    NyR42xVRcbS6rv150cbnbsrvkcbms1Gdo/qnKkvxcthXstt3TqGq+kZ1CIHDoJs
                    F8ZDQKuljXMEgsurt/OHQIDAQAO4GuiGtMBGGA1UdDgQUBBRsJehOf8/tO6YtFO
                    4hEYcc1COz0TAFBgNVHSMEGDANgBRRcvObAGFzbq1TCZOMpE7ji+fpTARBglgh
                    kgBhvhCAQEEBAMCB4AWOegYDVROPAQH/BAQDASbAMEBGA1UdHwRBMDGwPaA70Dm
                    GN2h@dHAGLy9wa210ZXNOLm9wZW5GcnVzdC5jb2GvT3B]b1RydXN@X1R1c3RFQO
                    FFUGHBMI5jcmmwOQYIKOZThvcNAQELBQADggEBAGMAU3YO2Z9Ff1FLX/DHVcwST
                    SotZ]aYtJindYcEtvhjY24vcXJzwbfopVu91XZFuxXjG12SSyksK4sRHFUVPQdr
                    yAMGZMUW+0gjVFjupV54jr6vkaEL2té6oyE52CHqvvlHyLJz5CIW6jDEm@AZGNI
                    ZlwdRr4afud9zM21m4X5J1Ts2GxY/JHO2F1155QJuVn7NSFFxBPxRsIKYNZ+27k
                    cZNTSL9ZDWYXob5PUBVEOFXMhWPJtngzBOISNGQDVQIjtnbecsSgDchRMVy4JOU
                    DBUK7RAIpG4aR/5RKaMkO@6DLHXJteXfmsKfLyDq3H8B+eHefJIWCeYMnvqk755
                    EVNE=</ds:X509Certificate>
                    </ds:X509Data>
                    </ds:KeyInfo>
                    </ds:Signature>
                    </Sgntr>
 </AppHdr>
 <Document
  xmlns="urn:iso:std:iso:20022:tech:xsd:pacs.002.001.05">
  <FIToFIPmtStsRpt>
  <GrpHdr>
   <MsgId>MSG_444873223482738299</MsgId>
   <CreDtTm>2020-08-12T14:38:12</CreDtTm>
  </GrpHdr>
  <OrgnlGrpInfAndSts>
   <OrgnlMsgId>MSG_334873223482738299</OrgnlMsgId>
   <OrgnlMsgNmId>pacs.008.001.06</OrgnlMsgNmId>
   <OrgnlCreDtTm>2020-08-12T14:38:12</OrgnlCreDtTm>
```

```
    <GrpSts>ACSP</GrpSts>
    <StsRsnInf>
                            <Rsn>
     <Prtry></Prtry>
    </Rsn>
    </StsRsnInf>
  </OrgnlGrpInfAndSts>
                        <TxInfAndSts>
                    <OrgnlInstrId>MSG_334873223482738299</OrgnlInstrId>
                    <OrgnlEndToEndId>TRAN_34873223482738299</OrgnlEndToEndId>
    <OrgnlTxId>TRAN_34873223482738299</OrgnlTxId>
    <TxSts>ACSP</TxSts>
    <StsRsnInf>
    <Rsn>
     <Prtry></Prtry>
    </Rsn>
    </StsRsnInf>
    <InstgAgt>
    <FinInstnId>
     <BICFI>FI_SWIFT1</BICFI>
    </FinInstnId>
    </InstgAgt>
    <OrgnlTxRef>
    <IntrBkSttlmDt>2020-08-12</IntrBkSttlmDt>
    <IntrBkSttlmAmt Ccy="BDT">1000.00</IntrBkSttlmAmt>
    </OrgnlTxRef>
  </TxInfAndSts>
                        <SplmtryData>
    <PlcAndNm />
    <Envlp>
                            <Tx_Tracking_Info>
                            <RefNo_SendingPSP></RefNo_SendingPSP>
                            <RefNo_SendingBank></RefNo_SendingBank>
                            <RefNo_ReceivingBank>98765432</RefNo_ReceivingBank>
                            <RefNo_ReceivingPSP>98765432</RefNo_ReceivingPSP>
                            <RefNo_IDTP>1234567890</RefNo_IDTP>
    </Tx_Tracking_Info>
    </Envlp>
  </SplmtryData>
  </FIToFIPmtStsRpt>
 </Document>
 </Body>
</DataPDU>
```

## Example 2:

```
<?xml version="1.0" encoding="latin1"?>
<DataPDU
 xmlns="urn:swift:saa:xsd:saa.2.0">
 <Revision>2.0.5</Revision>
 <Body>
 <AppHdr
 xmlns="urn:iso:std:iso:20022:tech:xsd:head.001.001.01">
  <Fr>
  <FIId>
   <FinInstnId>
   <BICFI>FI_SWIFT2</BICFI>
   </FinInstnId>
  </FIId>
  </Fr>
```

```
<To>
<FIId>
 <FinInstnId>
 <BICFI>IDTP</BICFI>
 </FinInstnId>
</FIId>
</To>
<BizMsgIdr>MSG_334873223482738299</BizMsgIdr>
<MsgDefIdr>pacs.002.001.05</MsgDefIdr>
<BizSvc>RTGS</BizSvc>
<CreDt>2019-01-13T12:36:58Z</CreDt>
          <Sgntr>
          <ds:Signature Id="_beddd7de-c63a-43a6-9b62-f69290939eb6"
          xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
          <ds:SignedInfo>
          <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/
          10/xml -exc-c14n#"/>
          <ds:SignatureMethod Algorithm="http: /
          /www.w3.org/2001/04/xmldsig-more#rsa-
          sha256"/>
          <ds:Reference URI="#_98742d60-2afc -4fa7-a731-828756ce47b1">
          <ds:Transforms>
          <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-
          cl4n#"/>
          </ds:Transforms>
          <ds:DigestMethod Algorithm="http:
          //www.w3.org/2001/04/xmlenc#sha256" />
          <ds:DigestValue>vB/
          xxu+qkEVUH5i9uVdBHOXOp6+XDsAn/iHxH+UiMGo=</ds :DigestValue>
          </ds:Reference>
          <ds: Reference URI="">
          <ds:Transforms>
          <ds: Transform
          Algorithm="http://www.w3.org/2000/09/xmldsig#tenveloped-
          signature" />
          <ds: Transform Algorithm="http://www.w3.org/2001/10/xml-exc-
          cl4n#"/>
          </ds:Transforms >
          <ds:DigestMethod Algorithm="http: //www.
          w3.org/2001/04/xmlenc#sha256" />
          <ds:DigestValue>hWGkHPu5IMYxe4KF
          YyaMOFWYqOw2pi+BYnYvHEwm/Z8=</ds:DigestValue>
          </ds:Reference>
          <ds:Reference>
          <ds:Transforms>
          <ds: Transform Algorithm="http://www.w3.org/2001/10/xml-exc-
          c14n#"/>
          </ds:Transforms >
          <ds:DigestMethod
          Algorithm="http://www.w3.org/2001/04/xmlenc#sha256" />
          <ds:DigestValue
          >10eHeNdJM1v177MOHzFsmP0IBMYvdPXVuRcR77hAgUg=</ds :DigestValue>
          </ds:Reference>
          </ds:SignedInfo>
          <ds:SignatureValue>H11itYLicuuSdrRrzuSCFxk5G2Z3LDOOnEPCrXkfwiuS
          dyOzA3P2r6Ale1cYidueY8niolEvcZcvKVS4zt6bbHvSRRabinU+J£13x4vTHSg
          SWERY1OLPErRbTNcn9r3Nb/hxeBj6Rztv3vR+gW+JY21y3pkTTADSOINOIKkcau
          arcwQGEMAWM3UjK315796Ldi7ddvHohgW1ighkzdidBfcONatYnIXZew/770UnB
          ecimz4yqJvCo1SritasC@LHFdbeudgBivJtQ/CD1/So9Mkrw6VNUXohv5L3i33
          3fNI9geM1oC/ZIGL1HLfOsyJ7GokRsypd 1YWFQvNNhu1OupanRA==
          </ds:SignatureValue>
```

```
                <ds:KeyInfo Id="_98742d60-2afc -4fa7-a731-828756ce47b1">
                <ds:X509Data>
                <ds:X509Certificate>MIID0DCCArigAwIBAgIBBTANBgkqghkiG9WOBAQsFAD
                BMMQswCQYDVQQGEWIGUECewTS2V5bmV4G1zLUSw2W5UcnV2dDEFMBO
                GALUEAnwWT381bRydXNOIFR1¢3QZ0CEgUGhBMjAeFwOxitjExMTUwMDU3MzVaFw
                OxNDEXMTUWMOU3MzVaMFexCZAJBgNVBAYTAK]UMQ8wDQYDVQQKDAZPIFRFU1QXE
                JAQBENVBASMCUSVIFRFUIQgMjESMBAGAIUECww)T2UgVEVTVCAXxMRAWDgYDVQQ
                DDAdUZXNGIENO:MIIBI5ANBgkqhkiGowOBAQEFAAOCAQSAMIIBCeKCAQEAtnB/1
                12FOScVqDI12Q)RsZZh9TK7ANLnxxnR2EP1hRP7GRanksgyYMIECiL/ANnTEhft
                Qe7AGSaWeX7x05GHIGd72NwnFQazVjHyaTBXSxaxUoG4kc1F5QaOOvvxUAHTtM2
                qYNjpgFyKkTGbASD7IgS36zTRYauE40kGhU2/pv1nG3jIKAU40f90gkQe4+hw2I
                xkNO'ImRaxPunkYoZWVn3geL/QQ1H/yggkBdpLG2qmTUm09¢vyVdycABdl+SRSG
                NyR42xVRcbS6rv150cbnbsrvkcbms1Gdo/qnKkvxcthXstt3TqGq+kZ1CIHDoJs
                F8ZDQKuljXMEgsurt/OHQIDAQAO4GuiGtMBGGA1UdDgQUBBRsJehOf8/tO6YtFO
                4hEYcc1COz0TAFBgNVHSMEGDANgBRRcvObAGFfzbq1TCZOMpE7ji+fpTARBglgh
                kgBhvhCAQEEBAMCB4AWOegYDVROPAQH/BAQDASbAMEBGA1UdHwRBMDGwPaA70Dm
                GN2h@dHAGLy9wa210ZXNOLm9wZW5GcnVzdC5jb2GvT3B]b1RydXN@X1R1c3RFQO
                FFUGHBMI5jcmmwOQYIKOZThvcNAQELBQADggEBAGMAU3YO2Z9Ff1FLX/DHVcwST
                SotZ]aYtJindYcEtvhjY24vcXJzwbfopVu91XZFuxXjG12SSyksK4sRHFUVPQdr
                yAMGZMUW+0gjVFjupV54jr6vkaEL2té6oyE52CHqvvlHyLJz5CIW6jDEm@AZGNI
                ZlwdRr4afud9zM21m4X5J1Ts2GxY/JHO2F1155QJuVn7NSFFxBPxRsIKYNZ+27k
                cZNTSL9ZDWYXob5PUBVEOFXMhWPJtngzBOISNGQDVQIjtnbecsSgDchRMVy4JOU
                DBUK7RAIpG4aR/5RKaMkO@6DLHXJteXfmsKfLyDq3H8B+eHefJIWCeYMnvqk755
                EVNE=</ds:X509Certificate>
                </ds:X509Data>
                </ds:KeyInfo>
                </ds:Signature>
                </Sgntr>
        </AppHdr>
        <Document
         xmlns="urn:iso:std:iso:20022:tech:xsd:pacs.002.001.05">
         <FIToFIPmtStsRpt>
         <GrpHdr>
          <MsgId>MSG_3348732234827382399</MsgId>
          <CreDtTm>2019-01-13T15:36:58</CreDtTm>
         </GrpHdr>
         <OrgnlGrpInfAndSts>
          <OrgnlMsgId>MSG_3348732234827382399</OrgnlMsgId>
          <OrgnlMsgNmId>pacs.008.001.06</OrgnlMsgNmId>
          <OrgnlCreDtTm>2019-01-12T16:05:30</OrgnlCreDtTm>
          <GrpSts>RJCT</GrpSts>
          <StsRsnInf>
          <Rsn>
           <Prtry>STAT/ERRP</Prtry>
                        </Rsn>
          <AddtlInf>EP130 Participant is in default</AddtlInf>
          </StsRsnInf>
         </OrgnlGrpInfAndSts>
         <TxInfAndSts>
          <OrgnlInstrId>MSG_3348732234827382399</OrgnlInstrId>
                    <OrgnlEndToEndId>TRAN_34873223482738299</OrgnlEndToEndId>
          <OrgnlTxId>TRAN_34873223482738299</OrgnlTxId>
          <TxSts>RJCT</TxSts>
          <StsRsnInf>
          <Rsn>
           <Prtry>STAT/ERRP</Prtry>
          </Rsn>
          <AddtlInf>EP130 Participant is in default</AddtlInf>
          </StsRsnInf>
         </TxInfAndSts>
                    <SplmtryData>
```

```
    <PlcAndNm />
    <Envlp>
                        <Tx_Tracking_Info>
                        <RefNo_SendingPSP>98765432</RefNo_SendingPSP>
                        <RefNo_SendingBank>98765432</RefNo_SendingBank>
                        <RefNo_ReceivingBank></RefNo_ReceivingBank>
                        <RefNo_ReceivingPSP></RefNo_ReceivingPSP>
                        <RefNo_IDTP>1234567890</RefNo_IDTP>
    </Tx_Tracking_Info>
    </Envlp>
  </SplmtryData>
  </FIToFIPmtStsRpt>
 </Document>
 </Body>
</DataPDU>
```

**Detailed Message Description:**

| Group Header | | |
|---|---|---|
| GrpHdr | **ISO Definition** | Set of characteristics shared by all individual transactions included in the status report message. |
| | **XML Tag** | <GrpHdr> |
| | **Occurrences** | [1..1] |

| Message Identification | | |
|---|---|---|
| GrpHdr +MsgId | **ISO Definition** | Point to point reference, as assigned by the instructing party, and sent to the next party in the chain to unambiguously identify the message. Usage: The instructing party has to make sure that MessageIdentification is unique per instructed party for a pre-agreed period. |
| | **XML Tag** | <MsgId> |
| | **IDTP Rules** | Maximum 22 characters allowed. |
| | **Occurrences** | [1..1] |

| Creation Date Time | | |
|---|---|---|
| GrpHdr +CreDtTm | **ISO Definition** | Date and time at which the message was created. |
| | **XML Tag** | <CreDtTm> |
| | **Type** | ISODateTime |
| | **Occurrences** | [1..1] |
| | **Rule** | Time up to seconds only. Local time format (YYYY-MM-DDThh:mm:ss). |

**Instructing Agent**

| GrpHdr +InstgAgt | ISO Definition | Agent that instructs the next party in the chain to carry out the (set of) instruction(s). |
| --- | --- | --- |
| | XML Tag | <InstgAgt> |
| | Occurrences | [0..1] |

**Financial Institution Identification**

| GrpHdr + InstgAgt ++ FinInstnId | ISO Definition | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| --- | --- | --- |
| | XML Tag | <FinInstnId> |
| | Occurrences | [1..1] |

**BICFI**

| GrpHdr + InstgAgt ++ FinInstnId +++ BICFI | ISO Definition | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| --- | --- | --- |
| | XML Tag | <BICFI> |
| | Occurrences | [1..1] |

**Instructed Agent**

| GrpHdr +InstdAgt | ISO Definition | Agent that is instructed by the previous party in the chain to carry out the (set of) instruction(s). |
| --- | --- | --- |
| | XML Tag | <InstdAgt> |
| | Type | BranchAndFinancialInstitutionIdentification5 |
| | Occurrences | [0..1] |

**Financial Institution Identification**

| GrpHdr<br>+ InstdAgt<br>++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
|---|---|---|
| | **XML Tag** | <FinInstnId> |
| | **Type** | FinancialInstitutionIdentification8 |
| | **Occurrences** | [1..1] |

**Original Message Identification**

| OrgnlGrpInfAndSts<br>+ OrgnlMsgId | **ISO Definition** | Point to point reference, as assigned by the original instructing party, to unambiguously identify the original message. |
|---|---|---|
| | **XML Tag** | <OrgnlMsgId> |
| | **Type** | Max35Text |
| | **Occurrences** | [1..1] |
| GrpHdr<br>+ InstdAgt<br>++ FinInstnId<br>+++ BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| | **XML Tag** | <BICFI> |
| | **Type** | BICFIIdentifier |
| | **Occurrences** | [1..1] |

**Original Group Information and Status**

| OrgnlGrpInfAndSts | **ISO Definition** | Original group information concerning the group of transactions, to which the status report message refers to. |
|---|---|---|
| | **XML Tag** | <OrgnlGrpInfAndSts> |

| | **Occurrences** | [1..1] |
|---|---|---|

**Original Message Name Identification**

| OrgnlGrpInfAndSts + OrgnlMsgNmId | **ISO Definition** | Specifies the original message name identifier to which the message refers. |
|---|---|---|
| | **XML Tag** | <OrgnlMsgNmId> |
| | **Type** | Max35Text |
| | **Occurrences** | [1..1] |
| | **IDTP Rules** | Use pacs.008.001.06 as value. |
| | **Example** | <OrgnlMsgNmId>pacs.008.001.06</OrgnlMsgNmId> |

**Original Creation Date Time**

| OrgnlGrpInfAndSts + OrgnlCreDtTm | **ISO Definition** | Date and time at which the original message was created. |
|---|---|---|
| | **XML Tag** | <OrgnlCreDtTm> |
| | **Type** | ISODateTime |
| | **Occurrences** | [0..1] |

**Group Status**

| OrgnlGrpInfAndSts + GrpSts | **ISO Definition** | Specifies the status of a group of transactions. |
|---|---|---|
| | **XML Tag** | <GrpSts> |
| | **Occurrences** | [1..1] |

**Group status codes:**

| **Name** | **Code** | **Details** |
|---|---|---|
| Rejected [RJCT] | RJCT | Payment initiation or individual transaction included in the payment initiation has been rejected. |

| Pending [PDNG] | PDNG | Payment initiation or individual transaction included in the payment initiation is pending. Further checks and status update will be performed. |
|---|---|---|
| Accepted Customer Profile [ACCP] | ACCP | Preceding check of technical validation was successful. Customer profile check was also successful. |
| Accepted Settlement In Process [ACSP] | ACSP | All preceding checks such as technical validation and customer profile were successful and therefore the payment initiation has been accepted for execution. |
| Accepted Settlement Completed [ACSC] | ACSC | Settlement on the debtor's account has been completed. Usage: this can be used by the first agent to report to the debtor that the transaction has been completed. Warning: this status is provided for transaction status reasons, not for financial information. It can only be used after bilateral agreement |

**Status Reason Information**

| OrgnlGrpInfAndSts +StsRsnInf | **ISO Definition** | Provides detailed information on the status reason. |
|---|---|---|
| | **XML Tag** | <StsRsnInf> |
| | **Occurrences** | [0..n] |
| | **Rule** | Repeat only once |

**Reason**

| | **ISO Definition** | Specifies the reason for the status report. |
|---|---|---|

| OrgnlGrpInfAndSts +StsRsnInf ++Rsn | **XML Tag** | <Rsn> |
|---|---|---|
| | **Occurrences** | [1..1] |

**Proprietary**

| OrgnlGrpInfAndSts<br>+ StsRsnInf<br>++Rsn<br>+++Prtry | **ISO Definition** | Proprietary status codes |
|---|---|---|
| | **XML Tag** | <Prtry> |
| | **Occurrences** | [1..1] |

**Transaction Information and Status**

| TxInfAndSts | **ISO Definition** | Information concerning the original transactions, to which the status report message refers. |
|---|---|---|
| | **XML Tag** | <TxInfAndSts> |
| | **Occurrences** | [0..n] |
| | **Rule** | Multiple occurrences, limited to a maximum of the number of transactions in the pacs.003, pacs.004, pacs.007, pacs.008, pacs.009 or camt.056 message to which it is in response. |

**Original Instruction Identification**

| TxInfAndSts<br>+OrgnlInstrId | **ISO Definition** | Unique identification, as assigned by the original instructing party for the original instructed party, to unambiguously identify the original instruction. |
|---|---|---|
| | **XML Tag** | <OrgnlInstrId> |
| | **Occurrences** | [1..1] |
| | **Rule** | From the same element of the original message to which the pacs.002 is in response. Maximum 22 characters allowed. |

**Original End to End Identification**

| TxInfAndSts<br>+OrgnlEndToEndId | **ISO Definition** | Unique identification, as assigned by the original initiating party, to unambiguously identify the original transaction. |
|---|---|---|
| | **XML Tag** | <OrgnlEndToEndId> |

| | **Occurrences** | [1..1] |
|---|---|---|
| | **Rule** | From the same element of the original message to which the pacs.002 is in response. Maximum 22 characters allowed. |

| **Original Transaction Identification** | | |
|---|---|---|
| TxInfAndSts<br>+ OrgnlTxId | **ISO Definition** | Unique identification, as assigned by the original first instructing agent, to unambiguously identify the transaction. |
| | **XML Tag** | <OrgnlTxId> |
| | **Occurrences** | [1..1] |
| | **Rule** | From the same element of the original message to which the pacs.002 is in response. Maximum 22 characters allowed. |

| **Transaction Status** | | |
|---|---|---|
| TxInfAndSts<br>+ TxSts | **ISO Definition** | Specifies the status of a transaction, in a coded form. |
| | **XML Tag** | <TxSts> |
| | **Occurrences** | [1..1] |

**Transaction status codes:**

| Name | Code | Details |
|---|---|---|
| Rejected [RJCT] | RJCT | Payment initiation or individual transaction included in the payment initiation has been rejected. |
| Pending [PDNG] | PDNG | Payment initiation or individual transaction included in the payment initiation is pending. Further checks and status update will be performed. |

| Accepted Customer Profile [ACCP] | ACCP | Preceding check of technical validation was successful. Customer profile check was also successful. |
|---|---|---|
| Accepted Settlement In Process [ACSP] | ACSP | All preceding checks such as technical validation and customer profile were successful and therefore the payment initiation has been accepted for execution. |
| Accepted Settlement Completed [ACSC] | ACSC | Settlement on the debtor's account has been completed.<br><br>Usage: this can be used by the first agent to report to the debtor that the transaction has been completed. Warning : this status is provided for transaction status reasons, not for financial information. It can only be used after bilateral agreement |

| **Status Reason Information** | | |
|---|---|---|
| TxInfAndSts<br> +StsRsnInf | **ISO Definition** | Provides detailed information on the status reason. |
| | **XML Tag** | <StsRsnInf> |
| | **Occurrences** | [0..n] |

| **Reason** | | |
|---|---|---|
| TxInfAndSts<br>+ StsRsnInf<br>++ Rsn | **ISO Definition** | Specifies the reason for the status report. |
| | **XML Tag** | <Rsn> |
| | **Occurrences** | [0..1] |

| **Proprietary** | | |
|---|---|---|
| TxInfAndSts<br>+ StsRsnInf<br>++ Rsn<br>+++ Prtry | **ISO Definition** | Reason for the status, in a proprietary form.. |
| | **XML Tag** | <Prtry> |
| | **Type** | Max35Text |

| | **Occurrences** | [1..1] |
|---|---|---|

**Acceptance Date Time**

| TxInfAndSts +AccptncDtTm | **ISO Definition** | Point in time when the payment order from the initiating party meets the processing conditions of the account servicing agent. This means that the account servicing agent has received the payment order and has applied checks such as authorisation, availability of funds. |
|---|---|---|
| | **XML Tag** | <AccptncDtTm> |
| | **Type** | ISODateTime |
| | **Occurrences** | [0..1] |

**Instructing Agent**

| TxInfAndSts +InstgAgt | **ISO Definition** | Agent that instructs the next party in the chain to carry out the (set of) instruction(s).<br><br>Usage: The instructing agent is the party sending the status message and not the party that sent the original instruction that is being reported on. |
|---|---|---|
| | **XML Tag** | <InstgAgt> |
| | **Occurrences** | 0..1 |

**Financial Institution Identification**

| TxInfAndSts +InstgAgt ++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
|---|---|---|
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

**BICFI**

| TxInfAndSts +InstgAgt ++FinInstnId +++BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
|---|---|---|
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

**Instructed Agent**

| TxInfAndSts +InstdAgt | **ISO Definition** | Agent that is instructed by the previous party in the chain to carry out the (set of) instruction(s). |
|---|---|---|
| | **XML Tag** | <InstdAgt> |
| | **Occurrences** | [0..1] |
| | **Rule** | From the instructing agent of the original message to which the pacs.002 is in response. |

**Financial Institution Identification**

| TxInfAndSts +InstdAgt ++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
|---|---|---|
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

**BICFI**

| TxInfAndSts +InstdAgt ++FinInstnId +++BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
|---|---|---|
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

| Original Transaction Reference | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef | **ISO Definition** | Key elements used to identify the original transaction that is being referred to. |
| | **XML Tag** | <OrgnlTxRef> |
| | **Occurrences** | [0..1] |

| Interbank Settlement Amount | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef<br>++IntrBkSttlmAmt | **ISO Definition** | Amount of money moved between the instructing agent and the instructed agent. |
| | **XML Tag** | <IntrBkSttlmAmt> |
| | **Type** | ActiveOrHistoricCurrencyAndAmount |
| | **Occurrences** | [0..1] |
| | **Xml Attribute** | Currency |

| Interbank Settlement Date | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef<br>++IntrBkSttlmDt | **ISO Definition** | Date on which the amount of money ceases to be available to the agent that owes it and when the amount of money becomes available to the agent to which it is due. |
| | **XML Tag** | <IntrBkSttlmDt> |
| | **Type** | ISODate |
| | **Occurrences** | [0..1] |

| Payment Type Information | | |
| --- | --- | --- |
| TxInfAndSts | **ISO Definition** | Set of elements used to further specify the type of transaction. |
| +OrgnlTxRef<br>++PmtTpInf | **XML Tag** | <PmtTpInf> |
| | **Occurrences** | [0..1] |

| Clearing Channel | | |
|---|---|---|
| TxInfAndSts<br>+OrgnlTxRef<br>++PmtTpInf<br>+++ClrChanl | **ISO Definition** | Specifies the clearing channel to be used to process the payment instruction. |
| | **XML Tag** | <ClrChanl> |
| | **Occurrences** | [0..1] |

| Service Level | | |
|---|---|---|
| TxInfAndSts<br>+OrgnlTxRef<br>++PmtTpInf<br>+++SvcLvl | **ISO Definition** | Agreement under which or rules under which the transaction should be processed. |
| | **XML Tag** | <SvcLvl> |
| | **Occurrences** | [0..1] |

| Proprietary | | |
|---|---|---|
| TxInfAndSts<br>+OrgnlTxRef<br>++PmtTpInf<br>+++SvcLvl<br>++++ Prtry | **ISO Definition** | Specifies a pre-agreed service or level of service between the parties, as a proprietary code. |
| | **XML Tag** | <Prtry> |
| | **Type** | Max35Text |
| | **Occurrences** | [1..1] |

| Local Instrument | | |
|---|---|---|
| TxInfAndSts<br>+ OrgnlTxRef<br>++ PmtTpInf<br>+++ LclInstrm | **ISO Definition** | User community specific instrument.<br><br>Usage: This element is used to specify a local instrument, local clearing option and/or further qualify the service or service level. |
| | **XML Tag** | <LclInstrm> |
| | **Type** | LocalInstrument2Choice |
| | **Occurrences** | [0..1] |

**Proprietary**

| TxInfAndSts<br>+ OrgnlTxRef<br>++ PmtTpInf<br>+++ LclInstrm<br>++++ Prtry | **ISO Definition** | Specifies the local instrument, as a proprietary code. |
|---|---|---|
| | **XML Tag** | \<Prtry> |
| | **Type** | Max35Text |
| | **Occurrences** | [1..1] |

**Category Purpose**

| TxInfAndSts<br>+OrgnlTxRef<br>++PmtTpInf<br>+++CtgyPurp | **ISO Definition** | Specifies the high-level purpose of the instruction based on a set of pre-defined categories.<br><br>Usage: This is used by the initiating party to provide information concerning the processing of the payment. It is likely to trigger special processing by any of the agents involved in the payment chain. |
|---|---|---|
| | **XML Tag** | \<CtgyPurp> |
| | **Type** | CategoryPurpose1Choice |
| | **Occurrences** | [0..1] |

**Proprietary**

| TxInfAndSts<br>+OrgnlTxRef<br>++PmtTpInf<br>+++CtgyPurp<br>++++Prtry | **ISO Definition** | Category purpose, in a proprietary form. |
|---|---|---|
| | **XML Tag** | \<Prtry> |
| | **Type** | Max35Text |
| | **Occurrences** | [1..1] |

**Remittance Information**

| TxInfAndSts<br>+OrgnlTxRef<br>++RmtInf | **ISO Definition** | Information supplied to enable the matching of an entry with the items that the transfer is intended to settle, such as commercial invoices in an accounts' receivable system. |
|---|---|---|

| | XML Tag | <RmtInf> |
|---|---|---|
| | Occurrences | [0..1] |

**Unstructured**

| | | |
|---|---|---|
| TxInfAndSts<br>+OrgnlTxRef<br>++RmtInf<br>++Ustrd | **ISO Definition** | Information supplied to enable the matching/reconciliation of an entry with the items that the payment is intended to settle, such as commercial invoices in an accounts' receivable system, in an unstructured form. |
| | **XML Tag** | <Ustrd> |
| | **Type** | Max140Text |
| | **Occurrences** | [1..1] |

**Debtor**

| | | |
|---|---|---|
| TxInfAndSts<br>+OrgnlTxRef<br>++Dbtr | **ISO Definition** | Party that owes an amount of money to the (ultimate) creditor. |
| | **XML Tag** | <Dbtr> |
| | **Occurrences** | [0..1] |

**Name**

| | | |
|---|---|---|
| TxInfAndSts<br>+OrgnlTxRef<br>++Dbtr<br>+++Nm | **ISO Definition** | Name by which a party is known and which is usually used to identify that party. |
| | **XML Tag** | <Nm> |
| | **Occurrences** | [0..1] |
| | **Type** | Max140Text |
| | **IDTP Type** | RestrictedFINXMax70Text (based on string)<br><br>- pattern: [0-9a-zA-Z/\-\?:\(\)\.\n\r,'\+ ]{1,70}<br>- minLength: 1 |

| | | - maxLength: 70 |
|---|---|---|

**Debtor Account**

| TxInfAndSts +OrgnlTxRef ++DbtrAcct | **ISO Definition** | Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction. |
|---|---|---|
| | **XML Tag** | <DbtrAcct> |
| | **Occurrences** | [0..1] |

**Identification**

| TxInfAndSts +OrgnlTxRef ++DbtrAcct ++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Other**

| TxInfAndSts +OrgnlTxRef ++DbtrAcct ++Id +++Othr | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
|---|---|---|
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

**Identification**

| TxInfAndSts +OrgnlTxRef ++DbtrAcct ++Id +++Othr ++++ Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Type** | Max34Text |
| | **Occurrences** | [1..1] |

**Debtor Agent**

| TxInfAndSts<br>+OrgnlTxRef<br>++DbtrAgt | **ISO Definition** | Financial institution servicing an account for the debtor. |
|---|---|---|
| | **XML Tag** | <DbtrAgt> |
| | **Type** | BranchAndFinancialInstitutionIdentification5 |
| | **Occurrences** | [0..1] |

**Financial Institution Identification**

| TxInfAndSts<br>+OrgnlTxRef<br>++DbtrAgt<br>+++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
|---|---|---|
| | **XML Tag** | <FinInstnId> |
| | **Type** | FinancialInstitutionIdentification8 |
| | **Occurrences** | [1..1] |

**BICFI**

| TxInfAndSts<br>+OrgnlTxRef<br>++DbtrAgt<br>+++FinInstnId<br>++++BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
|---|---|---|
| | **XML Tag** | <BICFI> |
| | **Type** | BICFIIdentifier |
| | **Occurrences** | [1..1] |

**Branch Identification**

| TxInfAndSts<br>+OrgnlTxRef<br>++DbtrAgt<br>+++BranchId | **ISO Definition** | Identifies a specific branch of a financial institution. |
|---|---|---|
| | **XML Tag** | <BranchId> |
| | **Occurrences** | [0..1] |

**Identification**

| TxInfAndSts<br>+OrgnlTxRef<br>++DbtrAgt<br>+++BranchId<br>++++Id | **ISO Definition** | Unique and unambiguous identification of a branch of a financial institution. |
| --- | --- | --- |
| | **XML Tag** | <Id> |
| | **Type** | Max35Text |
| | **Occurrences** | [1..1] |

**Debtor Agent Account**

| TxInfAndSts<br>+OrgnlTxRef<br>++DbtrAgtAcct | **ISO Definition** | Unambiguous identification of the account of the debtor agent at its servicing agent in the payment chain. |
| --- | --- | --- |
| | **XML Tag** | <DbtrAgtAcct> |
| | **Occurrences** | [0..1] |

**Identification**

| TxInfAndSts<br>+OrgnlTxRef<br>++DbtrAgtAcct<br>+++Id | **ISO Definition** | Unique and unambiguous identification of a branch of a financial institution. |
| --- | --- | --- |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Other**

| TxInfAndSts<br>+OrgnlTxRef<br>++DbtrAgtAcct<br>+++Id<br>++++Othr | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
| --- | --- | --- |
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

**Identification**

| TxInfAndSts<br>+OrgnlTxRef | **ISO Definition** | Identification assigned by an institution. |
| --- | --- | --- |

| ++DbtrAgtAcct<br>+++Id<br>++++Othr<br>+++++Id | **XML Tag** | \<Id> |
| --- | --- | --- |
| | **Type** | Max34Text |
| | **Occurrences** | [1..1] |

| **Type** | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef<br>++DbtrAgtAcct<br>+++ Tp | **ISO Definition** | Specifies the nature, or use of the account. |
| | **XML Tag** | \<Tp> |
| | **Occurrences** | [0..1] |

| **Proprietary** | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef<br>++DbtrAgtAcct<br>+++Tp<br>++++Prtry | **ISO Definition** | Nature or use of the account in a proprietary form. |
| | **XML Tag** | \<Prtry> |
| | **Type** | Max35Text |
| | **Occurrences** | [1..1] |

| **Creditor Agent** | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef<br>++CdtrAgt | **ISO Definition** | Financial institution servicing an account for the creditor. |
| | **XML Tag** | \<CdtrAgt> |
| | **Occurrences** | [0..1] |

| **Financial Institution Identification** | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef<br>++CdtrAgt<br>+++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| | **XML Tag** | \<FinInstnId> |

|  | Occurrences | [1..1] |
|---|---|---|

**BICFI**

| TxInfAndSts +OrgnlTxRef ++CdtrAgt +++FinInstnId ++++BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362<br><br>Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
|---|---|---|
|  | **XML Tag** | <BICFI> |
|  | **Occurrences** | [0..1] |

**Branch Identification**

| TxInfAndSts +OrgnlTxRef ++CdtrAgt +++BranchId | **ISO Definition** | Identifies a specific branch of a financial institution. |
|---|---|---|
|  | **XML Tag** | <BranchId> |
|  | **Occurrences** | [0..1] |

**Identification**

| TxInfAndSts +OrgnlTxRef ++CdtrAgt +++BranchId ++++Id | **ISO Definition** | Unique and unambiguous identification of a branch of a financial institution. |
|---|---|---|
|  | **XML Tag** | <Id> |
|  | **Type** | Max35Text |
|  | **Occurrences** | [1..1] |

**Creditor Agent Account**

| TxInfAndSts +OrgnlTxRef ++CdtrAgtAcct | **ISO Definition** | Unambiguous identification of the account of the creditor agent at its servicing agent to which a credit entry will be made as a result of the payment transaction. |
|---|---|---|
|  | **XML Tag** | <CdtrAgtAcct> |
|  | **Occurrences** | [0..1] |

| **Identification** | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef<br>++CdtrAgtAcct<br>+++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
| | **XML Tag** | \<Id> |
| | **Occurrences** | [1..1] |

| **Other** | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef<br>++CdtrAgtAcct<br>+++Id<br>++++Othr | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
| | **XML Tag** | \<Othr> |
| | **Occurrences** | [1..1] |

| **Identification** | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef<br>++CdtrAgtAcct<br>+++Id<br>++++Othr<br>+++++Id | **ISO Definition** | Identification assigned by an institution. |
| | **XML Tag** | \<Id> |
| | **Type** | Max34Text |
| | **Occurrences** | [1..1] |

| **Type** | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef<br>++CdtrAgtAcct<br>+++Tp | **ISO Definition** | Specifies the nature, or use of the account. |
| | **XML Tag** | \<Tp> |
| | **Occurrences** | [0..1] |

| **Proprietary** | | |
| --- | --- | --- |
| TxInfAndSts<br>+OrgnlTxRef | **ISO Definition** | Nature or use of the account in a proprietary form. |

| ++CdtrAgtAcct +++Tp ++++Prtry | XML Tag | <Prtry> |
|---|---|---|
| | Type | Max35Text |
| | Occurrences | [1..1] |

**Creditor**

| TxInfAndSts +OrgnlTxRef ++Cdtr | ISO Definition | Party to which an amount of money is due. |
|---|---|---|
| | XML Tag | <Cdtr> |
| | Occurrences | [0..1] |

**Name**

| TxInfAndSts +OrgnlTxRef ++Cdtr +++Nm | ISO Definition | Name by which an agent is known and which is usually used to identify that agent. |
|---|---|---|
| | XML Tag | <Nm> |
| | Occurrences | [0..1] |
| | Type | Max140Text |
| | IDTP Type | Restricted FINXMax70Text (based on string) - pattern: [0-9a-zA-Z/\-\?:\(\)\.\n\r,'\+ ]{1,70} - minLength: 1 - maxLength: 70 |

**Creditor Account**

| TxInfAndSts +OrgnlTxRef ++CdtrAcct | ISO Definition | Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction. |
|---|---|---|
| | XML Tag | <CdtrAcct> |
| | Occurrences | [0..1] |

**Identification**

| TxInfAndSts +OrgnlTxRef ++CdtrAcct +++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Other**

| TxInfAndSts +OrgnlTxRef ++CdtrAcct +++Id ++++Othr | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
|---|---|---|
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

**Identification**

| TxInfAndSts +OrgnlTxRef ++CdtrAcct +++Id ++++Othr +++++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Type** | Max34Text |
| | **Occurrences** | [1..1] |

## C. ISO 20022/PAIN.013.001.06 XML Sample

```
<?xml version="1.0" encoding="utf-8"?>
<Document
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns="urn:iso:std:iso:20022:tech:xsd:pain.013.001.06">
    <CdtrPmtActvtnReq>
        <GrpHdr>
            <MsgId>MSG_334873223482738299</MsgId>
            <CreDtTm>2020-08-12T14:43:04</CreDtTm>
            <NbOfTxs>1</NbOfTxs>
            <InitgPty>
                <Id>
                    <OrgId>
                        <Othr>
                            <Id>ACC_0010201000327</Id>
                        </Othr>
                    </OrgId>
                </Id>
            </InitgPty>
            <Sgntr>
            <ds:Signature Id="_beddd7de-c63a-43a6-9b62-f69290939eb6"
            xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
            <ds:SignedInfo>
            <ds:CanonicalizationMethod
            Algorithm="http://www.w3.org/2001/ 10/xml -exc-
            c14n#"/>
            <ds:SignatureMethod Algorithm="http: /
            /www.w3.org/2001/04/xmldsig-
            more#rsa- sha256"/>
            <ds:Reference URI="#_98742d60-2afc -4fa7-a731-828756ce47b1">
            <ds:Transforms>
            <ds:Transform
            Algorithm="http://www.w3.org/2001/10/xml-exc-
            cl4n#"/>
            </ds:Transforms >
            <ds:DigestMethod Algorithm="http:
            //www.w3.org/2001/04/xmlenc#sha256" />
            <ds:DigestValue>vB/xxu+qkEVUH5i9uVdBHOXOp6+XDsAn/iHxH+U
            iMGo=</d s :DigestValue>
            </ds:Reference>
            <ds: Reference URI="">
            <ds:Transforms>
            <ds: Transform
            Algorithm="http://www.w3.org/2000/09/xmldsig#tenve
            loped- signature" />
            <ds: Transform
            Algorithm="http://www.w3.org/2001/10/xml-exc-
            cl4n#"/>
            </ds: Transforms >
            <ds:DigestMethod
            Algorithm="http://www.w3.org/2001/04/xmlenc#sh
            a256" />
            <ds:DigestValue>hWGkHPu5IMYxe4KF
            YyaMOFWYqOw2pi+BYnYvHEwm/Z8=</ds:DigestValue>
            </ds:Reference>
            <ds:Reference>
            <ds:Transforms>
            <ds: Transform
            Algorithm="http://www.w3.org/2001/10/xml-exc-
```

```
c14n#"/>
</ds:Transforms >
<ds:DigestMethod
Algorithm="http://www.w3.org/2001/04/xmlenc#sh
a256" />
<ds:DigestValue
>10eHeNdJM1v177MOHzFsmP0IBMYvdPXVuRcR77hAgUg=</ds
:DigestValue>
</ds:Reference>
</ds:SignedInfo>
<ds:SignatureValue>H11itYLicuuSdrRrzuSCFxk5G2Z3LDOOnEPCrXkfwiuS
dyOzA3P2r6Ale1cYidueY8niolEvcZcvKVS4zt6bbHvSRRabinU+J£13x4vTHSg
SWERY1OLPErRbTNcn9r3Nb/hxeBj6Rztv3vR+gW+JY21y3pkTTADSOINOIKkcau
arcwQGEMAWM3UjK315796Ldi7ddvHohgW1ighkzdidBfcONatYnIXZew/770UnB
ecimz4yqJvCo1SritasC@LHFdbeudgBivJtQ/CD1/So9Mkrw6VNUXohv5L3i33
3fNI9geM1oC/ZIGL1HLfOsyJ7GokRsypd 1YWFQvNNhu1OupanRA==
</ds:SignatureValue>
<ds:KeyInfo Id="_98742d60-2afc -4fa7-a731-828756ce47b1">
<ds:X509Data>
<ds:X509Certificate>MIID0DCCArigAwIBAgIBBTANBgkqghkiG9WOBAQsFAD
BMMQswCQYDVQQGEWIGUEcMBoGAIUECewTS2V5bmV4G1zLUSw2W5UcnV2dDEFMBO
GALUEAnwWT381bRydXNOIFR1¢3QZ0CEgUGhBMjAeFwOxitjExMTUwMDU3
MzVaFw
OxNDEXMTUWMOU3MzVaMFexCZAJBgNVBAYTAK]UMQ8wDQYDVQQKDAZPIFR
FU1QXE
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```

```xml
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```

```
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</Document>
```

**Detailed Message Description:**

| Creditor Payment Activation Request | | |
|---|---|---|
| CdtrPmtActvtnReq | **ISO Definition** | The CreditorPaymentActivationRequest message is sent by the Creditor sending party to the Debtor receiving party, directly or through agents. It is used by a Creditor to request movement of funds from the debtor account to a creditor. |
| | **XML Tag** | <CdtrPmtActvtnReq> |
| | **Occurrences** | [1..1] |

| Group Header | | |
|---|---|---|
| CdtrPmtActvtnReq +GrpHdr | **ISO Definition** | Set of characteristics shared by all individual transactions included in the message. |
| | **XML Tag** | <GrpHdr> |
| | **Occurrences** | [1..1] |

| Message Identification | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+GrpHdr<br>++MsgId | **ISO Definition** | Point to point reference assigned by the instructing party and sent to the next party in the chain to unambiguously identify the message.<br>Usage: The instructing party has to make sure that 'MessageIdentification' is unique per instructed party for a pre-agreed period. |
| | **XML Tag** | <MsgId> |
| | **Occurrences** | [1..1] |
| | **Rule** | Rule "Message Identification Guideline"<br>Definition<br> If no unique Message Identification can be generated, then the element is recommended to be populated with a copy of Instruction Identification.<br>If generated, it is recommended that Message Identification to be structured as follows:<br>XXXX - First 4 characters of sender's BIC [4]<br>YYYYMMDD - Creation Date [8]<br>X – Channel Identification [1]<br>nnnnnnn- Sequence Number [9] |

| | | |
|---|---|---|
| | | The values of Channel Identification (X) are bank-determined and may be used to identify separate channels such as:<br>1 - Default value (only one single channel)<br>Or for example (multiple channels),<br>1 - Internet Banking<br>2 - Cash Management<br>3 - Treasury<br>4 – ATM |
| | **Reason** | In case of structural validation failure, reject with reason code '650' in Administration Advice message (admi.002) |

| Creation Date Time | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+GrpHdr<br>++CreDtTm | **ISO Definition** | Date and time at which a (group of) payment instruction(s) was created by the instructing party. |
| | **XML Tag** | <CreDtTm> |
| | **Occurrences** | [1..1] |
| | **Format** | YYYY-MM-DDThh:mm:ss |
| | **Rule** | Creation Date Time must be within one calendar day of the system's date/time. |

| | | |
|---|---|---|
| | **Reason Code** | In case of structural validation failure, reject with reason code '650' in Administration Advice message (admi.002) |
| | **Example** | *<CreDtTm>2019-11-12T10:05:00</CreDtTm>* |

**Number of Transactions**

| | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+GrpHdr<br>++NbOfTxs | **ISO Definition** | Number of individual transactions contained in the message. |
| | **XML Tag** | <NbOfTxs> |
| | **Occurrences** | [1..1] |
| | **Rule** | Expected value is "1" |
| | **Reason Code** | Reject with code '650' in Administration Advice message (admi.002) if value is not 1. |
| | **Note** | System only permits one Request for Payment transaction per message |
| | **Example** | *<NbOfTxs>1</NbOfTxs>* |

**Initiating Party**

| | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+GrpHdr<br>++InitgPty | **ISO Definition** | Party initiating the creditor payment activation request. This can either be the Creditor himself or the party that initiates the request on behalf of the Creditor. |
| | **XML Tag** | <InitgPty> |
| | **Occurrences** | [1..1] |
| | **Note** | In the interbank space (Creditor FI to Debtor FI) only element Identification/Organization Identification is allowed. |

**Identification**

| | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+GrpHdr<br>++InitgPty<br>+++Id | **ISO Definition** | Unique and unambiguous identification of a party |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Organization Identification**

| | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+GrpHdr<br>++InitgPty<br>+++Id<br>++++OrgId | **ISO Definition** | Unique and unambiguous way to identify an organization. |
| | **XML Tag** | <OrgId> |
| | **Occurrences** | [1..1] |

| **Other** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+GrpHdr<br>++InitgPty<br>+++Id<br>++++OrgId<br>+++++Othr | **ISO Definition** | Unique identification of an organization, as assigned by an institution, using an identification scheme. |
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

| **Identification** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+GrpHdr<br>++InitgPty | **ISO Definition** | Identification assigned by an institution. |
| | **XML Tag** | <Id> |

| +++Id<br>++++OrgId<br>+++++Othr<br>++++++Id | **Occurrences** | [1..1] |
|---|---|---|
| | **Rules** | Member Identification must be valid 9-digit Routing and Transit Number. |
| | **Reason Code** | Reject with Message Status Report (pacs.002) if<br> • Sender is not authorized to send this business message (reason code 'AG03')<br>• agent is signed off (reason code '9934')<br>• agent is suspended (reason code '9946')<br>the sender of the message is not authorized to submit messages on behalf of this agent (reason code 'DS0H')<br><br>Reject with admi.002 (reason 650) if Routing and Transit number does not exist in IDTP |
| | **Format** | 9-digit Routing and Transit Number |

| **Payment Information** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf | **ISO Definition** | Set of characteristics that applies to the debit side of the payment transactions included in the creditor payment initiation. |
| | **XML Tag** | <PmtInf> |
| | **Occurrences** | [1..1] |

| **Payment Information Identification** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++PmtInfId | **ISO Definition** | Reference assigned by a sending party to unambiguously identify the payment information block within the message. |
| | **XML Tag** | <PmtInfId > |
| | **Occurrences** | [0..1] |

| | Rules | Rule "Message Identification Guideline"<br><br>Definition<br> If no unique Message Identification can be generated, then the element is recommended to be populated with a copy of Instruction Identification.<br><br>If generated, it is recommended that Message Identification to be structured as follows: |
|---|---|---|

| | | XXXX - First 4 characters of sender's BIC [4]<br>YYYYMMDD - Creation Date [8]<br>X – Channel Identification [1]<br>nnnnnnn- Sequence Number [9]<br><br>The values of Channel Identification (X) are bank-determined and may be used to identify separate channels such as:<br>1 - Default value (only one single channel)<br>Or for example (multiple channels),<br>1 - Internet Banking<br>2 - Cash Management<br>3 - Treasury<br>4 - ATM |
|---|---|---|
| | Reason Code(s) | Reject with Message Status Report (pacs.002) if-<br><br>• Payment Information Identification matches a previously completed transaction (DUPL);<br><br>• Embedded date is not within 1 calendar day of the system date (DT04)<br><br>• Participant ID is not owned by the Instructing Agent (DS0H)<br><br>If structural validation fails, reject with reason code '650' in Administration Advice message (admi.002). |

| **Payment Method** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++PmtMtd | **ISO Definition** | Specifies the means of payment that will be used to move the amount of money. |
| | **XML Tag** | <PmtMtd> |
| | **Occurrences** | [1..1] |
| | **Rules** | Only a value of "TRF" is allowed. |

| | **Reason Code(s)** | Reject with code '650' in Administration Advice message (admi.002) if value is not "TRF" |
|---|---|---|
| | **Note** | This is a mandatory field and only the value TRF is expected. |
| | **Example** | <PmtMtd>TRF</PmtMtd> |

| **Requested Execution Date** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++ReqdExctnDt | **ISO Definition** | Date at which the initiating party requests the clearing agent to process the payment. If payment by cheque, the date when the cheque must be generated by the bank. Usage: This is the date on which the debtor's account(s) is (are) to be debited. |
| | **XML Tag** | <ReqdExctnDt> |
| | **Occurrences** | [1..1] |
| | **Format** | YYYY-MM-DD |
| | **Rules** | Must be a valid processing date. |
| | **Reason Code(s)** | Reject with code '650' in Administration Advice message (admi.002). |
| | **Example** | <ReqdExctnDt>2019-11-12</ReqdExctnDt> |

| **Debtor** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++Dbtr | **ISO Definition** | Party that owes an amount of money to the (ultimate) creditor. |
| | **XML Tag** | <Dbtr> |
| | **Occurrences** | [1..1] |
| | **Note:** | This is the information of the Debtor for the Credit Transfer (pacs.008). |

| **Name** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++Dbtr<br>+++Nm | **ISO Definition** | Name by which a party is known and which is usually used to identify that party. |
| | **XML Tag** | <Nm> |
| | **Occurrences** | [1..1] |
| | **Note:** | Name of the customer from which the Creditor is requesting a payment. Name need not be an exact match to the official name the Debtor FI has registered for the Debtor Account. |

**Identification**

| CdtrPmtActvtnReq<br>+PmtInf<br>++Dbtr<br>+++Id | **ISO Definition** | Unique and unambiguous identification of a party |
| --- | --- | --- |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Organization Identification**

| CdtrPmtActvtnReq<br>+PmtInf<br>++Dbtr<br>+++Id<br>++++OrgId | **ISO Definition** | Unique and unambiguous way to identify an organization. |
| --- | --- | --- |
| | **XML Tag** | <OrgId> |
| | **Occurrences** | [1..1] |

**Other**

| CdtrPmtActvtnReq<br>+PmtInf<br>++Dbtr<br>+++Id<br>++++OrgId<br>+++++Othr | **ISO Definition** | Unique identification of an organization, as assigned by an institution, using an identification scheme. |
| --- | --- | --- |
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

**Identification**

| CdtrPmtActvtnReq<br>+PmtInf<br>++Dbtr<br>+++Id<br>++++OrgId<br>+++++Othr<br>++++++Id | **ISO Definition** | Identification assigned by an institution. |
| --- | --- | --- |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |
| | **Rules** | Maximum length is 35 characters. |

**Scheme Name**

| CdtrPmtActvtnReq<br>+PmtInf<br>++Dbtr<br>+++Id<br>++++OrgId<br>+++++Othr<br>++++++SchmeNm | **ISO Definition** | Name of the identification scheme. |
| --- | --- | --- |
| | **XML Tag** | <SchmeNm> |
| | **Occurrences** | [1..1] |

**Code**

| CdtrPmtActvtnReq<br>+PmtInf<br>++Dbtr<br>+++Id<br>++++OrgId<br>+++++Othr<br>++++++SchmeNm<br>+++++++Cd | **ISO Definition** | Specifies the external organization identification scheme name code in the format of character string with a maximum length of 4 characters.<br>The list of valid codes is an external code list published separately.<br>External code sets can be downloaded from www.iso20022.org. |
|---|---|---|
| | **XML Tag** | <Cd> |
| | **Occurrences** | [1..1] |
| | **Rules** | Maximum length 4, minimum 1. |

**Country of Residence**

| CdtrPmtActvtnReq<br>+PmtInf<br>++CtryOfRes | **ISO Definition** | Country in which a person resides (the place of a person's home). In the case of a company, it is the country from which the affairs of that company are directed. |
|---|---|---|
| | **XML Tag** | <CtryOfRes> |
| | **Occurrences** | [1..1] |

**Debtor Account**

| CdtrPmtActvtnReq<br>+PmtInf<br>++DbtrAcct | **ISO Definition** | Account used to process charges associated with a transaction |
|---|---|---|
| | **XML Tag** | <DbtrAcct> |
| | **Occurrences** | [1..1] |

**Identification**

| CdtrPmtActvtnReq<br>+PmtInf<br>++DbtrAcct<br>+++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Other**

| CdtrPmtActvtnReq<br>+PmtInf<br>++DbtrAcct<br>+++Id<br>++++Othr | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
|---|---|---|
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

| Identification | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++DbtrAcct<br>+++Id<br>++++Othr<br>+++++Id | **ISO Definition** | Identification assigned by an institution. |
| | **Product Usage:** | Identification of the account, this could be a tokenized account number or an account number in the clear. |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |
| | **Format:** | up to 17 characters account identification |
| | **Example** | <Id>11000179512199001</Id> |

| Debtor Agent | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++DbtrAgt | **ISO Definition** | Financial institution servicing an account for the debtor. |
| | **Product Usage:** | This is the Debtor FI that holds the Debtor's account that is used to make the payment. Notwithstanding the ISO term "agent" this entity will always be a Member FI and party to a IDTP payment |
| | **XML Tag** | <DbtrAgt> |
| | **Occurrences** | [1..1] |

| Financial Institution Identification | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++DbtrAgt<br>+++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

| Clearing System Member Identification | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++DbtrAgt<br>+++FinInstnId<br>++++ClrSysMmbId | **ISO Definition:** | Information used to identify a member within a clearing system. |
| | **XML Tag:** | <ClrSysMmbId> |
| | **Occurrences:** | [1..1] |

| Member Identification | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++DbtrAgt<br>+++FinInstnId<br>++++ClrSysMmbId | **ISO Definition** | Identification of a member of a clearing system. |
| | **Product Usage** | Identification of the Debtor FI. |
| | **XML Tag** | <MmbId> |

| +++++MmbId | Occurrences | [1..1] |
|---|---|---|
| | Format | 9-digit Routing and Transit Number. ISO Max Length is 35. |
| | Rules | Member Identification validation must be 9-digit valid Routing and Transit Number. |
| | Reason Code(s) | Reject with Message Status Report (pacs.002) if: <br>• Routing and Transit number is not supported in RTP (reason code 'RC03') <br><br>• Receiver is not authorized to receive this business message (reason code 'AG03') <br><br>• Agent is signed-off (reason code '9910') <br><br>• Agent is suspended (reason code '9947') <br><br>• Receiver connection is not available (reason code '9912') |
| | Example: | <MmbId>011401533</MmbId> |

| Credit Transfer Transaction | | |
|---|---|---|
| | ISO Definition | Payment processes required to transfer cash from the debtor to the creditor. |
| CdtrPmtActvtnReq +PmtInf ++CdtTrfTx | XML Tag | <CdtTrfTx> |
| | Occurrences | [1..1] |

| Payment Identification | | |
|---|---|---|
| CdtrPmtActvtnReq +PmtInf ++CdtTrfTx +++PmtId | ISO Definition | Set of elements used to reference a payment instruction. |
| | XML Tag | <PmtId> |
| | Occurrences | [1..1] |

| End to End Identification | | |
|---|---|---|
| CdtrPmtActvtnReq +PmtInf ++CdtTrfTx +++PmtId | ISO Definition | Unique identification assigned by the initiating party to unambiguously identify the transaction. This identification is passed on, unchanged, throughout the entire end-to-end chain |

| ++++EndToEndId | Product Usage: | The identifier assigned by the originator submitting the Request for Payment to uniquely identify the transaction. This is the customer reference for the transaction. The end-to-end identification must be passed on throughout the entire end-to-end chain.<br>The end-to-end identification can be used for reconciliation or to link tasks relating to the transaction from the Creditor to the Debtor. It can be included in several messages related to the transaction |
|---|---|---|
| | **XML Tag** | <EndToEndId> |
| | **Occurrences** | [1..1] |
| | **Note:** | If the user does not provide a reference number for a Request for Payment, TCH recommends the use of 'NOREF' within the End To End ID field. |
| | **Example** | <EndToEndId>E2E-Ref001</EndToEndId> |

| **Payment Type Information** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf | **ISO Definition** | Set of elements used to further specify the type of transaction. |
| ++CdtTrfTx<br>+++PmtTpInf | **XML Tag** | <PmtTpInf> |
| | **Occurrences** | [1..1] |

| **Service Level** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf | **ISO Definition** | Agreement under which or rules under which the transaction should be processed. |
| ++CdtTrfTx<br>+++PmtTpInf<br>++++SvcLvl | **XML Tag** | <SvcLvl> |
| | **Occurrences** | [1..1] |

| **Code** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx | **ISO Definition** | Specifies a pre-agreed service or level of service between the parties, as published in an external service level code list. |
| +++PmtTpInf<br>++++SvcLvl<br>+++++Cd | **Product Usage:** | The Service level of the transaction. "SDVA" means Payment must be executed with same day value to the creditor (for RTP this will be done in seconds). |
| | **XML Tag** | <Cd> |
| | **Occurrences** | [1..1] |
| | **Rules:** | Expected value of "SDVA"' |
| | **Reason Code(s)** | Reject with code '650' in Administration Advice message (admi.002) if Service Level Code is not valid. |

| | Example | <Cd>SDVA</Cd> |
|---|---|---|
| | **Codes** | Name / Description |
| | **SDVA** | SameDayValue Payment must be executed with same day value to the creditor. |

**Local Instrument**

| | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++PmtTpInf<br>++++LclInstrm | **ISO Definition** | User community specific instrument.<br>Usage: This element is used to specify a local instrument, local clearing option, and/or further qualify the service or service level |
| | **Product Usage** | Identification of the initiator of the Request for Payment as a domestic or foreign business or consumer. This element could also identify the transaction as being initiated through a system which may require special processing or display considerations for the Debtor FI. |
| | **XML Tag** | <LclInstrm> |
| | **Occurrences** | [1..1] |
| | **Note** | Only "Proprietary" element is allowed. |

**Proprietary**

| | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++ CdtTrfTx<br>+++ PmtTpInf<br>++++ LclInstrm<br>+++++ Prtry | **ISO Definition** | Specifies the local instrument, as a proprietary code. |
| | **Product Usage** | Identifies the type of initiator of the Request for Payment. |
| | **XML Tag** | <Prtry> |
| | **Occurrences** | [1..1] |
| | **Example** | <Prtry>CONSUMER</Prtry> |
| | **Codes** | **Name / Description** |
| | **BUSINESS** | Business initiated request for payment |
| | **CONSUMER** | Consumer initiated request for payment |
| | **INTERMEDIARY** | Request for payment sent through a Payment Service Provider |
| | **ZELLE** | Zelle request |

**Amount**

| | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx | **ISO Definition** | Amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party. |

| +++Amt | Product Usage | Identifies the type of initiator of the Request for Payment. |
|---|---|---|
| | XML Tag | <Amt> |
| | Occurrences | [1..1] |

| **Instructed Amount** | | |
|---|---|---|
| CdtrPmtActvtnReq +PmtInf ++CdtTrfTx +++Amt ++++InstdAmt | ISO Definition | Amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party. Usage: This amount has to be transported unchanged through the transaction chain. |
| | Product Usage | The amount of money the sender of the Request for Payment message requests to be paid by the receiver of the message. Attribute is the currency code of amount. |
| | XML Tag | <InstdAmt> |
| | Occurrences | [1..1] |
| | Rules | Amount must comply with the scheme rules. |
| | Reason Code(s) | Reject with code '650' in Administration Advice message (admi.002) if: – The value of the request is less than or equal to zero – The value is greater than supported by the ISO definition for the maximum number of digits – The number of decimal digits is greater than the specified number of digits as defined by the ISO4217 definition |
| | Note | IDTP only supports BDT and the maximum decimal digits are two. As a best practice, Request for Payment should not be sent for amounts greater than the system limit for Payments ($25,000). |
| | Example | <InstdAmt>310.50</InstdAmt> |
| | Attribute | **Currency** |
| | ISO Definition | A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds". |
| | XML Tag | <Ccy> |
| | Rules | Currency must be a currency that is supported by IDTP i.e. BDT |

| | Reason Code(s) | Reject with code '650' in Administration Advice message (admi.002) if: – The currency code is not valid<br><br>Reject with code 'AM11' in Message Status Report (pacs.002) if: – The currency code is not supported by IDTP |
|---|---|---|
| | Example | BDT |

| **Charge Bearer** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++ChrgBr | **ISO Definition** | Specifies which party/parties will bear the charges associated with the processing of the payment transaction. |
| | **Product Usage** | There will be no charging for IDTP payments within the system. Hence, "XYZ" will be used in this field, which indicates that a service level agreement determines how charges are to be applied. IDTP Rules will serve as the agreement and will specify no charging within the system |
| | **XML Tag** | <ChrgBr> |
| | **Occurrences** | [1..1] |
| | **Rules** | Expected value of "XYZ". Others values are not supported as charges are applied external to IDTP |
| | **Reason Code(s)** | Reject with code '650' in Administration Advice message (admi.002) if Charge Bearer Code is not valid. |
| | **Example** | <ChrgBr>XYX</ChrgBr> |
| | **Codes** | **Name / Description** |
| | **SHAR**<br><br>**SLEV** | FollowingServiceLevel Charges are to be applied following the rules agreed in the service level and/or scheme.<br>FollowingServiceLevel Charges are to be applied following the rules agreed in the service level and/or scheme. |

| **Creditor Agent** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++CdtrAgt | **ISO Definition** | Financial institution servicing an account for the creditor. |
| | **Product Usage** | This is the Creditor FI that holds the account for the Creditor. Notwithstanding the ISO term "agent" this |
| | | entity will always be a Member FI and party to an RTP payment. |
| | **XML Tag** | <CdtrAgt> |
| | **Occurrences** | [1..1] |

**Financial Institution Identification**

| CdtrPmtActvtnReq +PmtInf ++CdtTrfTx +++CdtrAgt ++++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| --- | --- | --- |
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

**Clearing System Member Identification**

| CdtrPmtActvtnReq +PmtInf ++CdtTrfTx +++CdtrAgt ++++FinInstnId +++++ClrSysMmbId | **ISO Definition** | Information used to identify a member within a clearing system. |
| --- | --- | --- |
| | **XML Tag** | <ClrSysMmbId> |
| | **Occurrences** | [1..1] |

**Member Identification**

| CdtrPmtActvtnReq +PmtInf ++CdtTrfTx +++CdtrAgt ++++FinInstnId +++++ClrSysMmbId ++++++MmbId | **ISO Definition** | Identification of a member of a clearing system. |
| --- | --- | --- |
| | **Product Usage** | Creditor FI Identification |
| | **Index** | 2.162 |
| | **XML Tag** | <MmbId> |
| | **Occurrences** | [1..1] |
| | **Format** | 9 digit Routing and Transit Number |
| | **Rules** | Member Identification validation must be 9 digit valid Routing and Transit Number. |
| | **Pattern** | [A-Z0-9]{18,18}[0-9]{2,2} |
| | **Reason Code(s)** | Reject with Message Status Report (pacs.002) if: <br> • Receiver is not authorized to receive this business message (reason code 'AG03') <br> • agent is signed off (reason code '9934') |
| | | • agent is suspended (reason code '9946') <br> • the sender of the message is not authorized to submit messages on behalf of this agent (reason code 'DS0H') Reject with admi.002 (reason 650) if Routing and Transit number does not exist in RTP. |
| | **Example** | <MmbId>011400223</MmbId> |

**Creditor**

| CdtrPmtActvtnReq +PmtInf ++CdtTrfTx +++Cdtr | ISO Definition | Party to which an amount of money is due. |
|---|---|---|
| | Product Usage | The party (Receiver) that receives payment from the Debtor / Sender. |
| | XML Tag | <Cdtr> |
| | Occurrences | [1..1] |

**Name**

| CdtrPmtActvtnReq +PmtInf ++CdtTrfTx +++Cdtr ++++Nm | ISO Definition | Name by which a party is known and which is usually used to identify that party. |
|---|---|---|
| | Product Usage | Creditor Name |
| | XML Tag | <Nm> |
| | Occurrences | [1..1] |
| | Example | <Nm>Creditor Name</Nm> |

**Identification**

| CdtrPmtActvtnReq +PmtInf ++CdtTrfTx +++Cdtr ++++Id | ISO Definition | Unique and unambiguous identification of a party. |
|---|---|---|
| | Product Usage | This could be used on a conditional basis for OFAC checking an individual if required. Only element Date and Place of Birth is available. |
| | XML Tag | <Id> |
| | Occurrences | [0..1] |
| | Notes | If Creditor Identification Private Identification is present, all Date and Place of Birth fields are required. The system does not validate information included in these fields. |

**Organization Identification**

| CdtrPmtActvtnReq +PmtInf ++CdtTrfTx +++Cdtr ++++Id +++++OrgId | ISO Definition | Unique and unambiguous way to identify an organization. |
|---|---|---|
| | XML Tag | <OrgId> |
| | Occurrences | [1..1] |

**Other**

| CdtrPmtActvtnReq +PmtInf | ISO Definition | Unique identification of an organization, as assigned by an institution, using an identification scheme. |
|---|---|---|

| ++CdtTrfTx<br>+++Cdtr<br>++++Id<br>+++++OrgId<br>++++++Othr | **XML Tag** | \<Othr> |
| | **Occurrences** | [0..n] |

**Identification**

| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++Cdtr<br>++++Id<br>+++++OrgId<br>++++++Othr<br>+++++++Id | **ISO Definition** | Identification assigned by an institution. |
| | **XML Tag** | \<Id> |
| | **Occurrences** | [1..1] |
| | **Rules** | Maximum 35 characters allowed. |

**Scheme Name**

| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++Cdtr<br>++++Id<br>+++++OrgId<br>++++++Othr<br>+++++++SchmeNm | **ISO Definition** | Sets of elements to identify a name of the organization identification scheme. |
| | **XML Tag** | \<SchmeNm> |
| | **Occurrences** | [0..1] |

**Code**

| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++Cdtr<br>++++Id<br>+++++OrgId<br>+++++Othr<br>++++++SchmeNm<br>+++++++Cd | **ISO Definition** | Specifies the external organization identification scheme name code in the format of character string with a maximum length of 4 characters.<br>The list of valid codes is an external code list published separately.<br>External code sets can be downloaded from www.iso20022.org. |
| | **XML Tag** | \<Cd> |
| | **Occurrences** | [1..1] |
| | **Rules** | Maximum 4 characters allowed. |

**Creditor Account**

| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++CdtrAcct | **ISO Definition** | Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction. |
| | **XML Tag** | \<CdtrAcct> |

| | **Occurrences** | [1..1] |
|---|---|---|

| **Identification** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++CdtrAcct<br>++++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

| **Other** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++CdtrAcct<br>++++Id<br>+++++Othr | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
| | **Product Usage** | Unique identification of an account, as assigned by the Creditor FI. |
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

| **Identification** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++CdtrAcct<br>++++Id<br>+++++Othr<br>++++++Id | **ISO Definition** | Identification assigned by an institution. |
| | **Product Usage** | Identification of the account, this could be a tokenized account number or an account number in the clear. |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |
| | **Format** | Up to 17 characters account identification |
| | **Example** | <Id>12000194212199001</Id> |

| **Remittance Information** | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++RmtInf | **ISO Definition** | Information supplied to enable the matching of an entry with the items that the transfer is intended to settle, such as commercial invoices in an accounts' receivable system. Electronic address to which an agent is to send the remittance information. |
| | **XML Tag** | <RmtInf> |
| | **Occurrences** | [0..1] |

| Unstructured | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+PmtInf<br>++CdtTrfTx<br>+++RmtInf<br>++++Ustrd | **ISO Definition** | Information supplied to enable the matching/reconciliation of an entry with the items that the payment is intended to settle, such as commercial invoices in an accounts' receivable system, in an unstructured form. |
| | **Product Usage** | Unstructured 140-character field for additional remittance related information. |
| | **XML Tag** | <Ustrd> |
| | **Occurrences** | [1..1] |
| | **Example** | <Ustrd>Unstructured Information</Ustrd> |

| Supplementary Data | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+ SplmtryData | **ISO Definition** | Additional information that cannot be captured in the structured fields and/or any other specific block. |
| | **XML Tag** | <SplmtryData> |
| | **Occurrences** | [1..1] |

| Place And Name | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+ SplmtryData<br>++ PlcAndNm | **ISO Definition** | Unambiguous reference to the location where the supplementary data must be inserted in the message instance. |
| | **XML Tag** | <PlcAndNm> |
| | **Occurrences** | [1..1] |

| Envelope | | |
|---|---|---|
| CdtrPmtActvtnReq<br>+ SplmtryData<br>++ Envlp | **ISO Definition** | Technical element wrapping the supplementary data. |
| | **XML Tag** | <Envlp> |
| | **Occurrences** | [1..1] |

## D. ISO 20022/PAIN.014.001.06 XML Sample

```
<?xml version="1.0" encoding="utf-8"?>
<Document
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns="urn:iso:std:iso:20022:tech:xsd:pain.014.001.06">
    <CdtrPmtActvtnReq>
        <GrpHdr>
            <MsgId>MSG_334873223482738299</MsgId>
            <CreDtTm>2020-08-12T20:46:01</CreDtTm>
            <InitgPty>
                <Id>
                    <OrgId>
                        <Othr>
                            <Id>ACC_0010201000327</Id>
                        </Othr>
                    </OrgId>
                </Id>
            </InitgPty>
            <Sgntr>
            <ds:Signature Id="_beddd7de-c63a-43a6-9b62-f69290939eb6"
            xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
            <ds:SignedInfo>
            <ds:CanonicalizationMethod
            Algorithm="http://www.w3.org/2001/ 10/xml -exc-
            c14n#"/>
            <ds:SignatureMethod Algorithm="http: /
            /www.w3.org/2001/04/xmldsig-
            more#rsa- sha256"/>
            <ds:Reference URI="#_98742d60-2afc -4fa7-a731-828756ce47b1">
            <ds:Transforms>
            <ds:Transform
            Algorithm="http://www.w3.org/2001/10/xml-exc-
            cl4n#"/>
            </ds:Transforms >
            <ds:DigestMethod Algorithm="http:
            //www.w3.org/2001/04/xmlenc#sha256" />
            <ds:DigestValue>vB/
            xxu+qkEVUH5i9uVdBHOXOp6+XDsAn/iHxH+UiMGo=</ds
            :DigestValue>
            </ds:Reference>
            <ds: Reference URI="">
            <ds:Transforms>
            <ds: Transform
            Algorithm="http://www.w3.org/2000/09/xmldsig#tenve
            loped- signature" />
            <ds: Transform
            Algorithm="http://www.w3.org/2001/10/xml-exc-
            cl4n#"/>
            </ds: Transforms >
            <ds:DigestMethod
            Algorithm="http://www.w3.org/2001/04/xmlenc#sh
            a256" />
            <ds:DigestValue>hWGkHPu5IMYxe4KF
            YyaMOFWYqOw2pi+BYnYvHEwm/Z8=</ds:DigestValue>
            </ds:Reference>
            <ds:Reference>
            <ds:Transforms>
            <ds: Transform
            Algorithm="http://www.w3.org/2001/10/xml-exc-
```

```
c14n#"/>
</ds:Transforms >
<ds:DigestMethod
Algorithm="http://www.w3.org/2001/04/xmlenc#sh
a256" />
<ds:DigestValue
>10eHeNdJM1v177MOHzFsmP0IBMYvdPXVuRcR77hAgUg=</ds
:DigestValue>
</ds:Reference>
</ds:SignedInfo>
<ds:SignatureValue>H11itYLicuuSdrRrzuSCFxk5G2Z3LDOOnEPCrXkfwiuS
dyOzA3P2r6Ale1cYidueY8niolEvcZcvKVS4zt6bbHvSRRabinU+J£13x4vTHSg
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3fNI9geM1oC/ZIGL1HLfOsyJ7GokRsypd 1YWFQvNNhu1OupanRA==
</ds:SignatureValue>
<ds:KeyInfo Id="_98742d60-2afc -4fa7-a731-828756ce47b1">
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GALUEAnwWT381bRydXNOIFR1¢3QZ0CEgUGhBMjAeFwOxitjExMTUwMDU3
MzVaFw
OxNDEXMTUWMOU3MzVaMFexCZAJBgNVBAYTAK]UMQ8wDQYDVQQKDAZPIFR
FU1QXE
JAQBENVBASMCUSVIFRFUIQgMjESMBAGAIUECww)T2UgVEVTVCAXxMRAWD
gYDVQQ
DDAdUZXNGIENO:MIIBI5ANBgkqhkiGowOBAQEFAAOCAQSAMIIBCeKCAQE
AtnB/1
12FOScVqDI12Q)RsZZh9TK7ANLnxxnR2EP1hRP7GRanksgyYMIECiL/AN
nTEhft
Qe7AGSaWeX7x05GHIGd72NwnFQazVjHyaTBXSxaxUoG4kc1F5QaOOvvxU
AHTtM2
qYNjpgFyKkTGbASD7IgS36zTRYauE40kGhU2/pv1nG3jIKAU40f90gkQe
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l+SRSG
NyR42xVRcbS6rv150cbnbsrvkcbms1Gdo/qnKkvxcthXstt3TqGq+kZ1C
IHDoJs
F8ZDQKuljXMEgsurt/OHQIDAQAO4GuiGtMBGGA1UdDgQUBBRsJehOf8/t
O6YtFO
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RBglgh
kgBhvhCAQEEBAMCB4AWOegYDVROPAQH/BAQDASbAMEBGA1UdHwRBMDGwP
aA70Dm
GN2h@dHAGLy9wa210ZXNOLm9wZW5GcnVzdC5jb2GvT3B]b1RydXN@X1R1c3RFQO
FFUGHBMI5jcmmwOQYIKOZThvcNAQELBQADggEBAGMAU3YO2Z9Ff1FLX/DHVcwST
SotZ]aYtJindYcEtvhjY24vcXJzwbfopVu91XZFuxXjG12SSyksK4sRHF
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yAMGZMUW+0gjVFjupV54jr6vkaEL2té6oyE52CHqvvlHyLJz5CIW6jDEm
@AZGNI
ZlwdRr4afud9zM21m4X5J1Ts2GxY/JHO2F1155QJuVn7NSFFxBPxRsIKY
NZ+27k
cZNTSL9ZDWYXob5PUBVEOFXMhWPJtngzBOISNGQDVQIjtnbecsSgDchRM
Vy4JOU
DBUK7RAIpG4aR/5RKaMkO@6DLHXJteXfmsKfLyDq3H8B+eHefJIWCeYMn
vqk755 EVNE=</ds:X509Certificate>
</ds:X509Data>
</ds:KeyInfo>
</ds:Signature>
</Sgntr>
```

```
        </GrpHdr>
        <OrgnlGrpInfAndSts>
            <OrgnlMsgId>MSG_334873223482738299</OrgnlMsgId>
            <OrgnlMsgNmId>pain.013.001.06</OrgnlMsgNmId>
            <OrgnlCreDtTm>2020-08-12T20:46:01</OrgnlCreDtTm>
            <OrgnlNbOfTxs>1</OrgnlNbOfTxs>
        </OrgnlGrpInfAndSts>
        <OrgnlPmtInfAndSts>
            <OrgnlPmtInfId>PAY_223373223482738299</OrgnlPmtInfId>
            <TxInfAndSts>
                <TxSts>RJCT</TxSts>
        <StsRsnInf>
                <Rsn>
                        <Cd>AM04</Cd>
                </Rsn>
        </StsRsnInf>
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                    <ReqdExctnDt>2020-08-12</ReqdExctnDt>
                    <Dbtr>
                    <Nm>SAMPLE_NAME2</Nm>
                    </Dbtr>
                    <DbtrAgt>
                        <FinInstnId>
                        <ClrSysMmbId>
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                            </ClrSysMmbId>
                        </FinInstnId>
                    </DbtrAgt>
                    <CdtrAgt>
                        <FinInstnId>
                        <ClrSysMmbId>
                            <MmbId>FI_SWIFT1</MmbId>
                            </ClrSysMmbId>
                        </FinInstnId>
                    </CdtrAgt>
                    <Cdtr>
                    <Nm>SAMPLE_NAME1</Nm>
                    </Cdtr>
                </OrgnlTxRef>
            </TxInfAndSts>
        </OrgnlPmtInfAndSts>
    </CdtrPmtActvtnReq>
</Document>
```

**Detailed Message Description:**

| Group Header | | |
|---|---|---|
| GrpHdr | **ISO Definition** | Set of characteristics shared by all individual transactions included in the message. |
| | **XML Tag** | <GrpHdr> |
| | **Occurrences** | [1..1] |

**Message Identification**

| GrpHdr +MsgId | ISO Definition | Point to point reference, as assigned by the instructing party and sent to the next party in the chain to unambiguously identify the message.<br><br>Usage: The instructing party has to make sure that Message Identification is unique per instructed party for a pre-agreed period. |
|---|---|---|
| | Product Usage: | Assigned by the Instructing Agent (Creditor FI). The Instructing Agent (Creditor FI) must ensure the uniqueness of this message identification. |
| | XML Tag | <MsgId> |
| | Occurrences | [1..1] |
| | IDTP Rule | Rule "Message Identification Guideline"<br><br>Definition<br><br> If no unique Message Identification can be generated, then the element is recommended to be populated with a copy of Instruction Identification.<br><br><br>If generated, it is recommended that Message Identification to be structured as follows: |

| | | |
|---|---|---|
| | | XXXX - First 4 characters of sender's BIC [4]<br><br>YYYYMMDD - Creation Date [8]<br><br>X – Channel Identification [1]<br><br>nnnnnnn- Sequence Number [9]<br><br><br>The values of Channel Identification (X) are bank-determined and may be used to identify separate channels such as:<br><br>1 - Default value (only one single channel)<br><br>Or for example (multiple channels),<br><br>1 - Internet Banking<br><br>2 - Cash Management<br><br>3 - Treasury<br><br>4 - ATM |
| | **Example** | <MsgId>ABCD201308201123456789</MsgId> |

| **Creation Date Time** | | |
|---|---|---|
| GrpHdr<br>+CreDtTm | **ISO Definition** | Date and time at which a (group of) payment instruction(s) was created by the instructing party. |
| | **XML Tag** | <CreDtTm> |
| | **Format:** | YYYY-MM-DDThh:mm:ss |
| | **Occurrences** | [1..1] |
| | **Example** | <CreDtTm>2020-06-28T10:30:32</CreDtTm> |

| Initiating Party | | |
|---|---|---|
| GrpHdr +InitgPty | **ISO Definition** | Party initiating the creditor payment activation request. This can either be the creditor himself or the party that initiates the request on behalf of the creditor. |
| | **Product Usage:** | This is the Instructing Agent (Debtor FI) that initiates the Response to Request for Payment message in case of a reject of the pain.013 back to the Originator Agent (Creditor FI). |
| | **XML Tag** | <InitgPty> |
| | **Occurrences** | [1..1] |
| | **Example** | <CreDtTm>2020-06-28T10:30:32</CreDtTm> |
| | **Note:** | In the interbank space (Debtor FI to Creditor FI) only element Identification/Organization Identification is allowed. |

| Identification | | |
|---|---|---|
| GrpHdr +InitgPty ++Id | **ISO Definition** | Unique and unambiguous identification of a party. |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

| Organization Identification | | |
|---|---|---|
| GrpHdr +InitgPty ++Id +++OrgId | **ISO Definition** | Unique and unambiguous identification of a party. |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

| Other | | |
|---|---|---|
| GrpHdr +InitgPty ++Id | **ISO Definition** | Unique identification of an organization, as assigned by an institution, using an identification scheme. |
| | **XML Tag** | <Othr> |

| +++OrgId<br>++++Othr | **Occurrences** | [1..1] |
|---|---|---|

| **Identification** | | |
|---|---|---|

| GrpHdr<br>+InitgPty<br>++Id<br>+++OrgId<br>++++Othr<br>+++++Id | **ISO Definition** | Identification assigned by an institution. |
|---|---|---|
| | **Product Usage:** | Initiating Agent (Debtor FI) Identification. |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |
| | **Format:** | 9-digit Routing and Transit Number |
| | **Rules:** | Member Identification must be:<br>• Identical to the Member Identification of the Instructed Agent (Debtor FI)<br>• A valid 9-digit valid Routing and Transit Number |
| | **Reason Code(s)** | Reject with Message Status Report (pacs.002) if:<br>• Sender is not authorized to send this specific message (reason code 'ABC123')<br><br>• agent is signed off (reason code '1234')<br><br>• agent is suspended (reason code '5678')<br><br>• the sender of the message is not authorized to submit messages on behalf of this agent (reason code '9999')<br>Reject with admi.002 (reason 650) if Routing and Transit number does not exist in IDTP. |
| | **Example** | <Id>021200201</Id> |

| **Original Group Information and Status** | | |
|---|---|---|
| OrgnlGrpInfAndSts | **ISO Definition** | Original group information concerning the group of transactions, to which the status report message refers to. |
| | **XML Tag** | <OrgnlGrpInfAndSts> |

| | Occurrences | [1..1] |
|---|---|---|

| **Original Message Identification** | | |
|---|---|---|
| OrgnlGrpInfAndSts +OrgnlMsgId | **ISO Definition** | Point to point reference, as assigned by the original instructing party, to unambiguously identify the original message. |
| | **Product Usage:** | The Original Message ID of the Request for Payment (pain.013) |
| | **XML Tag** | <OrgnlMsgId`> |
| | **Occurrences** | [1..1] |

| **Original Message Name Identification** | | |
|---|---|---|
| OrgnlGrpInfAndSts +OrgnlMsgNmId | **ISO Definition** | Specifies the original message name identifier to which the message refers |
| | **Product Usage:** | Specifies the type of the original message to which this Response to Request for Payment message is a response. |
| | **XML Tag** | <OrgnlMsgNmId`> |
| | **Occurrences** | [1..1] |
| | **Rules:** | Expected value is pain.013.001.06 |
| | **Reason Code(s)** | Reject with code '650' in Administration Advice message (admi.002) if Original Message Name Identification is not valid. |
| | **Codes** | **Name / Description** |
| | **Pain.013.001.06** | Creditor Payment Activation Request (Request for Payment) |

**Original Creation Date Time**

| OrgnlGrpInfAndSts +OrgnlCreDtTm | ISO Definition | Date and time at which the original message was created. |
|---|---|---|
| | Product Usage: | That clarifies that this is the Date and Time at which the pain.013 was created. |
| | XML Tag | &lt;OrgnlCreDtTm&gt; |
| | Format: | YYYY-MM-DDThh:mm:ss |
| | Occurrences | [1..1] |
| | Reason Code(s) | Reject with code '650' in Administration Advice message (admi.002) if not valid. |
| | Example | &lt;CreDtTm&gt;2020-06-28T10:30:32&lt;/CreDtTm&gt; |

**Original Number of Transactions**

| OrgnlGrpInfAndSts +OrgnlNbOfTxs | ISO Definition | Number of individual transactions contained in the original message. |
|---|---|---|
| | XML Tag | &lt;OrgnlNbOfTxs&gt; |
| | Occurrences | [1..1] |
| | Rule(s) | Expected value is 1. |
| | Reason Code(s) | Reject with code '650' in Administration Advice message (admi.002) if value is not 1. |
| | Example | &lt;OrgnlNbOfTxs&gt;1&lt;/OrgnlNbOfTxs&gt; |

**Original Payment Information and Status**

| OrgnlPmtInfAndSts | ISO Definition | Information concerning the original payment information to which the status report message refers. |
|---|---|---|
| | XML Tag | &lt;OrgnlPmtInfAndSts&gt; |
| | Occurrences | [1..1] |

**Original Payment Information Identification**

| OrgnlPmtInfAndSts +OrgnlPmtInfId | ISO Definition | Unique identification, as assigned by the original sending party, to unambiguously identify the original payment information group. |
|---|---|---|
| | Product Usage: | The Payment Information Identification for which this message is the response (i.e. the Payment Information Identification for the pain.013). |
| | XML Tag | <OrgnlPmtInfId> |
| | Occurrences | [1..1] |
| | Example | <OrgnlPmtInfId><br>ABCD201308201123456789<br></OrgnlPmtInfId> |

**Transaction Information and Status**

| OrgnlPmtInfAndSts +TxInfAndSts | ISO Definition | Provides information on the original transactions to which the status report message refers. |
|---|---|---|
| | XML Tag | <TxInfAndSts> |
| | Occurrences | [1..1] |

**Transaction Status**

| OrgnlPmtInfAndSts +TxInfAndSts ++TxSts | ISO Definition | Specifies the status of a transaction, in a coded form. |
|---|---|---|
| | Product Usage | Information about the business reason for the rejection of the Request for Payment. |
| | XML Tag | <TxSts> |
| | Occurrences | [1..1] |
| | Rules | Only **RJCT** is excepted. |

| Reason Code | Reject with code '650' in Administration Advice message (admi.002) if invalid code. |
|---|---|
| **Codes** | **Name / Description** |
| **RJCT** | Rejected Requested for Payment has been rejected. |

| **Status Reason Information** | | |
|---|---|---|
| OrgnlPmtInfAndSts +TxInfAndSts ++StsRsnInf | **ISO Definition** | Provides detailed information on the status reason. |
| | **XML Tag** | <StsRsnInf> |
| | **Occurrences** | [1..1] |

| **Reason** | | |
|---|---|---|
| OrgnlPmtInfAndSts +TxInfAndSts ++StsRsnInf +++Rsn | **ISO Definition** | Specifies the reason for the status report. |
| | **XML Tag** | <Rsn> |
| | **Occurrences** | [1..1] |

| **Code** | | |
|---|---|---|
| OrgnlPmtInfAndSts +TxInfAndSts ++StsRsnInf +++Rsn ++++Cd | **ISO Definition** | Specifies the reason for the status report. |
| | **XML Tag** | <Cd> |
| | **Occurrences** | [0..1] |
| | **Note:** | List of available ISO Codes is available in the Appendix |
| | **Example** | <Cd>AC06</Cd> |

| Proprietary | | |
|---|---|---|
| OrgnlPmtInfAndSts<br>+TxInfAndSts<br>++StsRsnInf<br>+++Rsn<br>++++Prtry | **ISO Definition** | Reason for the status, in a proprietary form. |
| | **Product Usage:** | Proprietary reason code for the reject of the original instruction (pain.013). |
| | **XML Tag** | <Prtry> |
| | **Occurrences** | [0..1] |
| | **Example** | <Prtry>1100</Prtry> |
| | **Codes** | **Name / Description** |
| | **1100** | Any Other Reasons - i.e. not covered by ISO reason codes. Reason is provided as narrative information in the additional reason information field (3.109). |

| Additional Information | | |
|---|---|---|
| OrgnlPmtInfAndSts<br>+TxInfAndSts | **ISO Definition** | Specifies the status of a transaction, in a coded form. |
| ++StsRsnInf<br>+++AddtlInf | **Product Usage** | Information about the business reason for the rejection of the Request for Payment. |
| | **XML Tag** | <AddtlInf> |
| | **Occurrences** | [0..1] |
| | **Rules** | Only applicable for reason codes '1100' – Any Other Reasons and 'NARR' – narrative information |
| | **Reason Code** | Reject with code '650' in Administration Advice message (admi.002) if XML parsing error, otherwise not checked. |
| | **Example** | <AddtlInf>Additional Information for reject reason</AddtlInf> |

| Original Transaction Reference | | |
|---|---|---|
| OrgnlPmtInfAndSts<br>+TxInfAndSts<br>++OrgnlTxRef | **ISO Definition** | Key elements used to identify the original transaction that is being referred to. |
| | **XML Tag** | <OrgnlTxRef> |
| | **Occurrences** | [0..1] |

| Requested Execution Date | | |
|---|---|---|
| OrgnlPmtInfAndSts<br>+TxInfAndSts<br>++OrgnlTxRef<br>+++ReqdExctnDt | **ISO Definition** | Date at which the initiating party requests the clearing agent to process the payment.<br><br>Usage: This is the date on which the debtor's account is to be debited. If payment by check, the date when the check must be generated by the bank. |
| | **Product Usage** | Original requested date on which/by which the Credit Transfer (pacs.008) message should be executed (by Debtor FI). |
| | **XML Tag** | <ReqdExctnDt> |
| | **Occurrences** | [1..1] |
| | **Format** | YYYY-MM-DD |
| | **Rules** | Must be a valid settlement date. |
| | **Reason Code** | Reject with code '650' in Administration Advice message (admi.002). |
| | **Note** | This date should match the Requested Execution Date from the original Request for Payment (pain.013) message. |
| | **Example** | <ReqdExctnDt>2019-11-12</ReqdExctnDt> |

| Debtor | | |
|---|---|---|
| OrgnlPmtInfAndSts<br>+ TxInfAndSts<br>++ OrgnlTxRef<br>+++ Dbtr | **ISO Definition** | Party that owes an amount of money to the (ultimate) creditor. |
| | **Product** | The party (Receiver) that receives payment from the |

| | **Usage:** | Debtor / Sender. |
|---|---|---|
| | **XML Tag** | <Dbtr> |
| | **Occurrences** | [1..1] |

| **Name** | | |
|---|---|---|
| OrgnlPmtInfAndSts +TxInfAndSts ++OrgnlTxRef +++Cdtr ++++Nm | **ISO Definition** | Name by which a party is known and which is usually used to identify that party. |
| | **Product Usage** | Debtor Name |
| | **XML Tag** | <Nm> |
| | **Occurrences** | [1..1] |
| | **Example** | <Nm>Creditor Name</Nm> |

| **Debtor Agent** | | |
|---|---|---|
| OrgnlPmtInfAndSts + TxInfAndSts ++ OrgnlTxRef +++ DbtrAgt | **ISO Definition** | Financial institution servicing an account for the debtor. |
| | **Product Usage:** | This is the Debtor FI that holds the Debtor's account that is used to make the payment. Notwithstanding the ISO term "agent" this entity will always be a Member FI and party to a IDTP payment |
| | **XML Tag** | <DbtrAgt> |
| | **Occurrences** | [1..1] |

| **Financial Institution Identification** | | |
|---|---|---|
| OrgnlPmtInfAndSts + TxInfAndSts ++ OrgnlTxRef +++ DbtrAgt ++++ FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

| **Clearing System Member Identification** | | |
|---|---|---|
| OrgnlPmtInfAndSts + TxInfAndSts ++ OrgnlTxRef | **ISO Definition:** | Information used to identify a member within a clearing system. |
| | **XML Tag:** | <ClrSysMmbId> |

| +++ DbtrAgt<br>++++ FinInstnId<br>+++++ ClrSysMmbId | **Occurrences:** | [1..1] |
|---|---|---|

| **Member Identification** | | |
|---|---|---|
| OrgnlPmtInfAndSts<br>+ TxInfAndSts<br>++ OrgnlTxRef<br>+++ DbtrAgt<br>++++ FinInstnId<br>+++++ ClrSysMmbId<br>++++++ MmbId | **ISO Definition** | Identification of a member of a clearing system. |
| | **Product Usage** | Identification of the Debtor FI. |
| | **XML Tag** | <MmbId> |
| | **Occurrences** | [1..1] |
| | Format | **9-digit Routing and Transit Number. ISO Max Length is 35.** |
| | Rules | **Member Identification validation must be 9-digit valid Routing and Transit Number.** |
| | Reason Code(s) | **Reject with Message Status Report (pacs.002) if:**<br>• **Routing and Transit number is not supported in RTP (reason code 'RC03')**<br><br>• **Receiver is not authorized to receive this business message (reason code 'AG03')**<br><br>• **Agent is signed-off (reason code '9910')**<br><br>• **Agent is suspended (reason code '9947')**<br><br>• **Receiver connection is not available (reason code '9912')** |
| | Example: | **<MmbId>011401533</MmbId>** |

| **Creditor Agent** | | |
|---|---|---|
| OrgnlPmtInfAndSts<br>+TxInfAndSts<br>++OrgnlTxRef<br>+++CdtrAgt | **ISO Definition** | Financial institution servicing an account for the creditor. |
| | **Product Usage:** | This is the Creditor FI that holds the account for the Creditor. Notwithstanding the ISO term "agent" this entity will always be a Member FI and party to a RTP payment. |
| | **XML Tag** | <CdtrAgt> |

| | Occurrences | [1..1] |
|---|---|---|

**Financial Institution Identification**

| OrgnlPmtInfAndSts<br>+TxInfAndSts<br>++OrgnlTxRef<br>+++CdtrAgt<br>++++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
|---|---|---|
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

**Clearing System Member Identification**

| OrgnlPmtInfAndSts<br>+TxInfAndSts<br>++OrgnlTxRef +++CdtrAgt<br>++++FinInstnId<br>+++++ClrSysMmbId | **ISO Definition** | Information used to identify a member within a clearing system. |
|---|---|---|
| | **XML Tag** | <ClrSysMmbId> |
| | **Occurrences** | [1..1] |

**Member Identification**

| OrgnlPmtInfAndSts<br>+TxInfAndSts<br>++OrgnlTxRef<br>+++CdtrAgt<br>++++FinInstnId<br>+++++ClrSysMmbId<br>++++++MmbId | **ISO Definition** | Identification of a member of a clearing system. |
|---|---|---|
| | **Product Usage** | Creditor FI Identification |
| | **XML Tag** | <MmbId> |
| | **Occurrences** | [1..1] |
| | **Format** | 9-digit Routing and Transit Number |
| | **Rule(s)** | Member Identification must be a valid 9 digit Routing and Transit Number |
| | **Reason Code** | Reject with Message Status Report (pacs.002) if:<br><br>• Routing and Transit number is not supported in RTP (reason code 'RC04')<br><br>• Routing and Transit number is not authorized to |

| | | receive this business message (reason code 'AG01') |
|---|---|---|
| | | • Agent is signed-off (reason code '9910') |
| | | • Agent is suspended (reason code '9947') |
| | | • Receiver connection is not available (reason code '9912') |
| | **Example:** | <MmbId>011400223</MmbId> |

**Creditor**

| | | |
|---|---|---|
| OrgnlPmtInfAndSts<br>+ TxInfAndSts<br>++ OrgnlTxRef<br>+++ Cdtr | **ISO Definition** | Party to which an amount of money is due. |
| | **Product Usage:** | The party (Receiver) that receives payment from the Debtor / Sender. |
| | **XML Tag** | <Cdtr> |
| | **Occurrences** | [1..1] |

**Name**

| | | |
|---|---|---|
| OrgnlPmtInfAndSts<br>+TxInfAndSts<br>++OrgnlTxRef<br>+++Cdtr<br>++++Nm | **ISO Definition** | Name by which a party is known and which is usually used to identify that party. |
| | **Product Usage** | Creditor Name |
| | **XML Tag** | <Nm> |
| | **Occurrences** | [1..1] |
| | **Example** | <Nm>Creditor Name</Nm> |

## E. ISO 20022/CAMT.003.001.05 XML Sample

```xml
<?xml version="1.0" encoding="utf-8"?>
<Saa:DataPDU
    xmlns:Saa="urn:swift:saa:xsd:saa.2.0"
    xmlns:Sw="urn:swift:snl:ns.Sw"
    xmlns:SwGbl="urn:swift:snl:ns.SwGbl"
    xmlns:SwInt="urn:swift:snl:ns.SwInt"
    xmlns:SwSec="urn:swift:snl:ns.SwSec">
    <Saa:Body>
        <AppHdr
            xmlns:auto-ns1="urn:swift:saa:xsd:saa.2.0"
            xmlns="urn:iso:std:iso:20022:tech:xsd:head.001.001.01">
            <Fr>
                <FIId>
                    <FinInstnId>
                        <BICFI>IDTP</BICFI>
                    </FinInstnId>
                </FIId>
            </Fr>
            <To>
                <FIId>
                    <FinInstnId>
                        <BICFI>FI_SWIFT</BICFI>
                    </FinInstnId>
                </FIId>
            </To>
            <BizMsgIdr>MSG_334873223482738299</BizMsgIdr>
            <MsgDefIdr>camt.003.001.05</MsgDefIdr>
            <BizSvc>IDTP</BizSvc>
            <CreDt>2020-04-07T12:33:22Z</CreDt>
            <Sgntr>
            <ds:Signature Id="_beddd7de-c63a-43a6-9b62-
            f69290939eb6"
            xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
            <ds:SignedInfo>
            <ds:CanonicalizationMethod
            Algorithm="http://www.w3.org/2001/ 10/xml -exc-
            c14n#"/>
            <ds:SignatureMethod Algorithm="http: /
            /www.w3.org/2001/04/xmldsig-
            more#rsa- sha256"/>
            <ds:Reference URI="#_98742d60-2afc -4fa7-a731-828756ce47b1">
            <ds:Transforms>
            <ds:Transform Algorithm="http:
            //www.w3.org/2001/10/xml-exc- cl4n#"/>
            </ds:Transforms >
            <ds:DigestMethod Algorithm="http:
            //www.w3.org/2001/04/xmlenc#sha256" />
            <ds:DigestValue>vB/
            xxu+qkEVUH5i9uVdBHOXOp6+XDsAn/iHxH+UiMGo=</ds
            :DigestValue>
            </ds:Reference>
            <ds: Reference URI="">
            <ds:Transforms>
            <ds: Transform Algorithm="http:
            //www.w3.
            org/2000/09/xmldsig#tenveloped-
            signature" />
```

```xml
<ds: Transform Algorithm="http: //www.w3.
org/2001/10/xml-exc- cl4n#"/>
</ds: Transforms >
<ds:DigestMethod
Algorithm="http: //www.
w3.org/2001/04/xmlenc#sha256" />
<ds:DigestValue>hWGkHPu5IMYxe4KF
YyaMOFWYqOw2pi+BYnYvHEwm/Z8=</ds:DigestValue>
</ds:Reference>
<ds:Reference>
<ds:Transforms>
<ds: Transform Algorithm="http:
//www.w3.org/2001/10/xml-exc- c14n#"/>
</ds:Transforms >
<ds:DigestMethod
Algorithm="http: //www.
w3.org/2001/04/xmlenc#sha256" />
<ds:DigestValue
>10eHeNdJM1v177MOHzFsmP0IBMYvdPXVuRcR77hAgUg=</ds
:DigestValue>
</ds:Reference>
</ds:SignedInfo>
<ds:SignatureValue>H11itYLicuuSdrRrzuSCFxk5G2Z3LDOOnEPCrX
kfwiuS
dyOzA3P2r6Ale1cYidueY8niolEvcZcvKVS4zt6bbHvSRRabinU+J£13x
4vTHSg
SWERY1OLPErRbTNcn9r3Nb/hxeBj6Rztv3vR+gW+JY21y3pkTTADSOINO
IKkcau
arcwQGEMAWM3UjK315796Ldi7ddvHohgW1ighkzdidBfcONatYnIXZew/
770UnB                                              ec
imz4yqJvCo1SritasC@LHFdbeudgBivJtQ/CD1/So9Mkrw6VNUXohv
5L3i33          3fNI9geM1oC/ZIGL1HLfOsyJ7GokRsypd
1YWFQvNNhu1OupanRA==
</ds :SignatureValue>
<ds:KeyInfo Id="_98742d60-2afc -4fa7-a731-828756ce47b1">
<ds:X509Data>
<ds:X509Certificate>MIID0DCCArigAwIBAgIBBTANBgkqghkiG9WOBAQsFAD
BMMQswCQYDVQQGEWIGUEcMBoGAIUECewTS2V5bmV4G1zLUSw2W5UcnV2dDEFMBO
GALUEAnwWT381bRydXNOIFR1¢3QZ0CEgrUGhBMjAeFwOxitjExMTUwMDU3
MzVaFw
OxNDEXMTUWMOU3MzVaMFexCZAJBgNVBAYTAK]UMQ8wDQYDVQQKDAZPIFR
FU1QXE
JAQBENVBASMCUSVIFRFUIQgMjESMBAGAIUECww)T2UgVEVTVCAXxMRAWD
gYDVQQ
DDAdUZXNGIENO:MIIBI5ANBgkqhkiGowOBAQEFAAOCAQSAMIIBCeKCAQE
AtnB/1
12FOScVqDI12Q)RsZZh9TK7ANLnxxnR2EP1hRP7GRanksgyYMIECiL/AN
nTEhft
Qe7AGSaWeX7x05GHIGd72NwnFQazVjHyaTBXSxaxUoG4kc1F5QaOOvvxU
AHTtM2
qYNjpgFyKkTGbASD7IgS36zTRYauE40kGhU2/pv1nG3jIKAU40f90gkQe
4+hw2I
xkNO'ImRaxPunkYoZWVn3geL/QQ1H/yggkBdpLG2qmTUm09¢vyVdycABd
l+SRSG
NyR42xVRcbS6rv150cbnbsrvkcbms1Gdo/qnKkvxcthXstt3TqGq+kZ1C
IHDoJs
F8ZDQKuljXMEgsurt/OHQIDAQAO4GuiGtMBGGA1UdDgQUBBRsJehOf8/t
O6YtFO
4hEYcc1COz0TAFBgNVHSMEGDANgBRRcvObAGFfzbq1TCZOMpE7ji+fpTA
RBglgh
kgBhvhCAQEEBAMCB4AWOegYDVROPAQH/BAQDASbAMEBGA1UdHwRBMDGwP
```

```
                aA70Dm
        GN2h@dHAGLy9wa210ZXNOLm9wZW5GcnVzdC5jb2GvT3B]b1RydXN@X1R1c3RFQO
        FFUGHBMI5jcmmwOQYIKOZThvcNAQELBQADggEBAGMAU3YO2Z9Ff1FLX/DHVcwST
        SotZ]aYtJindYcEtvhjY24vcXJzwbfopVu91XZFuxXjG12SSyksK4sRHF
        UVPQdr
        yAMGZMUW+0gjVFjupV54jr6vkaEL2té6oyE52CHqvvlHyLJz5CIW6jDEm
        @AZGNI
        ZlwdRr4afud9zM21m4X5J1Ts2GxY/JHO2F1155QJuVn7NSFFxBPxRsIKY
        NZ+27k
        cZNTSL9ZDWYXob5PUBVEOFXMhWPJtngzBOISNGQDVQIjtnbecsSgDchRM
        Vy4JOU
        DBUK7RAIpG4aR/5RKaMkO@6DLHXJteXfmsKfLyDq3H8B+eHefJIWCeYMn
        vqk755 EVNE=</ds:X509Certificate>
```

```
                </ds:X509Data>
            </ds:KeyInfo>
        </ds:Signature>
        </Sgntr>
    </AppHdr>
    <Document
        xmlns="urn:iso:std:iso:20022:tech:xsd:camt.003.0
        01.05"
        xmlns:xsi="http://www.w3.org/2001/XMLSchema-
        instance">
        <GetAcct>
            <MsgHdr>
                <MsgId>MSG_334873223482738299</MsgId>
                <CreDtTm>2020-04-07:00:00</CreDtTm>
            </MsgHdr>
            <AcctQryDef>
                <AcctCrit>
                    <QryNm>STAT</QryNm>
                    <NewCrit>
                        <SchCrit>
                          <AcctId>

                            <EQ><Othr>
                            <Id>ACC_0010201000324</Id>
                        </Othr>
                            </EQ>
                        </AcctId>
                        <AcctOwnr>
                            <Id>
                            <OrgId>
                                    <AnyBIC>FI_SWIFT</AnyBIC>
                            </OrgId>
                            </Id>
                     </AcctOwnr></SchCrit>
                  </NewCrit>
                </AcctCrit>
            </AcctQryDef>
        </GetAcct>
    </Document>
    </Saa:Body>
</Saa:DataPDU>
```

**Detailed Message Description:**

| App Header | | |
|---|---|---|
| AppHdr | **ISO Definition** | Business Application Header |
| | **XML Tag** | <AppHdr> |
| | **Occurrences** | [1..1] |

| From | | |
|---|---|---|
| AppHdr<br>+ Fr | **ISO Definition** | The sending MessagingEndpoint that has created this Business Message for the receiving MessagingEndpoint that will process this Business Message.<br>Note: the sending MessagingEndpoint might be different from the sending address potentially contained in the transport header (as defined in the transport layer). |
| | **XML Tag** | <Fr> |
| | **Occurrences** | [1..1] |

| FIId | | |
|---|---|---|
| AppHdr<br>+ Fr<br>++ FIId | **ISO Definition** | Identification of a financial institution. |
| | **XML Tag** | <FIId> |
| | **Occurrences** | [1..1] |

| Financial Institution Identification | | |
|---|---|---|
| AppHdr<br>+Fr<br>++ FIId<br>+++ FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognised or proprietary identification scheme. |
| | **XML Tag** | <FinInstnId> |

| | **Occurrences** | [1..1] |
|---|---|---|

**BICFI**

| | | |
|---|---|---|
| `AppHdr`<br>`+Fr`<br>`++ FIId`<br>`+++ FinInstnId`<br>`++++ BICFI` | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

**To**

| | | |
|---|---|---|
| `AppHdr`<br>`+ To` | **ISO Definition** | The MessagingEndpoint designated by the sending MessagingEndpoint to be the recipient who will ultimately process this Business Message.<br><br>Note: the receiving MessagingEndpoint might be different from the receiving address potentially contained in the transport header (as defined in the transport layer). |
| | **XML Tag** | <To> |
| | **Occurrences** | [1..1] |

**FIId**

| | | |
|---|---|---|
| `AppHdr`<br>`+ To`<br>`++ FIId` | **ISO Definition** | Identification of a financial institution. |
| | **XML Tag** | <FIId> |
| | **Occurrences** | [1..1] |

**Financial Institution Identification**

| | | |
|---|---|---|
| `AppHdr`<br>`+ To`<br>`++ FIId`<br>`+++ FinInstnId` | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognised or proprietary identification scheme. |

| | XML Tag | <FinInstnId> |
|---|---|---|
| | **Occurrences** | [1..1] |

| **BICFI** | | |
|---|---|---|
| AppHdr<br>+ To<br>++ FIId<br>+++ FinInstnId<br>++++ BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

| **Business Message Identifier** | | |
|---|---|---|
| AppHdr<br>+ BizMsgIdr | **ISO Definition** | Unambiguously identifies the Business Message to the MessagingEndpoint that has created the Business Message. |
| | **XML Tag** | <BizMsgIdr> |
| | **Occurrences** | [1..1] |

| **Message Definition Identifier** | | |
|---|---|---|
| AppHdr<br>+ MsgDefIdr | **ISO Definition** | Contains the MessageIdentifier that defines the BusinessMessage.<br><br>It must contain a MessageIdentifier published on the ISO 20022 website.<br><br>Example: pacs.008.001.04 |
| | **XML Tag** | <MsgDefIdr> |
| | **Occurrences** | [1..1] |

| Business Service | | |
|---|---|---|
| `AppHdr`<br>`+ BizSvc` | **ISO Definition** | Specifies the business service agreed between the two MessagingEndpoints under which rules this Business Message is exchanged.<br><br>To be used when there is a choice of processing services or processing service levels. |
| | **XML Tag** | <BizSvc> |
| | **Occurrences** | [1..1] |

| Creation Date | | |
|---|---|---|
| `AppHdr`<br>`+ CreDt` | **ISO Definition** | Date and time when this Business Message (header) was created.<br><br>Note: Times must be normalized, using the "Z" annotation. |
| | **XML Tag** | <CreDt> |
| | **Occurrences** | [1..1] |

| GetAcct | | |
|---|---|---|
| `GetAcct` | **ISO Definition** | Set of characteristics, such as the identification or the creation date and time, specific to the message. |
| | **XML Tag** | <GetAcct> |
| | **Occurrences** | [1..1] |

| Message Header | | |
|---|---|---|
| `GetAcct`<br>`+ MsgHdr` | **ISO Definition** | Common information for the message. |
| | **XML Tag** | <MsgHdr> |
| | **Occurrences** | [1..1] |

| **Message Identification** | | |
|---|---|---|
| `GetAcct`<br>`+ MsgHdr`<br>`++ MsgId` | **ISO Definition** | Point to point reference, as assigned by the participant who sends request |
| | **XML Tag** | <MsgId> |
| | **Occurrences** | [1..1] |

| **Creation Date Time** | | |
|---|---|---|
| `GetAcct`<br>`+ MsgHdr`<br>`++ CreDtTm` | **ISO Definition** | Date and time at which the message was created. |
| | **XML Tag** | <CreDtTm> |
| | **Occurrences** | [1..1] |

| **Account Query Definition** | | |
|---|---|---|
| `GetAcct`<br>`+ AcctQryDef` | **ISO Definition** | Details of query |
| | **XML Tag** | <AcctQryDef> |
| | **Occurrences** | [1..1] |

| **Account Criteria** | | |
|---|---|---|
| `GetAcct`<br>`+ AcctQryDef`<br>`++ AcctCrit` | **ISO Definition** | Defines the account query criteria. |
| | **XML Tag** | <AcctCrit> |
| | **Occurrences** | [1..1] |

| **Query Name** | | |
|---|---|---|
| `GetAcct`<br>`+ AcctQryDef`<br>`++ AcctCrit`<br>`+++ QryNm` | **ISO Definition** | Name of the query defined by the search criteria and return criteria. |
| | **XML Tag** | <QryNm> |
| | **Occurrences** | [1..1] |

**New Criteria**

| GetAcct<br>+ AcctQryDef<br>++ AcctCrit<br>+++ NewCrit | ISO Definition | Defines the criteria which are used to search for an account and to report on the account. A name may be given to the new query. |
|---|---|---|
| | XML Tag | <NewCrit> |
| | Occurrences | [1..1] |

**Search Criteria**

| GetAcct<br>+ AcctQryDef<br>++ AcctCrit<br>+++ NewCrit<br>++++ SchCrit | ISO Definition | Defines the criteria to be used to extract the account information. |
|---|---|---|
| | XML Tag | <SchCrit> |
| | Occurrences | [1..1] |

**Account Identification**

| GetAcct<br>+ AcctQryDef<br>++ AcctCrit<br>+++ NewCrit<br>++++ SchCrit<br>+++++ AcctId | ISO Definition | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | XML Tag | <AcctId> |
| | Occurrences | [1..1] |

**Equal**

| GetAcct<br>+ AcctQryDef<br>++ AcctCrit<br>+++ NewCrit<br>++++ SchCrit<br>+++++ AcctId<br>++++++ EQ | ISO Definition | Specifies the unique identification of an account as assigned by the account servicer. |
|---|---|---|
| | XML Tag | <EQ> |
| | Occurrences | [1..1] |

**Other**

| GetAcct<br>+ AcctQryDef<br>++ AcctCrit<br>+++ NewCrit<br><br>++++ SchCrit<br>+++++ AcctId<br>++++++ EQ<br>+++++++ Other | **ISO Definition** | Information related to a generic account identification. |
|---|---|---|
| | **XML Tag** | <Other> |
| | **Occurrences** | [1..1] |

| **Identification** | | |
|---|---|---|
| GetAcct<br>+ AcctQryDef<br>++ AcctCrit<br>+++ NewCrit<br><br>++++ SchCrit<br>+++++ AcctId<br>++++++ EQ<br>+++++++ Other<br>++++++++ Id | **ISO Definition** | Code of requested account |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

| **Account Owner** | | |
|---|---|---|
| GetAcct<br>+ AcctQryDef<br>++ AcctCrit<br>+++ NewCrit<br>++++ SchCrit<br>+++++ AcctOwnr | **ISO Definition** | Owner of the account which is being queried. |
| | **XML Tag** | <AcctOwnr> |
| | **Occurrences** | [1..1] |

| **Identification** | | |
|---|---|---|
| GetAcct<br>+ AcctQryDef<br>++ AcctCrit<br>+++ NewCrit<br>++++ SchCrit<br>+++++ AcctOwnr<br>++++++ Id | **ISO Definition** | Unique and unambiguous identification of a party. |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

| **Organization Identification** | | |
|---|---|---|
| GetAcct | **ISO** | Unique and unambiguous way to identify an |

| `+ AcctQryDef`<br>`++ AcctCrit`<br>`+++ NewCrit`<br><br>`++++ SchCrit`<br>`+++++ AcctOwnr`<br>`++++++ Id`<br>`+++++++ OrgId` | **Definition** | organization |
|---|---|---|
| | **XML Tag** | \<OrgId\> |
| | **Occurrences** | [1..1] |

| **AnyBIC** | | |
|---|---|---|
| `GetAcct`<br>`+ AcctQryDef`<br>`++ AcctCrit`<br>`+++ NewCrit`<br><br>`++++ SchCrit`<br>`+++++ AcctOwnr`<br>`++++++ Id`<br>`+++++++ OrgId`<br>`++++++++ AnyBIC` | **ISO Definition** | BIC of participant who owns requested account |
| | **XML Tag** | \<AnyBIC\> |
| | **Occurrences** | [1..1] |

## F. ISO 20022/CAMT.004.001.05 XML Sample

```
<?xml version="1.0" encoding="latin1"?>
<DataPDU
    xmlns="urn:swift:saa:xsd:saa.2.0">
    <Revision>2.0.5</Revision>
    <Body>
        <AppHdr
            xmlns="urn:iso:std:iso:20022:tech:xsd:head.001.001.01">
            <Fr>
                <FIId>
                    <FinInstnId>
                        <BICFI>FI_SWIFT</BICFI>
                    </FinInstnId>
                </FIId>
            </Fr>
            <To>
                <FIId>
                    <FinInstnId>
                        <BICFI>IDTP</BICFI>
                    </FinInstnId>
                </FIId>
            </To>
            <BizMsgIdr>MSG_444873223482738299</BizMsgIdr>
            <MsgDefIdr>camt.004.001.05</MsgDefIdr>
            <BizSvc>IDTP</BizSvc>
            <CreDt>2020-04-07T09:28:47Z</CreDt>
            <Sgntr>
            <ds:Signature Id="_beddd7de-c63a-43a6-9b62-f69290939eb6"
            xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
            <ds:SignedInfo>
            <ds:CanonicalizationMethod
            Algorithm="http://www.w3.org/2001/ 10/xml -exc-
            c14n#"/>
            <ds:SignatureMethod Algorithm="http: /
            /www.w3.org/2001/04/xmldsig-
            more#rsa- sha256"/>
            <ds:Reference URI="#_98742d60-2afc -4fa7-a731-828756ce47b1">
            <ds:Transforms>
            <ds:Transform Algorithm="http:
            //www.w3.org/2001/10/xml-exc- c14n#"/>
            </ds:Transforms >
            <ds:DigestMethod Algorithm="http:
            //www.w3.org/2001/04/xmlenc#sha256" />
            <ds:DigestValue>vB/
            xxu+qkEVUH5i9uVdBHOXOp6+XDsAn/iHxH+UiMGo=</ds
            :DigestValue>
            </ds:Reference>
            <ds: Reference URI="">
            <ds:Transforms>
            <ds: Transform Algorithm="http:
            //www.w3.
            org/2000/09/xmldsig#tenveloped-
            signature" />
            <ds: Transform Algorithm="http: //www.w3.
            org/2001/10/xml-exc- c14n#"/>
            </ds: Transforms >
            <ds:DigestMethod
            Algorithm="http: //www.
            w3.org/2001/04/xmlenc#sha256" />
```

```
<ds:DigestValue>hWGkHPu5IMYxe4KF
YyaMOFWYqOw2pi+BYnYvHEwm/Z8=</ds:DigestValue>
</ds:Reference>
<ds:Reference>
<ds:Transforms>
<ds: Transform Algorithm="http:
//www.w3.org/2001/10/xml-exc- c14n#"/>
</ds:Transforms >
<ds:DigestMethod
Algorithm="http: //www.
w3.org/2001/04/xmlenc#sha256" />
<ds:DigestValue
>10eHeNdJM1v177MOHzFsmP0IBMYvdPXVuRcR77hAgUg=</ds
:DigestValue>
</ds:Reference>
</ds:SignedInfo>
<ds:SignatureValue>H11itYLicuuSdrRrzuSCFxk5G2Z3LDOOnEPCrXkfwiuS
dyOzA3P2r6A1e1cYidueY8niolEvcZcvKVS4zt6bbHvSRRabinU+J£13x4vTHSg
SWERY1OLPErRbTNcn9r3Nb/hxeBj6Rztv3vR+gW+JY21y3pkTTADSOINOIKkcau
arcwQGEMAWM3UjK315796Ldi7ddvHohgW1ighkzdidBfcONatYnIXZew/770UnB
ecimz4yqJvCo1SritasC@LHFdbeudgBivJtQ/CD1/So9Mkrw6VNUXohv5L3i33
3fNI9geM1oC/ZIGL1HLfOsyJ7GokRsypd 1YWFQvNNhu1OupanRA==
</ds:SignatureValue>
<ds:KeyInfo Id="_98742d60-2afc -4fa7-a731-828756ce47b1">
<ds:X509Data>
<ds:X509Certificate>MIID0DCCArigAwIBAgIBBTANBgkqghkiG9WOBAQsFAD
BMMQswCQYDVQQGEWIGUEcMBoGA1USCewTS2V5bmV4G1zLUSw5UcnV2dDEFMBO
GALUEAnwWT381bRydXNOIFR1¢3QZ0CEgUGhBMjAeFwOxitjExMTUwMDU3
MzVaFw
OxNDEXMTUWMOU3MzVaMFexCZAJBgNVBAYTAK]UMQ8wDQYDVQQKDAZPIFR
FU1QXE
JAQBENVBASMCUSVIFRFUIQgMjESMBAGAIUECww)T2UgVEVTVCAXxMRAWD
gYDVQQ
DDAdUZXNGIENO:MIIBI5ANBgkqhkiGowOBAQEFAAOCAQSAMIIBCeKCAQE
AtnB/1
12FOScVqDI12Q)RsZZh9TK7ANLnxxnR2EP1hRP7GRanksgyYMIECiL/AN
nTEhft
Qe7AGSaWeX7x05GHIGd72NwnFQazVjHyaTBXSxaxUoG4kc1F5QaOOvvxU
AHTtM2
qYNjpgFyKkTGbASD7IgS36zTRYauE40kGhU2/pv1nG3jIKAU40f90gkQe
4+hw2I
xkNO'ImRaxPunkYoZWVn3geL/QQ1H/yggkBdpLG2qmTUm09¢vyVdycABd
l+SRSG
NyR42xVRcbS6rv150cbnbsrvkcbms1Gdo/qnKkvxcthXstt3TqGq+kZ1C
IHDoJs
F8ZDQKuljXMEgsurt/OHQIDAQAO4GuiGtMBGGA1UdDgQUBBRsJehOf8/t
O6YtFO
4hEYcc1COz0TAFBgNVHSMEGDANgBRRcvObAGFfzbq1TCZOMpE7ji+fpTA
RBglgh
kgBhvhCAQEEBAMCB4AWOegYDVROPAQH/BAQDASbAMEBGA1UdHwRBMDGwP
aA70Dm
GN2h@dHAGLy9wa210ZXNOLm9wZW5GcnVzdC5jb2GvT3B]b1RydXN@X1R1c3RFQO
FFUGHBMI5jcmmwOQYIKOZThvcNAQELBQADggEBAGMAU3YO2Z9Ff1FLX/DHVcwST
SotZ]aYtJindYcEtvhjY24vcXJzwbfopVu91XZFuxXjG12SSyksK4sRHF
UVPQdr
yAMGZMUW+0gjVFjupV54jr6vkaEL2té6oyE52CHqvvlHyLJz5CIW6jDEm
@AZGNI
ZlwdRr4afud9zM21m4X5J1Ts2GxY/JHO2F1155QJuVn7NSFFxBPxRsIKY
NZ+27k
cZNTSL9ZDWYXob5PUBVEOFXMhWPJtngzBOISNGQDVQIjtnbecsSgDchRM
Vy4JOU
```

```
            DBUK7RAIpG4aR/5RKaMkO@6DLHXJteXfmsKfLyDq3H8B+eHefJIWCeYMn
            vqk755 EVNE=</ds:X509Certificate>
            </ds:X509Data>
            </ds:KeyInfo>
            </ds:Signature>
            </Sgntr>
        </AppHdr>
        <Document
            xmlns="urn:swift:xsd:camt.004.001.05">
            <RtrAcct>
                <MsgHdr>
                    <MsgId>MSG_444873223482738299</MsgId>
                    <CreDtTm>2020-04-07T12:28:47</CreDtTm>
                    <OrgnlBizQry>
                        <MsgId> MSG_334873223482738299 </MsgId>
                    </OrgnlBizQry>
                </MsgHdr>
                <RptOrErr>
                    <AcctRpt>
                        <AcctId>
                            <Othr>
                                <Id> ACC_0010201000324</Id>
                            </Othr>
                        </AcctId>
                        <AcctOrErr>
                            <Acct>
                                <Tp>
                                    <Cd>AA</Cd>
                                </Tp>
                                <Ccy>BDT</Ccy>
                            <CurMulLmt>
                                <Amt>
                                    <AmtWthtCcy>1000.00</AmtWthtCcy>
                                </Amt>
                                <CdtDbtInd>DBIT</CdtDbtInd>
                            </CurMulLmt>
                            <Ownr>
                                <Id>
                                <OrgId>
                                        <AnyBIC>FI_SWIFT</AnyBIC>
                                </OrgId>
                                </Id>
                            </Ownr>
                            </Acct>
                        </AcctOrErr>
                    </AcctRpt>
                </RptOrErr>
            </RtrAcct>
        </Document>
    </Body>
</DataPDU>
```

**Detailed Message Description:**

| App Header | | |
|---|---|---|
| AppHdr | **ISO Definition** | Business Application Header |
| | **XML Tag** | <AppHdr> |
| | **Occurrences** | [1..1] |

| From | | |
|---|---|---|
| AppHdr<br>+ Fr | **ISO Definition** | The sending MessagingEndpoint that has created this Business Message for the receiving MessagingEndpoint that will process this Business Message.<br>Note: the sending MessagingEndpoint might be different from the sending address potentially contained in the transport header (as defined in the transport layer). |
| | **XML Tag** | <Fr> |
| | **Occurrences** | [1..1] |

| FIId | | |
|---|---|---|
| AppHdr<br>+ Fr<br>++ FIId | **ISO Definition** | Identification of a financial institution. |
| | **XML Tag** | <FIId> |
| | **Occurrences** | [1..1] |

| Financial Institution Identification | | |
|---|---|---|
| AppHdr<br>+Fr<br>++ FIId<br>+++ FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognised or proprietary identification scheme. |

| | **XML Tag** | <FinInstnId> |
|---|---|---|
| | **Occurrences** | [1..1] |

| **BICFI** | | |
|---|---|---|
| `AppHdr`<br>`+Fr`<br>`++ FIId`<br>`+++ FinInstnId`<br>`++++ BICFI` | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

| **To** | | |
|---|---|---|
| `AppHdr`<br>`+ To` | **ISO Definition** | The MessagingEndpoint designated by the sending MessagingEndpoint to be the recipient who will ultimately process this Business Message.<br><br>Note: the receiving MessagingEndpoint might be different from the receiving address potentially contained in the transport header (as defined in the transport layer). |
| | **XML Tag** | <To> |
| | **Occurrences** | [1..1] |

| **FIId** | | |
|---|---|---|
| `AppHdr`<br>`+ To`<br>`++ FIId` | **ISO Definition** | Identification of a financial institution. |
| | **XML Tag** | <FIId> |
| | **Occurrences** | [1..1] |

**Financial Institution Identification**

| `AppHdr`<br>`+ To`<br>`++ FIId`<br>`+++ FinInstnId` | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognised or proprietary identification scheme. |
|---|---|---|
| | **XML Tag** | \<FinInstnId\> |
| | **Occurrences** | [1..1] |

**BICFI**

| `AppHdr`<br>`+ To`<br>`++ FIId`<br>`+++ FinInstnId`<br>`++++ BICFI` | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
|---|---|---|
| | **XML Tag** | \<BICFI\> |
| | **Occurrences** | [1..1] |

**Business Message Identifier**

| `AppHdr`<br>`+ BizMsgIdr` | **ISO Definition** | Unambiguously identifies the Business Message to the MessagingEndpoint that has created the Business Message. |
|---|---|---|
| | **XML Tag** | \<BizMsgIdr\> |
| | **Occurrences** | [1..1] |

**Message Definition Identifier**

| `AppHdr`<br>`+ MsgDefIdr` | **ISO Definition** | Contains the MessageIdentifier that defines the BusinessMessage.<br><br>It must contain a MessageIdentifier published on the ISO 20022 website.<br><br>Example: pacs.008.001.04 |
|---|---|---|
| | **XML Tag** | \<MsgDefIdr\> |

| | Occurrences | [1..1] |
|---|---|---|

**Business Service**

| | | |
|---|---|---|
| `AppHdr`<br>`+ BizSvc` | **ISO Definition** | Specifies the business service agreed between the two MessagingEndpoints under which rules this Business Message is exchanged.<br><br>To be used when there is a choice of processing services or processing service levels. |
| | **XML Tag** | <BizSvc> |
| | **Occurrences** | [1..1] |

**Creation Date**

| | | |
|---|---|---|
| `AppHdr`<br>`+ CreDt` | **ISO Definition** | Date and time when this Business Message (header) was created.<br><br>Note: Times must be normalized, using the "Z" annotation. |
| | **XML Tag** | <CreDt> |
| | **Occurrences** | [1..1] |

**Return Account**

| | | |
|---|---|---|
| `RtrAcct` | **ISO Definition** | Scope The ReturnAccount message is sent by the transaction administrator to a member. It is used to provide information on the details of one or more accounts held at the transaction administrator, including information on the balances. |
| | **XML Tag** | <RtrAcct> |
| | **Occurrences** | [1..1] |

| Message Header | | |
|---|---|---|
| RtrAcct<br>+ MsgHdr | **ISO Definition** | Common information for the message. |
| | **XML Tag** | <MsgHdr> |
| | **Occurrences** | [1..1] |

| Message Identification | | |
|---|---|---|
| RtrAcct<br>+ MsgHdr<br>++ MsgId | **ISO Definition** | Point to point reference, as assigned by the participant who sends request |
| | **XML Tag** | <MsgId> |
| | **Occurrences** | [1..1] |

| Creation Date Time | | |
|---|---|---|
| RtrAcct<br>+ MsgHdr<br>++ CreDtTm | **ISO Definition** | Date and time at which the message was created. |
| | **XML Tag** | <CreDtTm> |
| | **Occurrences** | [1..1] |

| Original Business Query | | |
|---|---|---|
| RtrAcct<br>+ MsgHdr<br>++ OrgnlBizQry | **ISO Definition** | Unique identification of the original query message. |
| | **XML Tag** | <OrgnlBizQry> |
| | **Occurrences** | [1..1] |

| Message Identification | | |
|---|---|---|
| RtrAcct<br>+ MsgHdr<br>++ OrgnlBizQry<br>+++ MsgId | **ISO Definition** | Point to point reference, as assigned by the sender, to unambiguously identify the message. |
| | **XML Tag** | <MsgId> |
| | **Occurrences** | [1..1] |

**Report or Error**

| RtrAcct<br>+ RptOrErr | **ISO Definition** | Choice between account details or an operational error when the requested data cannot be retrieved. |
|---|---|---|
| | **XML Tag** | \<RptOrErr\> |
| | **Occurrences** | [1..1] |

**Account Report**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt | **ISO Definition** | Reports either on the account information or on a business error. |
|---|---|---|
| | **XML Tag** | \<AcctRpt\> |
| | **Occurrences** | [1..1] |

**Account Identification**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctId | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | \<AcctId\> |
| | **Occurrences** | [1..1] |

**Other**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctId<br>++++ Other | **ISO Definition** | Information related to a generic account identification. |
|---|---|---|
| | **XML Tag** | \<Other\> |
| | **Occurrences** | [1..1] |

**Identification**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctId<br>++++ Other<br>+++++ Id | **ISO Definition** | Code of requested account |
|---|---|---|
| | **XML Tag** | \<Id\> |
| | **Occurrences** | [1..1] |

**Account or Error**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctOrErr | **ISO Definition** | Requested information on the account or business error when information has not been found. |
|---|---|---|
| | **XML Tag** | \<AcctOrErr\> |
| | **Occurrences** | [1..1] |

**Account**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctOrErr<br>++++ Acct | **ISO Definition** | Account to or from which a cash entry is made. |
|---|---|---|
| | **XML Tag** | \<Acct\> |
| | **Occurrences** | [1..1] |

**Type**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctOrErr<br>++++ Acct<br>+++++ Tp | **ISO Definition** | Specifies the nature, or use, of the cash account. |
|---|---|---|
| | **XML Tag** | \<Tp\> |
| | **Occurrences** | [1..1] |

**Code**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctOrErr<br>++++ Acct<br>+++++ Tp<br>++++++ Cd | **ISO Definition** | Specifies the external account identification scheme name code in the format of character string with a maximum length of 4 characters. |
|---|---|---|
| | **XML Tag** | \<Cd\> |
| | **Occurrences** | [1..1] |

**Currency**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt | **ISO Definition** | Specifies the currency of the cash account. |
|---|---|---|

| `+++ AcctOrErr`<br>`++++ Acct`<br>`+++++ Ccy` | **XML Tag** | `<Ccy>` |
| | **Occurrences** | [1..1] |

**Current Multilateral Limit**

| `RtrAcct`<br>`+ RptOrErr`<br>`++ AcctRpt`<br>`+++ AcctOrErr`<br>`++++ Acct`<br>`+++++ CurMulLmt` | **ISO Definition** | Maximum amount value applied to or by a participant versus a set of counterparts. The multilateral system is taken into account by the transaction administrator to contain the risk in the system.<br>With the help of the multilateral limit, the direct participant restricts the use of liquidity when clearing payments with all other direct participants for whom no bilateral limit was set. |
| | **XML Tag** | `<CurMulLmt>` |
| | **Occurrences** | [1..1] |

**Amount**

| `RtrAcct`<br>`+ RptOrErr`<br>`++ AcctRpt`<br>`+++ AcctOrErr`<br>`++++ Acct`<br>`+++++ CurMulLmt`<br>`++++++ Amt` | **ISO Definition** | Amount of money of the limit, expressed in an eligible currency. |
| | **XML Tag** | `<Amt>` |
| | **Occurrences** | [1..1] |

**Amount without currency**

| `RtrAcct`<br>`+ RptOrErr`<br>`++ AcctRpt`<br>`+++ AcctOrErr`<br>`++++ Acct`<br>`+++++ CurMulLmt`<br>`++++++ Amt`<br>`+++++++ AmtWthtCcy` | **ISO Definition** | Number of monetary units specified in a currency where the unit of currency is implied by the context and compliant with ISO 4217. The decimal separator is a dot. Note: a zero amount is considered a positive amount. |
| | **XML Tag** | `<AmtWthtCcy>` |
| | **Occurrences** | [1..1] |

**Credit Debit Indicator**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctOrErr<br>++++ Acct<br>+++++ CurMulLmt<br>++++++ CdtDbtInd | ISO Definition | Specifies if a limit is a debit limit or a credit limit. |
|---|---|---|
| | XML Tag | <CdtDbtInd> |
| | Occurrences | [1..1] |

**Owner**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctOrErr<br>++++ Acct<br>+++++ Ownr | ISO Definition | Owner of the account which is being queried. |
|---|---|---|
| | XML Tag | <CurMulLmt> |
| | Occurrences | [1..1] |

**Identification**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctOrErr<br><br>++++ Acct<br>+++++ Ownr<br>++++++ Id | ISO Definition | Identification used to indicate the account identification under another specified name. |
|---|---|---|
| | XML Tag | <Id> |
| | Occurrences | [1..1] |

**Organisation Identification**

| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctOrErr<br><br>++++ Acct<br>+++++ Ownr<br>++++++ Id<br>+++++++ OrgId | ISO Definition | Unique and unambiguous way to identify an organization |
|---|---|---|
| | XML Tag | <OrgId> |
| | Occurrences | [1..1] |

| Any BIC | | |
|---|---|---|
| RtrAcct<br>+ RptOrErr<br>++ AcctRpt<br>+++ AcctOrErr<br>++++ Acct<br>+++++ Ownr<br>++++++ Id<br>+++++++ OrgId<br>++++++++ AnyBIC | **ISO Definition** | BIC of participant who owns requested account |
| | **XML Tag** | <AnyBIC> |
| | **Occurrences** | [1..1] |

## G. ISO 20022/PAIN.001.001.04 XML Sample

```
<?xml version="1.0" encoding="utf-8"?>
<Document xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance"
xmlns="urn:iso:std:iso:20022:tech:xsd:pain.001.001.04">
    <CstmrCdtTrfInitn>
        <GrpHdr>
            <MsgId>MSG_334873223482738299</MsgId>
            <CreDtTm>2020-04-28T14:07:00</CreDtTm>
            <NbOfTxs>1</NbOfTxs>
            <CtrlSum>1000</CtrlSum>
            <InitgPty>
                <Nm>SAMPLENAME1</Nm>
            </InitgPty>
            <Sgntr>
            <ds:Signature Id="_beddd7de-c63a-43a6-9b62-f69290939eb6"
            xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
            <ds:SignedInfo>
            <ds:CanonicalizationMethod
            Algorithm="http://www.w3.org/2001/ 10/xml -exc-
            c14n#"/>
            <ds:SignatureMethod Algorithm="http: /
            /www.w3.org/2001/04/xmldsig-
            more#rsa- sha256"/>
            <ds:Reference URI="#_98742d60-2afc -4fa7-a731-828756ce47b1">
            <ds:Transforms>
            <ds:Transform Algorithm="http:
            //www.w3.org/2001/10/xml-exc- cl4n#"/>
            </ds:Transforms >
            <ds:DigestMethod Algorithm="http:
            //www.w3.org/2001/04/xmlenc#sha256" />
            <ds:DigestValue>vB/
            xxu+qkEVUH5i9uVdBHOXOp6+XDsAn/iHxH+UiMGo=</ds
            :DigestValue>
            </ds:Reference>
            <ds: Reference URI="">
            <ds:Transforms>
            <ds: Transform Algorithm="http:
            //www.w3.
            org/2000/09/xmldsig#tenveloped-
            signature" />
            <ds: Transform Algorithm="http: //www.w3.
            org/2001/10/xml-exc- cl4n#"/>
            </ds: Transforms >
            <ds:DigestMethod
            Algorithm="http: //www.
            w3.org/2001/04/xmlenc#sha256" />
            <ds:DigestValue>hWGkHPu5IMYxe4KF
            YyaMOFWYqOw2pi+BYnYvHEwm/Z8=</ds:DigestValue>
            </ds:Reference>
            <ds:Reference>
            <ds:Transforms>
            <ds: Transform Algorithm="http:
            //www.w3.org/2001/10/xml-exc- c14n#"/>
            </ds:Transforms >
            <ds:DigestMethod
            Algorithm="http: //www.
            w3.org/2001/04/xmlenc#sha256" />
            <ds:DigestValue
```

```
            >10eHeNdJM1v177MOHzFsmP0IBMYvdPXVuRcR77hAgUg=</ds
            :DigestValue>
            </ds:Reference>
            </ds:SignedInfo>
            <ds:SignatureValue>H11itYLicuuSdrRrzuSCFxk5G2Z3LDOOnEPCrXkfwiuS
            dyOzA3P2r6Ale1cYidueY8niolEvcZcvKVS4zt6bbHvSRRabinU+J£13x4vTHSg
            SWERY1OLPErRbTNcn9r3Nb/hxeBj6Rztv3vR+gW+JY21y3pkTTADSOINOIKkcau
            arcwQGEMAWM3UjK315796Ldi7ddvHohgW1ighkzdidBfcONatYnIXZew/770UnB
            ecimz4yqJvCo1SritasC@LHFdbeudgBivJtQ/CD1/So9Mkrw6VNUXohv5L3i33
            3fNI9geM1oC/ZIGL1HLfOsyJ7GokRsypd 1YWFQvNNhu1OupanRA==
            </ds :SignatureValue>
            <ds:KeyInfo Id="_98742d60-2afc -4fa7-a731-828756ce47b1">
            <ds:X509Data>
            <ds:X509Certificate>MIID0DCCArigAwIBAgIBBTANBgkqghkiG9WOBAQsFAD
            BMMQswCQYDVQQGEWIGUEcMBoGAIUECewTS2V5bmV4G1zLUSw5UcnV2dDEFMBO
            GALUEAnwWT381bRydXNOIFR1¢3QZ0CEgUGhBMjAeFwOxitjExMTUwMDU3
            MzVaFw
            OxNDEXMTUWMOU3MzVaMFexCZAJBgNVBAYTAK]UMQ8wDQYDVQQKDAZPIFR
            FU1QXE
            JAQBENVBASMCUSVIFRFUIQgMjESMBAGAIUECww)T2UgVEVTVCAXxMRAWD
            gYDVQQ
            DDAdUZXNGIENO:MIIBI5ANBgkqhkiGowOBAQEFAAOCAQSAMIIBCeKCAQE
            AtnB/1
            12FOScVqDI12Q)RsZZh9TK7ANLnxxnR2EP1hRP7GRanksgyYMIECiL/AN
            nTEhft
            Qe7AGSaWeX7x05GHIGd72NwnFQazVjHyaTBXSxaxUoG4kc1F5QaOOvvxU
            AHTtM2
            qYNjpgFyKkTGbASD7IgS36zTRYauE40kGhU2/pv1nG3jIKAU40f90gkQe
            4+hw2I
            xkNO'ImRaxPunkYoZWVn3geL/QQ1H/yggkBdpLG2qmTUm09¢vyVdycABd
            l+SRSG
            NyR42xVRcbS6rv150cbnbsrvkcbms1Gdo/qnKkvxcthXstt3TqGq+kZ1C
            IHDoJs
            F8ZDQKuljXMEgsurt/OHQIDAQAO4GuiGtMBGGA1UdDgQUBBRsJehOf8/t
            O6YtFO
            4hEYcc1COz0TAFBgNVHSMEGDANgBRRcvObAGFfzbq1TCZOMpE7ji+fpTA
            RBglgh
            kgBhvhCAQEEBAMCB4AWOegYDVROPAQH/BAQDASbAMEBGA1UdHwRBMDGwP
            aA70Dm
            GN2h@dHAGLy9wa210ZXNOLm9wZW5GcnVzdC5jb2GvT3B]b1RydXN@X1R1c3RFQO
            FFUGHBMI5jcmmwOQYIKOZThvcNAQELBQADggEBAGMAU3YO2Z9Ff1FLX/DHVcwST
            SotZ]aYtJindYcEtvhjY24vcXJzwbfopVu91XZFuxXjG12SSyksK4sRHF
            UVPQdr
            yAMGZMUW+0gjVFjupV54jr6vkaEL2té6oyE52CHqvvlHyLJz5CIW6jDEm
            @AZGNI
            ZlwdRr4afud9zM21m4X5J1Ts2GxY/JHO2F1155QJuVn7NSFFxBPxRsIKY
            NZ+27k
            cZNTSL9ZDWYXob5PUBVEOFXMhWPJtngzBOISNGQDVQIjtnbecsSgDchRM
            Vy4JOU
            DBUK7RAIpG4aR/5RKaMkO@6DLHXJteXfmsKfLyDq3H8B+eHefJIWCeYMn
            vqk755 EVNE=</ds:X509Certificate>
            </ds:X509Data>
            </ds:KeyInfo>
            </ds:Signature>
            </Sgntr>
        </GrpHdr>
        <PmtInf>
            <PmtInfId>PAY_223373223482738299</PmtInfId>
            <PmtMtd>TRF</PmtMtd>
            <BtchBookg>false</BtchBookg>
            <ReqdExctnDt>2020-04-28</ReqdExctnDt>
```

```xml
        <Dbtr>
            <Nm></Nm>
        </Dbtr>
        <DbtrAcct>
            <Id>
                <Othr>
                    <Id>sampleuser1@user.idtp</Id>
                </Othr>
            </Id>
        </DbtrAcct>
        <DbtrAgt>
            <FinInstnId>
                <BICFI>FI_SWIFT1</BICFI>
            </FinInstnId>
        </DbtrAgt>
        <CdtTrfTxInf>
            <PmtId>
                <InstrId>MSG_3348733223482738299</InstrId>
                <EndToEndId>TRAN_34873223482738299</EndToEndId>
            </PmtId>
            <Amt>
                <InstdAmt Ccy="BDT">1000</InstdAmt>
            </Amt>
            <ChrgBr>SHAR</ChrgBr>
            <CdtrAgt>
                <FinInstnId>
                    <BICFI>FI_SWIFT2</BICFI>
                </FinInstnId>
            </CdtrAgt>
            <Cdtr>
                <Nm></Nm>
            </Cdtr>
            <CdtrAcct>
                <Id>
                    <Othr>
                    <Id>sampleuser2@user.idtp</Id>
                    </Othr>
                </Id>
            </CdtrAcct>
        </CdtTrfTxInf>
    </PmtInf>
        <SplmtryData>
            <PlcAndNm/>
            <Envlp>
                <DeviceInfo>
                    <Device_ID>012HGRTBHDGBKLBVB</Device_ID>
                    <Mobile_No>="+8801985245697</Mobile_No>
                    <Location>23.7805,90.4267</Location>
                    <IP>10.0.0.1</IP>
                </DeviceInfo>
                <IDTP_PIN>XXXXXX</IDTP_PIN>
                <VID>sampleuser@user.idtp</VID>
                <Channel>App/Portal/XXX</Channel>
            </Envlp>
        </SplmtryData>
    </CstmrCdtTrfInitn>
 </Document>
```

**Detailed Message Description:**

| CstmrCdtTrfInitn | | |
|---|---|---|
| CstmrCdtTrfInitn | **ISO Definition** | The CustomerCreditTransferInitiation message is sent by the initiating party to the forwarding agent or debtor agent. It is used to request movement of funds from the debtor account to a creditor. |
| | **XML Tag** | \<CstmrCdtTrfInitn\> |
| | **Occurrences** | [1..1] |

| Group Header | | |
|---|---|---|
| CstmrCdtTrfInitn + GrpHdr | **ISO Definition** | Set of characteristics shared by all individual transactions included in the message. |
| | **XML Tag** | \<GrpHdr\> |
| | **Occurrences** | [1..1] |

| Message Identification | | |
|---|---|---|
| CstmrCdtTrfInitn + GrpHdr ++ MsgId | **ISO Definition** | Point to point reference, as assigned by the instructing party, and sent to the next party in the chain to unambiguously identify the message. |
| | **XML Tag** | \<MsgId\> |
| | **Occurrences** | [1..1] |

| Message Identification | | |
|---|---|---|
| CstmrCdtTrfInitn + GrpHdr ++ MsgId | **ISO Definition** | Point to point reference, as assigned by the instructing party, and sent to the next party in the chain to unambiguously identify the message. |
| | **XML Tag** | \<MsgId\> |
| | **Occurrences** | [1..1] |

| Creation Date Time | | |
|---|---|---|
| CstmrCdtTrfInitn + GrpHdr ++ CreDtTm | **ISO Definition** | Date and time at which the message was created. |

| | XML Tag | <CreDtTm> |
|---|---|---|
| | Occurrences | [1..1] |

| **Number of Transactions** | | |
|---|---|---|
| `CstmrCdtTrfInitn`<br>`+GrpHdr`<br>`++ NbOfTxs` | **ISO Definition** | Date and time at which the message was created. |
| | **XML Tag** | <NbOfTxs> |
| | **Occurrences** | [1..1] |

| **Control Sum** | | |
|---|---|---|
| `CstmrCdtTrfInitn`<br>`+ GrpHdr`<br>`++ CtrlSum` | **ISO Definition** | Total of all individual amounts included in the message, irrespective of currencies. |
| | **XML Tag** | <CtrlSum> |
| | **Occurrences** | [1..1] |

| **Initiating Party** | | |
|---|---|---|
| `CstmrCdtTrfInitn`<br>`+ GrpHdr`<br>`++ InitgPty` | **ISO Definition** | Party that initiates the payment. |
| | **XML Tag** | <InitgPty> |
| | **Occurrences** | [1..1] |

| **Name** | | |
|---|---|---|
| `CstmrCdtTrfInitn`<br>`+ GrpHdr`<br>`++ InitgPty`<br>`+++ Nm` | **ISO Definition** | Name by which a party is known and which is usually used to identify that party. |
| | **XML Tag** | <Nm> |
| | **Occurrences** | [1..1] |

**Payment Information**

| CstmrCdtTrfInitn + PmtInf | ISO Definition | Set of characteristics that applies to the debit side of the payment transactions included in the creditor payment initiation. |
|---|---|---|
| | XML Tag | <PmtInf> |
| | Occurrences | [1..1] |

**Payment Information Identification**

| CstmrCdtTrfInitn + PmtInf ++ PmtInfId | ISO Definition | Unique identification, as assigned by a sending party, to unambiguously identify the payment information group within the message. |
|---|---|---|
| | XML Tag | <PmtInfId> |
| | Occurrences | [1..1] |

**Payment Method**

| CstmrCdtTrfInitn + PmtInf ++ PmtMtd | ISO Definition | Unique identification, as assigned by a sending party, to unambiguously identify the payment information group within the message. |
|---|---|---|
| | XML Tag | <PmtMtd> |
| | Occurrences | [1..1] |

**Batch Booking**

| CstmrCdtTrfInitn + PmtInf ++ BtchBookg | ISO Definition | Identifies whether a single entry per individual transaction or a batch entry for the sum of the amounts of all transactions within the group of a message is requested. |
|---|---|---|
| | XML Tag | <BtchBookg> |
| | Occurrences | [1..1] |

**Requested Execution Date**

| CstmrCdtTrfInitn + PmtInf ++ ReqdExctnDt | ISO Definition | Date at which the initiating party requests the clearing agent to process the payment. |
|---|---|---|
| | XML Tag | <ReqdExctnDt> |

| | **Occurrences** | [1..1] |
|---|---|---|

| **Debtor** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ Dbtr | **ISO Definition** | Party that owes an amount of money to the (ultimate) creditor. |
| | **XML Tag** | <Dbtr> |
| | **Occurrences** | [1..1] |

| **Name** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ Dbtr<br>+++ Nm | **ISO Definition** | Name by which a party is known and which is usually used to identify that party. |
| | **XML Tag** | <Nm> |
| | **Occurrences** | [1..1] |

| **Debtor Account** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ DbtrAcct | **ISO Definition** | Name by which a party is known and which is usually used to identify that party. |
| | **XML Tag** | <DbtrAcct> |
| | **Occurrences** | [1..1] |

| **Identification** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ DbtrAcct<br>+++ Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Other**

| `CstmrCdtTrfInitn`<br>`+ PmtInf`<br>`++ DbtrAcct`<br>`+++ Id`<br>`++++ Othr` | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
| --- | --- | --- |
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

**Identification**

| `CstmrCdtTrfInitn`<br>`+ PmtInf`<br>`++ DbtrAcct`<br>`+++ Id`<br>`++++ Othr`<br>`+++++ Id` | **ISO Definition** | Identification assigned by an institution. |
| --- | --- | --- |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Debtor Agent**

| `CstmrCdtTrfInitn`<br>`+ PmtInf`<br>`++ DbtrAgt` | **ISO Definition** | Financial institution servicing an account for the debtor. |
| --- | --- | --- |
| | **XML Tag** | <DbtrAgt> |
| | **Occurrences** | [1..1] |

**Financial Institution Identification**

| `CstmrCdtTrfInitn`<br>`+ PmtInf`<br>`++ DbtrAgt`<br>`+++ FinInstnId` | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| --- | --- | --- |
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

**BICFI**

| `CstmrCdtTrfInitn`<br>`+ PmtInf`<br>`++ DbtrAgt`<br>`+++ FinInstnId` | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| --- | --- | --- |

| ++++ BICFI | **XML Tag** | <BICFI> |
|---|---|---|
| | **Occurrences** | [1..1] |

| **Credit Transfer Transaction Information** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ CdtTrfTxInf | **ISO Definition** | Provides information on the individual transaction(s) included in the message. |
| | **XML Tag** | <CdtTrfTxInf> |
| | **Occurrences** | [1..1] |

| **Payment Identification** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ CdtTrfTxInf<br>+++ PmtId | **ISO Definition** | Set of elements used to reference a payment instruction. |
| | **XML Tag** | <PmtId> |
| | **Occurrences** | [1..1] |

| **Instruction Identification** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ CdtTrfTxInf<br>+++ PmtId<br>++++ InstrId | **ISO Definition** | Unique identification as assigned by an instructing party for an instructed party to unambiguously identify the instruction. |
| | **XML Tag** | <InstrId> |
| | **Occurrences** | [1..1] |

| **End To End Identification** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ CdtTrfTxInf<br>+++ PmtId<br>++++ EndToEndId | **ISO Definition** | Unique identification assigned by the initiating party to unambiguously identify the transaction. This identification is passed on, unchanged, throughout the entire end-to-end chain. |
| | **XML Tag** | <EndToEndId> |
| | **Occurrences** | [1..1] |

**Amount**

| `CstmrCdtTrfInitn`<br>`+ PmtInf`<br>`++ CdtTrfTxInf`<br>`+++ Amt` | **ISO Definition** | Amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party. |
| --- | --- | --- |
| | **XML Tag** | <Amt> |
| | **Occurrences** | [1..1] |

**Instructed Amount**

| `CstmrCdtTrfInitn`<br>`+ PmtInf`<br>`++ CdtTrfTxInf`<br>`+++ Amt`<br>`++++ InstdAmt` | **ISO Definition** | Amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party. |
| --- | --- | --- |
| | **XML Tag** | <InstdAmt> |
| | **Occurrences** | [1..1] |

**Charge Bearer**

| `CstmrCdtTrfInitn`<br>`+ PmtInf`<br>`++ CdtTrfTxInf`<br>`+++ ChrgBr` | **ISO Definition** | Specifies which party/parties will bear the charges associated with the processing of the payment transaction. |
| --- | --- | --- |
| | **XML Tag** | <ChrgBr> |
| | **Occurrences** | [1..1] |

**Creditor Agent**

| `CstmrCdtTrfInitn`<br>`+ PmtInf`<br>`++ CdtTrfTxInf`<br>`+++ CdtrAgt` | **ISO Definition** | Financial institution servicing an account for the creditor. |
| --- | --- | --- |
| | **XML Tag** | <CdtrAgt> |
| | **Occurrences** | [1..1] |

**Financial Institution Identification**

| `CstmrCdtTrfInitn`<br>`+ PmtInf`<br>`++ CdtTrfTxInf`<br>`+++ CdtrAgt` | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| --- | --- | --- |

| ++++ FinInstnId | XML Tag | <FinInstnId> |
|---|---|---|
| | Occurrences | [1..1] |

| **BICFI** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ CdtTrfTxInf<br>+++ CdtrAgt<br>++++ FinInstnId<br>+++++ BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

| **Creditor** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ CdtTrfTxInf<br>+++ Cdtr | **ISO Definition** | Party to which an amount of money is due. |
| | **XML Tag** | <Cdtr> |
| | **Occurrences** | [1..1] |

| **Name** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ CdtTrfTxInf<br>+++ Cdtr<br>++++ Nm | **ISO Definition** | Name by which a party is known and which is usually used to identify that party. |
| | **XML Tag** | <Nm> |
| | **Occurrences** | [1..1] |

| **Creditor Account** | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ PmtInf<br>++ CdtTrfTxInf<br>+++ CdtrAcct | **ISO Definition** | Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction. |
| | **XML Tag** | <DbtrAcct> |
| | **Occurrences** | [1..1] |

**Identification**

| CstmrCdtTrfInitn<br>+ PmtInf<br>++ CdtTrfTxInf<br>+++ CdtrAcct<br>++++ Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Other**

| CstmrCdtTrfInitn<br>+ PmtInf<br>++ CdtTrfTxInf<br>+++ CdtrAcct<br>++++ Id<br>+++++ Othr | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
|---|---|---|
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

**Identification**

| CstmrCdtTrfInitn<br>+ PmtInf<br>++ CdtTrfTxInf<br>+++ CdtrAcct<br><br>++++ Id<br>+++++ Othr<br>++++++ Id | **ISO Definition** | Identification assigned by an institution. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Supplementary Data**

| CstmrCdtTrfInitn<br>+ SplmtryData | **ISO Definition** | Additional information that can not be captured in the structured fields and/or any other specific block. |
|---|---|---|
| | **XML Tag** | <SplmtryData> |
| | **Occurrences** | [1..1] |

| Place And Name | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ SplmtryData<br>++ PlcAndNm | **ISO Definition** | Unambiguous reference to the location where the supplementary data must be inserted in the message instance. |
| | **XML Tag** | <PlcAndNm> |
| | **Occurrences** | [1..1] |

| Envelope | | |
|---|---|---|
| CstmrCdtTrfInitn<br>+ SplmtryData<br>++ Envlp | **ISO Definition** | Technical element wrapping the supplementary data. |
| | **XML Tag** | <Envlp> |
| | **Occurrences** | [1..1] |

## H. ISO 20022/CAMT.054.001.04 XML Sample

```xml
<?xml version="1.0" encoding="latin1"?>
<DataPDU
    xmlns="urn:swift:saa:xsd:saa.2.0">
    <Revision>2.0.5</Revision>
    <Body>
        <AppHdr
            xmlns="urn:iso:std:iso:20022:tech:xsd:head.001.001.01">
            <Fr>
                <FIId>
                    <FinInstnId>
                        <BICFI>IDTP</BICFI>
                    </FinInstnId>
                </FIId>
            </Fr>
            <To>
                <FIId>
                    <FinInstnId>
                        <BICFI>FI_SWIFT1</BICFI>
                    </FinInstnId>
                </FIId>
            </To>
            <BizMsgIdr>MSG_334873223482738299</BizMsgIdr>
            <MsgDefIdr>camt.054.001.04</MsgDefIdr>
            <BizSvc>IDTP</BizSvc>
            <CreDt>2020-04-07T13:50:45Z</CreDt>
            <Sgntr>
            <ds:Signature Id="_beddd7de-c63a-43a6-9b62-f69290939eb6"
            xmlns:ds="http://www.w3.org/2000/09/xmldsig#">
            <ds:SignedInfo>
            <ds:CanonicalizationMethod
            Algorithm="http://www.w3.org/2001/ 10/xml -exc-
            c14n#"/>
            <ds:SignatureMethod Algorithm="http: /
            /www.w3.org/2001/04/xmldsig-
            more#rsa- sha256"/>
            <ds:Reference URI="#_98742d60-2afc -4fa7-a731-828756ce47b1">
            <ds:Transforms>
            <ds:Transform Algorithm="http:
            //www.w3.org/2001/10/xml-exc- c14n#"/>
            </ds:Transforms >
            <ds:DigestMethod Algorithm="http:
            //www.w3.org/2001/04/xmlenc#sha256" />
            <ds:DigestValue>vB/
            xxu+qkEVUH5i9uVdBHOXOp6+XDsAn/iHxH+UiMGo=</ds
            :DigestValue>
            </ds:Reference>
            <ds: Reference URI="">
            <ds:Transforms>
            <ds: Transform Algorithm="http:
            //www.w3.
            org/2000/09/xmldsig#tenveloped-
            signature" />
            <ds: Transform Algorithm="http: //www.w3.
            org/2001/10/xml-exc- c14n#"/>
            </ds: Transforms >
            <ds:DigestMethod
            Algorithm="http: //www.
            w3.org/2001/04/xmlenc#sha256" />
```

```
<ds:DigestValue>hWGkHPu5IMYxe4KF
YyaMOFWYqOw2pi+BYnYvHEwm/Z8=</ds:DigestValue>
</ds:Reference>
<ds:Reference>
<ds:Transforms>
<ds: Transform Algorithm="http:
//www.w3.org/2001/10/xml-exc- c14n#"/>
</ds:Transforms >
<ds:DigestMethod
Algorithm="http: //www.
w3.org/2001/04/xmlenc#sha256" />
<ds:DigestValue
>10eHeNdJM1v177MOHzFsmP0IBMYvdPXVuRcR77hAgUg=</ds
:DigestValue>
</ds:Reference>
</ds:SignedInfo>
<ds:SignatureValue>H11itYLicuuSdrRrzuSCFxk5G2Z3LDOOnEPCrXkfwiuS
dyOzA3P2r6Ale1cYidueY8niolEvcZcvKVS4zt6bbHvSRRabinU+J£13x4vTHSg
SWERY1OLPErRbTNcn9r3Nb/hxeBj6Rztv3vR+gW+JY21y3pkTTADSOINOIKkcau
arcwQGEMAWM3UjK315796Ldi7ddvHohgW1ighkzdidBfcONatYnIXZew/770UnB
ecimz4yqJvCo1SritasC@LHFdbeudgBivJtQ/CD1/So9Mkrw6VNUXohv5L3i33
3fNI9geM1oC/ZIGL1HLfOsyJ7GokRsypd 1YWFQvNNhu1OupanRA==
</ds:SignatureValue>
<ds:KeyInfo Id="_98742d60-2afc -4fa7-a731-828756ce47b1">
<ds:X509Data>
<ds:X509Certificate>MIID0DCCArigAwIBAgIBBTANBgkqghkiG9WOBAQsFAD
BMMQswCQYDVQQGEWIGUEcMBoGAIUECewTS2V5bmV4G1zLUSw5UcnV2dDEFMBO
GALUEAnwWT381bRydXNOIFR1¢3QZ0CEgUGhBMjAeFwOxitjExMTUwMDU3
MzVaFw
OxNDEXMTUWMOU3MzVaMFexCZAJBgNVBAYTAK]UMQ8wDQYDVQQKDAZPIFR
FU1QXE
JAQBENVBASMCUSVIFRFUIQgMjESMBAGAIUECww)T2UgVEVTVCAXxMRAWD
gYDVQQ
DDAdUZXNGIENO:MIIBI5ANBgkqhkiGowOBAQEFAAOCAQSAMIIBCeKCAQE
AtnB/1
12FOScVqDI12Q)RsZZh9TK7ANLnxxnR2EP1hRP7GRanksgyYMIECiL/AN
nTEhft
Qe7AGSaWeX7x05GHIGd72NwnFQazVjHyaTBXSxaxUoG4kc1F5QaOOvvxU
AHTtM2
qYNjpgFyKkTGbASD7IgS36zTRYauE40kGhU2/pv1nG3jIKAU40f90gkQe
4+hw2I
xkNO'ImRaxPunkYoZWVn3geL/QQ1H/yggkBdpLG2qmTUm09¢vyVdycABd
l+SRSG
NyR42xVRcbS6rv150cbnbsrvkcbms1Gdo/qnKkvxcthXstt3TqGq+kZ1C
IHDoJs
F8ZDQKuljXMEgsurt/OHQIDAQAO4GuiGtMBGGA1UdDgQUBBRsJehOf8/t
O6YtFO
4hEYcc1COz0TAFBgNVHSMEGDANgBRRcvObAGFfzbq1TCZOMpE7ji+fpTA
RBglgh
kgBhvhCAQEEBAMCB4AWOegYDVROPAQH/BAQDASbAMEBGA1UdHwRBMDGwP
aA70Dm
GN2h@dHAGLy9wa210ZXNOLm9wZW5GcnVzdC5jb2GvT3B]b1RydXN@X1R1c3RFQO
FFUGHBMI5jcmmwOQYIKOZThvcNAQELBQADggEBAGMAU3YO2Z9Ff1FLX/DHVcwST
SotZ]aYtJindYcEtvhjY24vcXJzwbfopVu91XZFuxXjG12SSyksK4sRHF
UVPQdr
yAMGZMUW+0gjVFjupV54jr6vkaEL2té6oyE52CHqvvlHyLJz5CIW6jDEm
@AZGNI
ZlwdRr4afud9zM21m4X5J1Ts2GxY/JHO2F1155QJuVn7NSFFxBPxRsIKY
NZ+27k
cZNTSL9ZDWYXob5PUBVEOFXMhWPJtngzBOISNGQDVQIjtnbecsSgDchRM
Vy4JOU
```

```
                DBUK7RAIpG4aR/5RKaMkO@6DLHXJteXfmsKfLyDq3H8B+eHefJIWCeYMn
                vqk755 EVNE=</ds:X509Certificate>
                </ds:X509Data>
                </ds:KeyInfo>
                </ds:Signature>
                </Sgntr>
        </AppHdr>
        <Document
            xmlns="urn:iso:std:iso:20022:tech:xsd:camt.054.001.04">
            <BkToCstmrDbtCdtNtfctn>
                <GrpHdr>
                    <MsgId>MSG_334873223482738299</MsgId>
                    <CreDtTm>2020-04-07T16:50:45</CreDtTm>
                </GrpHdr>
                <Ntfctn>
                    <Id>MSG_334873223482738299</Id>
                    <CreDtTm>2020-04-07T16:50:45</CreDtTm>
                    <Acct>
                        <Id>
                            <Othr>
                                <Id>sampleuser1@user.idtp</Id>
                            </Othr>
                        </Id>
                    </Acct>
                    <Ntry>
                        <NtryRef>SAMPLEREF</NtryRef>
                        <Amt Ccy="BDT">1000.00</Amt>
                        <CdtDbtInd>DBIT</CdtDbtInd>
                        <Sts>BOOK</Sts>
                    <ValDt>
                        <Dt>2020-03-15</Dt>
                    </ValDt>
                        <BkTxCd>
                            <Prtry>
                                <Cd>NTAV</Cd>
                            </Prtry>
                        </BkTxCd>
                        <NtryDtls>
                            <TxDtls>
                                <Refs>
                    <InstrId>MSG_334873223482738299</InstrId>
                    <EndToEndId>TRAN_34873223482738299</EndToEndId>
                                    <TxId>TRAN_34873223482738299</TxId>
                                </Refs>
                                <Amt Ccy="BDT">1000.00</Amt>
                                <CdtDbtInd>DBIT</CdtDbtInd>
                                <RltdPties>
                                    <InitgPty>
                                        <Nm>SAMPLE_NAME1</Nm>
                                    </InitgPty>
                                    <Cdtr>
                                        <Id>
                                            <OrgId>
                                                <AnyBIC>FI_SWIFT1</AnyBIC>
                                            </OrgId>
                                        </Id>
                                    </Cdtr>
                                </RltdPties>
                                <RltdDts>
                                    <TxDtTm>2020-03-15T00:00:00</TxDtTm>
                                </RltdDts>
```

```
                     </TxDtls>
                  </NtryDtls>
               </Ntry>
            </Ntfctn>
         </BkToCstmrDbtCdtNtfctn>
      </Document>
   </Body>
</DataPDU>
```

## Detailed Message Description:

| App Header | | |
|---|---|---|
| AppHdr | **ISO Definition** | Business Application Header |
| | **XML Tag** | <AppHdr> |
| | **Occurrences** | [1..1] |

| From | | |
|---|---|---|
| AppHdr<br>+ Fr | **ISO Definition** | The sending MessagingEndpoint that has created this Business Message for the receiving MessagingEndpoint that will process this Business Message.<br>Note: the sending MessagingEndpoint might be different from the sending address potentially contained in the transport header (as defined in the transport layer). |
| | **XML Tag** | <Fr> |
| | **Occurrences** | [1..1] |

| FIId | | |
|---|---|---|
| AppHdr<br>+ Fr<br>++ FIId | **ISO Definition** | Identification of a financial institution. |
| | **XML Tag** | <FIId> |
| | **Occurrences** | [1..1] |

**Financial Institution Identification**

| AppHdr<br>+Fr<br>++ FIId<br>+++ FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognised or proprietary identification scheme. |
|---|---|---|
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

**BICFI**

| AppHdr<br>+Fr<br>++ FIId<br>+++ FinInstnId<br>++++ BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
|---|---|---|
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

**To**

| AppHdr<br>+ To | **ISO Definition** | The MessagingEndpoint designated by the sending MessagingEndpoint to be the recipient who will ultimately process this Business Message.<br><br>Note: the receiving MessagingEndpoint might be different from the receiving address potentially contained in the transport header (as defined in the transport layer). |
|---|---|---|
| | **XML Tag** | <To> |
| | **Occurrences** | [1..1] |

**FIId**

| AppHdr<br>+ To<br>++ FIId | **ISO Definition** | Identification of a financial institution. |
|---|---|---|
| | **XML Tag** | <FIId> |

| | **Occurrences** | [1..1] |
|---|---|---|

**Financial Institution Identification**

| `AppHdr`<br>`+ To`<br>`++ FIId`<br>`+++ FinInstnId` | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognised or proprietary identification scheme. |
|---|---|---|
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

**BICFI**

| `AppHdr`<br>`+ To`<br>`++ FIId`<br>`+++ FinInstnId`<br>`++++ BICFI` | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
|---|---|---|
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

**Business Message Identifier**

| `AppHdr`<br>`+ BizMsgIdr` | **ISO Definition** | Unambiguously identifies the Business Message to the MessagingEndpoint that has created the Business Message. |
|---|---|---|
| | **XML Tag** | <BizMsgIdr> |
| | **Occurrences** | [1..1] |

| Message Definition Identifier | | |
|---|---|---|
| AppHdr<br>+ MsgDefIdr | **ISO Definition** | Contains the MessageIdentifier that defines the BusinessMessage.<br><br>It must contain a MessageIdentifier published on the ISO 20022 website.<br><br>Example: pacs.008.001.04 |
| | **XML Tag** | <MsgDefIdr> |
| | **Occurrences** | [1..1] |

| Business Service | | |
|---|---|---|
| AppHdr<br>+ BizSvc | **ISO Definition** | Specifies the business service agreed between the two MessagingEndpoints under which rules this Business Message is exchanged.<br><br>To be used when there is a choice of processing services or processing service levels. |
| | **XML Tag** | <BizSvc> |
| | **Occurrences** | [1..1] |

| Creation Date | | |
|---|---|---|
| AppHdr<br>+ CreDt | **ISO Definition** | Date and time when this Business Message (header) was created.<br><br>Note: Times must be normalized, using the "Z" annotation. |
| | **XML Tag** | <CreDt> |
| | **Occurrences** | [1..1] |

| Bank To Customer Debit Credit Notification | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn | **ISO Definition** | Scope The BankToCustomerDebitCreditNotification message is sent by the account servicer to an account owner or to a party authorised by the account owner to receive the message. It can be used to inform the account owner, or authorised party, of single or multiple debit and/or credit entries reported to the account. Usage The BankToCustomerDebitCreditNotification message can contain reports for more than one account. It provides information for cash management and/or reconciliation. The BankToCustomerDebitCreditNotification message can be used to: - report pending and booked items; - notify one or more debit entries; - notify one or more credit entries; - notify a combination of debit and credit entries. It can include underlying details of transactions that have been included in the entry. It is possible that the receiver of the message is not the account owner, but a party entitled by the account owner to receive the account information (also known as recipient). It does not contain balance information. |
| | **XML Tag** | <BkToCstmrDbtCdtNtfctn> |
| | **Occurrences** | [1..1] |

| Group Header | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn + GrpHdr | **ISO Definition** | Provides further details on the message. |
| | **XML Tag** | <GrpHdr> |
| | **Occurrences** | [1..1] |

| Message Identification | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ GrpHdr<br>++ MsgId | **ISO Definition** | Provides further details on the message. |
| | **XML Tag** | <MsgId> |
| | **Occurrences** | [1..1] |

| Creation Date Time | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ GrpHdr<br>++ CreDtTm | **ISO Definition** | Date and time at which the message was created. |
| | **XML Tag** | <CreDtTm> |
| | **Occurrences** | [1..1] |

| Notification | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn | **ISO Definition** | Provides further details of the account notification. |
| | **XML Tag** | <Ntfctn> |
| | **Occurrences** | [1..1] |

| Identification | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Id | **ISO Definition** | Unique identification, as assigned by the account servicer, to unambiguously identify the account notification. |
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

| Creation Date Time | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ CreDtTm | **ISO Definition** | Date and time at which the message was created. |
| | **XML Tag** | <CreDtTm> |

| | **Occurrences** | [1..1] |
|---|---|---|

**Account**

| | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Acct | **ISO Definition** | Unambiguous identification of the account to which credit and debit entries are made. |
| | **XML Tag** | \<Acct\> |
| | **Occurrences** | [1..1] |

**Identification**

| | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Acct<br>+++ Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
| | **XML Tag** | \<Id\> |
| | **Occurrences** | [1..1] |

**Other**

| | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Acct<br>+++ Id<br>++++ Othr | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
| | **XML Tag** | \<Othr\> |
| | **Occurrences** | [1..1] |

**Identification**

| | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Acct<br>+++ Id<br>++++ Othr<br>+++++ Id | **ISO Definition** | Identification assigned by an institution. |
| | **XML Tag** | \<Id\> |
| | **Occurrences** | [1..1] |

**Entry**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry | ISO Definition | Set of elements used to specify an entry in the debit credit notification.<br><br>Usage: At least one reference must be provided to identify the entry and its underlying transaction(s). |
| --- | --- | --- |
| | XML Tag | <Ntry> |
| | Occurrences | [1..1] |

**Entry Reference**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ NtryRef | ISO Definition | Unique reference for the entry. |
| --- | --- | --- |
| | XML Tag | <NtryRef> |
| | Occurrences | [1..1] |

**Amount**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ Amt | ISO Definition | Amount of money in the cash entry. |
| --- | --- | --- |
| | XML Tag | <Amt> |
| | Occurrences | [1..1] |
| | XML Attribute Currency (Ccy) | Medium of exchange of value. |

**Credit Debit Indicator**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ CdtDbtInd | ISO Definition | Amount of money in the cash entry. |
| --- | --- | --- |
| | XML Tag | <CdtDbtInd> |
| | Occurrences | [1..1] |

| Status | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ Sts | **ISO Definition** | Status of an entry on the books of the account servicer. |
| | **XML Tag** | <Sts> |
| | **Occurrences** | [1..1] |

| Value Date | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ ValDt | **ISO Definition** | Date and time at which assets become available to the account owner in case of a credit entry, or cease to be available to the account owner in case of a debit entry.<br><br>Usage: If entry status is pending and value date is present, then the value date refers to an expected/requested value date.<br><br>For entries subject to availability/float and for which availability information is provided, the value date must not be used. In this case the availability component identifies the number of availability days. |
| | **XML Tag** | <ValDt> |
| | **Occurrences** | [1..1] |

| Date | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ ValDt<br>++++ Dt | **ISO Definition** | Specified date. |
| | **XML Tag** | <ValDt> |
| | **Occurrences** | [1..1] |

**Bank Transaction Code**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ BkTxCd | **ISO Definition** | Set of elements used to fully identify the type of underlying transaction resulting in an entry. |
| --- | --- | --- |
| | **XML Tag** | <Sts> |
| | **Occurrences** | [1..1] |

**Proprietary**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ BkTxCd<br>++++ Prtry | **ISO Definition** | Set of elements used to fully identify the type of underlying transaction resulting in an entry. |
| --- | --- | --- |
| | **XML Tag** | <Prtry> |
| | **Occurrences** | [1..1] |

**Code**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ BkTxCd<br>++++ Prtry<br>+++++ Cd | **ISO Definition** | Proprietary bank transaction code to identify the underlying transaction. |
| --- | --- | --- |
| | **XML Tag** | <Cd> |
| | **Occurrences** | [1..1] |

**Entry Details**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ NtryDtls | **ISO Definition** | Provides details on the entry. |
| --- | --- | --- |
| | **XML Tag** | <NtryDtls> |
| | **Occurrences** | [1..1] |

**Entry Details**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry | **ISO Definition** | Provides details on the entry. |
| --- | --- | --- |

| +++ NtryDtls | **XML Tag** | \<NtryDtls\> |
|---|---|---|
| | **Occurrences** | [1..1] |

**Transaction Details**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ NtryDtls<br>++++ TxDtls | **ISO Definition** | Provides information on the underlying transaction(s). |
|---|---|---|
| | **XML Tag** | \<TxDtls\> |
| | **Occurrences** | [1..1] |

**References**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ NtryDtls<br>++++ TxDtls<br>+++++ Refs | **ISO Definition** | Provides the identification of the underlying transaction. |
|---|---|---|
| | **XML Tag** | \<TxDtls\> |
| | **Occurrences** | [1..1] |

**Instruction Identification**

| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ NtryDtls<br>++++ TxDtls<br>+++++ Refs<br>++++++ InstrId | **ISO Definition** | Unique identification, as assigned by an instructing party for an instructed party, to unambiguously identify the instruction.<br><br>Usage: The instruction identification is a point to point reference that can be used between the instructing party and the instructed party to refer to the individual instruction. It can be included in several messages related to the instruction. |
|---|---|---|
| | **XML Tag** | \<InstrId\> |
| | **Occurrences** | [1..1] |

| **End To End Identification** | | |
|---|---|---|
| `BkToCstmrDbtCdtNtfctn`<br>`+ Ntfctn`<br>`++ Ntry`<br>`+++ NtryDtls`<br>`++++ TxDtls`<br>`+++++ Refs`<br>`++++++ EndToEndId` | **ISO Definition** | Unique identification, as assigned by the initiating party, to unambiguously identify the transaction. This identification is passed on, unchanged, throughout the entire end-to-end chain.<br><br>Usage: The end-to-end identification can be used for reconciliation or to link tasks relating to the transaction. It can be included in several messages related to the transaction.<br><br>Usage: In case there are technical limitations to pass on multiple references, the end-to-end identification must be |

| | | |
|---|---|---|
| | | passed on throughout the entire end-to-end chain. |
| | **XML Tag** | <EndToEndId> |
| | **Occurrences** | [1..1] |

**Transaction Identification**

| `BkToCstmrDbtCdtNtfctn`<br>`+ Ntfctn`<br>`++ Ntry`<br>`+++ NtryDtls`<br>`++++ TxDtls`<br>`+++++ Refs`<br>`++++++ TxId` | **ISO Definition** | Unique identification, as assigned by the first instructing agent, to unambiguously identify the transaction that is passed on, unchanged, throughout the entire interbank chain.<br><br>Usage: The transaction identification can be used for reconciliation, tracking or to link tasks relating to the transaction on the interbank level.<br><br>Usage: The instructing agent has to make sure that the transaction identification is unique for a pre-agreed period. |
| --- | --- | --- |
| | **XML Tag** | <TxId> |
| | **Occurrences** | [1..1] |

**Amount**

| `BkToCstmrDbtCdtNtfctn`<br>`+ Ntfctn`<br>`++ Ntry`<br>`+++ NtryDtls`<br>`++++ TxDtls`<br>`+++++ Amt` | **ISO Definition** | Amount of money in the cash entry. |
| --- | --- | --- |
| | **XML Tag** | <Amt> |
| | **Occurrences** | [1..1] |
| | **XML Attribute Currency (Ccy)** | Medium of exchange of value. |

**Credit Debit Indicator**

| `BkToCstmrDbtCdtNtfctn`<br>`+ Ntfctn`<br>`++ Ntry`<br>`+++ NtryDtls`<br>`++++ TxDtls`<br>`+++++CdtDbtInd` | **ISO Definition** | Specifies if a limit is a debit limit or a credit limit. |
| --- | --- | --- |
| | **XML Tag** | <CdtDbtInd> |
| | **Occurrences** | [1..1] |

| Related Parties | | |
|---|---|---|
| `BkToCstmrDbtCdtNtfctn`<br>`+ Ntfctn`<br>`++ Ntry`<br>`+++ NtryDtls`<br>`++++ TxDtls`<br>`+++++ RltdPties` | **ISO Definition** | Set of elements used to identify the parties related to the underlying transaction. |
| | **XML Tag** | <RltdPties> |
| | **Occurrences** | [1..1] |

| Initiating Party | | |
|---|---|---|
| `BkToCstmrDbtCdtNtfctn`<br>`+ Ntfctn`<br>`++ Ntry`<br>`+++ NtryDtls`<br>`++++ TxDtls`<br>`+++++ RltdPties`<br>`++++++ InitgPty` | **ISO Definition** | Party that initiated the payment that is reported in the entry. |
| | **XML Tag** | <InitgPty> |
| | **Occurrences** | [1..1] |

| Name | | |
|---|---|---|
| `BkToCstmrDbtCdtNtfctn`<br>`+ Ntfctn`<br>`++ Ntry`<br>`+++ NtryDtls`<br>`++++ TxDtls`<br>`+++++ RltdPties`<br>`++++++ InitgPty`<br>`+++++++ Nm` | **ISO Definition** | Name by which a party is known and which is usually used to identify that party. |
| | **XML Tag** | <Nm> |
| | **Occurrences** | [1..1] |

| Creditor | | |
|---|---|---|
| `BkToCstmrDbtCdtNtfctn`<br>`+ Ntfctn`<br>`++ Ntry`<br>`+++ NtryDtls`<br>`++++ TxDtls`<br>`+++++ RltdPties`<br>`++++++ Cdtr` | **ISO Definition** | Party to which an amount of money is due. |
| | **XML Tag** | <Cdtr> |
| | **Occurrences** | [1..1] |

**Identification**

| | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ NtryDtls<br>++++ TxDtls<br>+++++ RltdPties<br>++++++ Cdtr<br>+++++++ Id | **ISO Definition** | Unique and unambiguous identification of a party. |
| | **XML Tag** | \<Id\> |
| | **Occurrences** | [1..1] |

**Organisation Identification**

| | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ NtryDtls<br>++++ TxDtls<br>+++++ RltdPties<br>++++++ Cdtr<br>+++++++ Id<br>++++++++ OrgId | **ISO Definition** | Unique and unambiguous way to identify an organization. |
| | **XML Tag** | \<OrgId\> |
| | **Occurrences** | [1..1] |

**Any BIC**

| | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ NtryDtls<br>++++ TxDtls<br>+++++ RltdPties<br>++++++ Cdtr<br>+++++++ Id<br>++++++++ OrgId<br>+++++++++ AnyBIC | **ISO Definition** | Code allocated to a financial institution or non-financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| | **XML Tag** | \<OrgId\> |
| | **Occurrences** | [1..1] |

**Related Dates**

| | | |
|---|---|---|
| BkToCstmrDbtCdtNtfctn<br>+ Ntfctn<br>++ Ntry<br>+++ NtryDtls<br>++++ TxDtls | **ISO Definition** | Set of elements used to identify the dates related to the underlying transactions. |
| | **XML Tag** | \<RltdDts\> |

| ++++++ RltdDts | **Occurrences** | [1..1] |
|---|---|---|

| **Transaction Date Time** | | |
|---|---|---|
| `BkToCstmrDbtCdtNtfctn`<br>`+ Ntfctn`<br>`++ Ntry`<br>`+++ NtryDtls`<br>`++++ TxDtls`<br>`+++++ RltdDts`<br>`++++++ TxDtTm` | **ISO Definition** | Date and time of the underlying transaction. |
| | **XML Tag** | <TxDtTm> |
| | **Occurrences** | [1..1] |

## I. ISO 20022/PACS.009.001.04 XML Sample

```
<?xml version="1.0" encoding="UTF-8"?>
<Saa:DataPDU
    xmlns:Saa="urn:swift:saa:xsd:
    saa.2.0”
    xmlns:Sw="urn:swift:snl:ns.Sw
    "
    xmlns:SwGbl="urn:swift:snl:ns
    .SwGbl"
    xmlns:SwInt="urn:swift:snl:ns
    .SwInt"
    xmlns:SwSec="urn:swift:snl:ns
    .SwSec">
    <Saa:Body>
        <AppHdr:AppHdr
            xmlns="urn:iso:std:iso:20022:tech:xsd:head.001
            .001.01"
 xmlns:AppHdr="urn:iso:std:iso:20022:tech:xsd:head.001.001.01">
            <Fr>
                <FIId>
                    <FinInstnId>
                        <BICFI>IDTP</BICFI>
                    </FinInstnId>
                </FIId>
            </Fr>
            <To>
                <FIId>
                    <FinInstnId>
                     <BICFI>FI_SWIFT2</BICFI>
                    </FinInstnId>
                </FIId>
            </To>
            <BizMsgIdr>MSG_3348732234827386699</BizMsgIdr>
            <MsgDefIdr>pacs.009.001.04</MsgDefIdr>
            <BizSvc>IDTP</BizSvc>
            <CreDt>2019-05-27T14:21:25</CreDt>
            <Sgntr>
            <ds:Signature Id="_beddd7de-c63a-43a6-9b62-
            f69290939eb6"
            xmlns:ds="http://www.w3.org/2000/09/xmldsig#”>
            <ds:SignedInfo>
            <ds:CanonicalizationMethod
            Algorithm="http://www.w3.org/2001/ 10/xml -exc-
            c14n#"/>
            <ds:SignatureMethod Algorithm="http: /
            /www.w3.org/2001/04/xmldsig-
            more#rsa- sha256"/>
            <ds:Reference URI="#_98742d60-2afc -4fa7-a731-828756ce47b1">
            <ds:Transforms>
            <ds:Transform
            Algorithm="http://www.w3.org/2001/10/xml-exc-
            cl4n#"/>
            </ds:Transforms >
            <ds:DigestMethod Algorithm="http:
            //www.w3.org/2001/04/xmlenc#sha256" />
            <ds:DigestValue>vB/xxu+qkEVUH5i9uVdBHOXOp6+XDsAn/iHxH+U
```

```
iMGo=</d s :DigestValue>
</ds:Reference>
<ds: Reference URI="">
<ds:Transforms>
<ds: Transform
Algorithm="http://www.w3.org/2000/09/xmldsig#tenve
loped- signature" />
<ds: Transform
Algorithm="http://www.w3.org/2001/10/xml-exc-
cl4n#"/>
</ds:Transforms >
<ds:DigestMethod
Algorithm="http://www.w3.org/2001/04/xmlenc#sh
a256" />
<ds:DigestValue>hWGkHPu5IMYxe4KF
YyaMOFWYqOw2pi+BYnYvHEwm/Z8=</ds:DigestValue>
</ds:Reference>
<ds:Reference>
<ds:Transforms>
<ds: Transform
Algorithm="http://www.w3.org/2001/10/xml-exc-
c14n#"/>
</ds:Transforms>
<ds:DigestMethod
Algorithm="http://www.w3.org/2001/04/xmlenc#sh
a256" />
<ds:DigestValue>10eHeNdJM1v177MOHzFsmP0IBMYvdPXVuRcR77h
AgUg=</d s :DigestValue>
</ds:Reference>
</ds:SignedInfo>
<ds:SignatureValue>H11itYLicuuSdrRrzuSCFxk5G2Z3LDOOnEPCrXkfwiuS
dyOzA3P2r6Ale1cYidueY8niolEvcZcvKVS4zt6bbHvSRRabinU+J£13x4vTHSg
SWERY1OLPErRbTNcn9r3Nb/hxeBj6Rztv3vR+gW+JY21y3pkTTADSOINOIKkcau
arcwQGEMAWM3UjK315796Ldi7ddvHohgW1ighkzdidBfcONatYnIXZew/770UnB
ecimz4yqJvCo1SritasC@LHFdbeudgBivJtQ/CD1/So9Mkrw6VNUXohv5L3i33
3fNI9geM1oC/ZIGL1HLfOsyJ7GokRsypd 1YWFQvNNhu1OupanRA==
</ds:SignatureValue>
<ds:KeyInfo Id="_98742d60-2afc -4fa7-a731-828756ce47b1">
<ds:X509Data>
<ds:X509Certificate>MIID0DCCArigAwIBAgIBBTANBgkqghkiG9WOBAQsFAD
BMMQswCQYDVQQGEWIGUEcMBoGAIUECewTS2V5bmV4G1zLUSw5UcnV2dDEFMBO
GALUEAnwWT381bRydXNOIFR1¢3QZ0CEgUGhBMjAeFwOxitjExMTUwMDU3
MzVaFw
OxNDEXMTUWMOU3MzVaMFexCZAJBgNVBAYTAK]UMQ8wDQYDVQQKDAZPIFR
FU1QXE
JAQBENVBASMCUSVIFRFUIQgMjESMBAGAIUECww)T2UgVEVTVCAXxMRAWD
gYDVQQ
DDAdUZXNGIENO:MIIBI5ANBgkqhkiGowOBAQEFAAOCAQSAMIIBCeKCAQE
AtnB/1
12FOScVqDI12Q)RsZZh9TK7ANLnxxnR2EP1hRP7GRanksgyYMIECiL/AN
nTEhft
Qe7AGSaWeX7x05GHIGd72NwnFQazVjHyaTBXSxaxUoG4kc1F5QaOOvvxU
AHTtM2
qYNjpgFyKkTGbASD7IgS36zTRYauE40kGhU2/pv1nG3jIKAU40f90gkQe
4+hw2I
xkNO'ImRaxPunkYoZWVn3geL/QQ1H/yggkBdpLG2qmTUm09¢vyVdycABd
l+SRSG
NyR42xVRcbS6rv150cbnbsrvkcbms1Gdo/qnKkvxcthXstt3TqGq+kZ1C
IHDoJs
F8ZDQKuljXMEgsurt/OHQIDAQAO4GuiGtMBGGA1UdDgQUBBRsJehOf8/t
O6YtFO
```

```
            4hEYcc1COz0TAFBgNVHSMEGDANgBRRcvObAGFfzbq1TCZOMpE7ji+fpTA
            RBglgh
            kgBhvhCAQEEBAMCB4AWOegYDVROPAQH/BAQDASbAMEBGA1UdHwRBMDGwP
            aA70Dm
            GN2h@dHAGLy9wa210ZXNOLm9wZW5GcnVzdC5jb2GvT3B]b1RydXN@X1R1c3RFQO
            FFUGHBMI5jcmmwOQYIKOZThvcNAQELBQADggEBAGMAU3YO2Z9Ff1FLX/DHVcwST
            SotZ]aYtJindYcEtvhjY24vcXJzwbfopVu91XZFuxXjG12SSyksK4sRHF
            UVPQdr
            yAMGZMUW+0gjVFjupV54jr6vkaEL2té6oyE52CHqvvlHyLJz5CIW6jDEm
            @AZGNI
            ZlwdRr4afud9zM21m4X5J1Ts2GxY/JHO2F1155QJuVn7NSFFxBPxRsIKY
            NZ+27k
            cZNTSL9ZDWYXob5PUBVEOFXMhWPJtngzBOISNGQDVQIjtnbecsSgDchRM
            Vy4JOU
            DBUK7RAIpG4aR/5RKaMkO@6DLHXJteXfmsKfLyDq3H8B+eHefJIWCeYMn
            vqk755 EVNE=</ds:X509Certificate>
```

```
        </ds:X509Data>
        </ds:KeyInfo>
        </ds:Signature>
        </Sgntr>
    </AppHdr:AppHdr>
    <Document
        xmlns="urn:iso:std:iso:20022:tech:xsd:pacs.009.001.04">
      <FICdtTrf>
        <GrpHdr>
            <MsgId> MSG_3348732234827386699</MsgId>
            <CreDtTm>2019-10-24T15:47:53</CreDtTm>
            <NbOfTxs>1</NbOfTxs>
            <SttlmInf>
                <SttlmMtd>IDTP</SttlmMtd>
            </SttlmInf>
        </GrpHdr>
        <CdtTrfTxInf>
            <InstgAgt>
                <FinInstnId>
                    <BICFI>FI_SWIFT1</BICFI>
                </FinInstnId>
            </InstgAgt>
            <InstdAgt>
                <FinInstnId>
                    <BICFI>FI_SWIFT2</BICFI>
                </FinInstnId>
            </InstdAgt>
            <PmtTpInf>
                <ClrChanl>IDTP</ClrChanl>
                <LclInstrm>
                    <Prtry>IDTP</Prtry>
                </LclInstrm>
                <SvcLvl>
                    <Prtry>0040</Prtry>
                </SvcLvl>
                <CtgyPurp>
                    <Prtry>001</Prtry>
                </CtgyPurp>
            </PmtTpInf>
            <PmtId>
            <InstrId>MSG_3348732234827386699</InstrId>
```

```
                            <TxId>Tran_334873223482738699</TxId>
        <EndToEndId>Tran_334873223482738699</EndToEndId>
                        </PmtId>
                        <IntrBk
SttlmAmt
Ccy=«BDT»>1000.50</IntrBkSt
tlmAmt>
                        <IntrBkSttlmDt>2019-03-15</IntrBkSttlmDt>
                        <Dbtr>
                            <FinInstnId>
                                <BICFI>FI_SWIFT1</BICFI>
                            </FinInstnId>
                        </Dbtr>
                        <DbtrAcct>
                            <Id>
                                <Othr>
                                    <Id>ACC_0010201000324</Id>
                                </Othr>
                            </Id>
                        </DbtrAcct>
                        <Cdtr>
                            <FinInstnId>
                                <BICFI>FI_SWIFT2</BICFI>
                            </FinInstnId>
                        </Cdtr>
                        <CdtrAcct>
                            <Id>
                             <Othr>
                    <Id>ACC_0010201006666</Id>
                                </Othr>
                            </Id>
                        </CdtrAcct>
                    </CdtTrfTxInf>
                    <SplmtryData>
                      <PlcAndNm />
                      <Envlp>
                          <Tx_Tracking_Info>
                          <RefNo_SendingPSP></RefNo_SendingPSP>
                          <RefNo_SendingBank></RefNo_SendingBank>
                          <RefNo_ReceivingBank></RefNo_ReceivingBank>
                          <RefNo_ReceivingPSP></RefNo_ReceivingPSP>
                          <RefNo_IDTP>1234567890</RefNo_IDTP>
                          </Tx_Tracking_Info>
                      </Envlp>
                    </SplmtryData>
                </FICdtTrf>
            </Document>
        </Saa:Body>
</Saa:DataPDU>
```

**Detailed Message Description:**

| App Header | | |
|---|---|---|
| AppHdr | **ISO Definition** | Business Application Header |
| | **XML Tag** | <AppHdr> |
| | **Occurrences** | [1..1] |

| From | | |
|---|---|---|
| AppHdr<br>+ Fr | **ISO Definition** | The sending MessagingEndpoint that has created this Business Message for the receiving MessagingEndpoint that will process this Business Message.<br>Note: the sending MessagingEndpoint might be different from the sending address potentially contained in the transport header (as defined in the transport layer). |
| | **XML Tag** | <Fr> |
| | **Occurrences** | [1..1] |

| FIId | | |
|---|---|---|
| AppHdr<br>+ Fr<br>++ FIId | **ISO Definition** | Identification of a financial institution. |
| | **XML Tag** | <FIId> |
| | **Occurrences** | [1..1] |

| Financial Institution Identification | | |
|---|---|---|
| AppHdr<br>+Fr<br>++ FIId<br>+++ FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognised or proprietary identification scheme. |
| | **XML Tag** | <FinInstnId> |

| | **Occurrences** | [1..1] |
|---|---|---|

| **BICFI** | | |
|---|---|---|
| `AppHdr`<br>`+Fr`<br>`++ FIId`<br>`+++ FinInstnId`<br>`++++ BICFI` | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

| **To** | | |
|---|---|---|
| `AppHdr`<br>`+ To` | **ISO Definition** | The MessagingEndpoint designated by the sending MessagingEndpoint to be the recipient who will ultimately process this Business Message.<br><br>Note: the receiving MessagingEndpoint might be different from the receiving address potentially contained in the transport header (as defined in the transport layer). |
| | **XML Tag** | <To> |
| | **Occurrences** | [1..1] |

| **FIId** | | |
|---|---|---|
| `AppHdr`<br>`+ To`<br>`++ FIId` | **ISO Definition** | Identification of a financial institution. |
| | **XML Tag** | <FIId> |
| | **Occurrences** | [1..1] |

| Financial Institution Identification | | |
|---|---|---|
| `AppHdr`<br>`+ To`<br>`++ FIId`<br>`+++ FinInstnId` | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognised or proprietary identification scheme. |
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

| BICFI | | |
|---|---|---|
| `AppHdr`<br>`+ To`<br>`++ FIId`<br>`+++ FinInstnId`<br>`++++ BICFI` | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

| Business Message Identifier | | |
|---|---|---|
| `AppHdr`<br>`+ BizMsgIdr` | **ISO Definition** | Unambiguously identifies the Business Message to the MessagingEndpoint that has created the Business Message. |
| | **XML Tag** | <BizMsgIdr> |
| | **Occurrences** | [1..1] |

| Message Definition Identifier | | |
|---|---|---|
| `AppHdr`<br>`+ MsgDefIdr` | **ISO Definition** | Contains the MessageIdentifier that defines the BusinessMessage.<br><br>It must contain a MessageIdentifier published on the ISO 20022 website.<br><br>Example: pacs.008.001.04 |
| | **XML Tag** | <MsgDefIdr> |

| | | | |
|---|---|---|---|
| | **Occurrences** | [1..1] | |

| | | |
|---|---|---|
| AppHdr<br>**Business Service**<br><br>+ BizSvc | **ISO Definition** | Specifies the business service agreed between the two MessagingEndpoints under which rules this Business Message is exchanged.<br><br> To be used when there is a choice of processing services or processing service levels. |
| | **XML Tag** | <BizSvc> |
| | **Occurrences** | [1..1] |

| **Creation Date** | | |
|---|---|---|
| AppHdr<br>+ CreDt | **ISO Definition** | Date and time when this Business Message (header) was created.<br><br>Note: Times must be normalized, using the "Z" annotation. |
| | **XML Tag** | <CreDt> |
| | **Occurrences** | [1..1] |

| **Financial Institution Credit Transfer** | | |
|---|---|---|
| FICdtTrf | **ISO Definition** | This message is sent by a debtor financial institution to a creditor financial institution, directly or through other agents and/or a payment clearing and settlement system. |
| | **XML Tag** | <FICdtTrf> |
| | **Occurrences** | [1..1] |

| **Group Header** | | |
|---|---|---|
| GrpHdr | **ISO Definition** | Set of characteristics shared by all individual transactions included in the message. |
| | **XML Tag** | <GrpHdr> |
| | **Occurrences** | [1..1] |

**Message Identification**

| GrpHdr +MsgId | ISO Definition | Point to point reference, as assigned by the instructing party, and sent to the next party in the chain to unambiguously identify the message.<br>Usage: The instructing party has to make sure that Message Identification is unique per instructed party for a pre-agreed period. |
|---|---|---|
| | **XML Tag** | <MsgId> |
| | **Occurrences** | [1..1] |
| | **Type** | Max35Text |
| | **ISO Length:** | 1 ...35 |
| | **IDTP Length:** | 1 ...22 |
| | **Rule** | Rule "Message Identification Guideline"<br><br>Definition<br> If no unique Message Identification can be generated, then the element is recommended to be populated with a copy of Instruction Identification.<br><br>If generated, it is recommended that Message Identification to be structured as follows:<br><br>XXXX - First 4 characters of sender's BIC [4]<br>YYYYMMDD - Creation Date [8]<br>X – Channel Identification [1]<br>nnnnnnn- Sequence Number [9]<br><br>The values of Channel Identification (X) are bank-determined and may be used to identify separate channels such as:<br>1 - Default value (only one single channel)<br>Or for example (multiple channels),<br>1 - Internet Banking |

| | | 2 - Cash Management<br>3 - Treasury<br>4 - ATM |
|---|---|---|
| | **Example** | <MsgId>ABCD201308201123456789</MsgId> |

**Creation Date Time**

| GrpHdr +CreDtTm | ISO Definition | Date and time at which the message was created. |
|---|---|---|
| | **XML Tag** | <CreDtTm> |

| | | |
|---|---|---|
| **Format:** | YYYY-MM-DDThh:mm:ss |
| **Type** | ISODateTime |
| **Occurrences** | [1..1] |
| **Example** | <CreDtTm>2013-08-20T09:30:32</CreDtTm> |

| **Number of Transactions** | | |
|---|---|---|
| GrpHdr<br>+NbOfTxs | **ISO Definition** | Date and time at which the message was created. |
| | **XML Tag** | <NbOfTxs> |
| | **IDTP Rule** | The number of transactions is limited to one. |
| | **Type** | Max15NumericText |
| | **Occurrences** | [1..1] |
| | **Example** | <NbOfTxs>1</NbOfTxs> |

| **Settlement Information** | | |
|---|---|---|
| GrpHdr<br>+ SttlmInf | **ISO Definition** | Specifies the details on how the settlement of the transaction(s) between the instructing agent and the instructed agent is completed. |
| | **XML Tag** | <SttlmInf > |
| | **Occurrences** | [1..1] |

| **Settlement Method** | | |
|---|---|---|
| GrpHdr<br>+ SttlmInf<br>++ SttlmMtd | **ISO Definition** | Method used to settle the (batch of) payment instructions. |
| | **XML Tag** | <SttlmMtd> |
| | **Codes: CLRG** (ClearingSystem)<br>Code Description: Settlement is done through a payment clearing system. | |
| | **IDTP Rule** | Fixed Value = CLRG |
| | **Occurrences** | [1..1] |
| | **Example** | <SttlmMtd>CLRG</SttlmMtd> |

| **Credit Transfer Transaction Information** | | |
|---|---|---|
| CdtTrfTxInf | **ISO Definition** | Set of elements providing information specific to the individual credit transfer(s). |
| | **XML Tag** | <CdtTrfTxInf> |

| | **Occurrences** | [1..1] |
|---|---|---|

### Instructing Agent

| | | |
|---|---|---|
| `CdtTrfTxInf`<br>`+InstgAgt` | **ISO Definition** | Agent that instructs the next party in the chain to carry out the (set of) instruction(s). |
| | **XML Tag** | <InstgAgt> |
| | **Occurrences** | [1..1] |
| | **Rule** | The element is used to specify the BIC of the RTGS registered member when the Debtor is used to specify the name or BIC of an indirect RTGS member |

### Financial Institution Identification

| | | |
|---|---|---|
| `CdtTrfTxInf`<br>`+InstgAgt`<br>`++FinInstnId` | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

### BICFI

| | | |
|---|---|---|
| `CdtTrfTxInf`<br>`+InstdAgt`<br>`++FinInstnId`<br>`+++BICFI` | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

### Instructed Agent

| | | |
|---|---|---|
| `CdtTrfTxInf`<br>`+InstdAgt` | **ISO Definition** | Agent that is instructed by the previous party in the chain to carry out the (set of) instruction(s). |
| | **XML Tag** | <InstdAgt> |
| | **Occurrences** | [1..1] |
| | **Rule** | The element is used to specify the BIC of the RTGS registered member when the Debtor is used to specify the name or BIC of an indirect RTGS member |

### Financial Institution Identification

| | | |
|---|---|---|
| `CdtTrfTxInf`<br>`+ InstdAgt`<br>`++ FinInstnId` | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| | **XML Tag** | <FinInstnId> |

|  | **Occurrences** | [1..1] |
|---|---|---|

| **BICFI** | | |
|---|---|---|
| `CdtTrfTxInf`<br>`+InstdAgt`<br>`++FinInstnId`<br>`+++BICFI` | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
|  | **XML Tag** | <BICFI> |
|  | **Occurrences** | [1..1] |

| **Payment Type Information** | | |
|---|---|---|
| `CdtTrfTxInf`<br>`+PmtTpInf` | **ISO Definition** | Set of elements used to further specify the type of transaction. |
|  | **XML Tag** | <PmtTpInf> |
|  | **Occurrences** | [1..1] |

| **Clearing Channel** | | |
|---|---|---|
| `CdtTrfTxInf`<br>`+PmtTpInf`<br>`++ClrChanl` | **ISO Definition** | Specifies the clearing channel to be used to process the payment instruction. |
|  | **XML Tag** | <ClrChanl> |
|  | **IDTP Rule** | IDTP uses CBS (Core Banking System) |
|  | **Occurrences** | [1..1] |
|  | **Type** | ClearingChannel2Code |
|  | **Example** | <ClrChanl>CBS</ClrChanl> |

| **Local Instrument** | | |
|---|---|---|
| `CdtTrfTxInf`<br>`+PmtTpInf`<br>`++LclInstrm` | **ISO Definition** | User community specific instrument.<br><br>Usage: This element is used to specify a local instrument, local clearing option and/or further qualify the service or service level. |
|  | **XML Tag** | <LclInstrm> |
|  | **Rule** | Rule "Local Instrument Rule"<br>Definition<br>Local Instrument must only be used when agreed bilaterally or within a community to reflect a specific payment instrument currently identified through |
|  |  | community specific implementation of (proprietary) standards. |

| | **Occurrences** | [1..1] |
|---|---|---|

### Proprietary

| | | |
|---|---|---|
| CdtTrfTxInf<br>+ PmtTpInf<br>++ LclInstrm<br>+++ Prtry | **ISO Definition** | Specifies the local instrument, as a proprietary code. |
| | **XML Tag** | <Prtry> |
| | **IDTP Rule** | IDTP uses RTGS_CSCT(RTGS Customer Credit Transfer) as fixed value for this element. |
| | **Occurrences** | [1..1] |
| | **Type** | Max35Text |

### Service Level

| | | |
|---|---|---|
| CdtTrfTxInf<br>+PmtTpInf<br>++ SvcLvl | **ISO Definition** | Agreement under which or rules under which the transaction should be processed. |
| | **XML Tag** | <SvcLvl> |
| | **Occurrences** | [1..1] |

### Proprietary

| | | |
|---|---|---|
| CdtTrfTxInf<br>+ PmtTpInf<br>++ SvcLvl<br>+++ Prtry | **ISO Definition** | Specifies the service level, as a proprietary code. |
| | **XML Tag** | <Prtry> |
| | **IDTP Rule** | IDTP uses RTGS_CSCT(RTGS Customer Credit Transfer) as fixed value for this element. |
| | **Occurrences** | [1..1] |
| | **Type** | Max35Text |

### Category Purpose

| | | |
|---|---|---|
| CdtTrfTxInf<br>+ PmtTpInf<br>++ CtgyPurp | **ISO Definition** | Specifies the high-level purpose of the instruction based on a set of pre-defined categories. Usage: This is used by the initiating party to provide information concerning the processing of the payment. It is likely to trigger special processing by any of the agents involved in the payment chain. |
| | **XML Tag** | <CtgyPurp> |
| | **IDTP Rule** | IDTP use this element here under Payment Type Information tag instead of shown in index 1.25 |
| | **Occurrences** | [1..1] |

**Proprietary**

| CdtTrfTxInf<br>+ PmtTpInf<br>++ CtgyPurp<br>+++ Prtry | **ISO Definition** | Category purpose, in a proprietary form. |
|---|---|---|
| | **XML Tag** | <Prtry> |
| | **Rule** | Rule "Category Purpose 1 Code Rule"<br><br>Definition<br> Transaction Type Code from MT 103 Field 72 (Sender to Receiver Information) after the designated code word /CODTYPTR/. |
| | **Occurrences** | [1..1] |
| | **Type** | Max35Text |

**Payment Identification**

| CdtTrfTxInf<br>+ PmtId | **ISO Definition** | Set of elements used to reference a payment instruction. |
|---|---|---|
| | **XML Tag** | <PmtId> |
| | **Occurrences** | [1..1] |

**Instruction Identification**

| CdtTrfTxInf<br>+ PmtId<br>++ InstrId | **ISO Definition** | Unique identification, as assigned by an instructing party for an instructed party, to unambiguously identify the instruction.<br>Usage: The instruction identification is a point to point reference that can be used between the instructing party and the instructed party to refer to the individual instruction. It can be included in several messages related to the instruction. |
|---|---|---|
| | **IDTP Rule** | Use MessageId |
| | **XML Tag** | <InstrId> |
| | **Type** | Max35Text |
| | **Occurrences** | [1..1] |

**Transaction Identification**

| CdtTrfTxInf<br>+ PmtId<br>++ TxId | **ISO Definition** | Unique identification, as assigned by the first instructing agent, to unambiguously identify the transaction that is passed on, unchanged, throughout the entire interbank chain.<br>Usage: The transaction identification can be used for reconciliation, tracking or to link tasks relating to the transaction on the interbank level. Usage: The instructing agent has to make sure that the transaction identification is unique for a pre-agreed period. |
|---|---|---|
| | **XML Tag** | <TxId> |
| | **Occurrences** | [1..1] |
| | **Type** | Max35Text |
| | **ISO Length** | 1 ...35 |
| | **IDTP Length** | 1 ...22 |
| | **Rules** | Rule "Message Identification Guideline"<br><br>Definition<br> If no unique Message Identification can be generated, then the element is recommended to be populated with a copy of Instruction Identification.<br><br>If generated, it is recommended that Message Identification to be structured as follows:<br><br>XXXX - First 4 characters of sender's BIC [4]<br>YYYYMMDD - Creation Date [8]<br>X – Channel Identification [1]<br>nnnnnnn- Sequence Number [9]<br><br>The values of Channel Identification (X) are bank-determined and may be used to identify separate channels such as:<br>1 - Default value (only one single channel)<br>Or for example (multiple channels),<br>1 - Internet Banking<br>2 - Cash Management<br>3 - Treasury<br>4 - ATM |
| | **IDTP Rule** | Use MsgId |
| | **Example** | <TxId>HSBC201308201123456789</TxId> |

**End To End Identification**

| CdtTrfTxInf +PmtId ++EndToEndId | ISO Definition | Unique identification, as assigned by the initiating party, to unambiguously identify the transaction. This identification is passed on, unchanged, throughout the entire end-to-end chain.<br>Usage: The end-to-end identification can be used for reconciliation or to link tasks relating to the transaction. It can be included in several messages related to the transaction.<br> Usage: In case there are technical limitations to pass on multiple references, the end-to-end identification must be passed on throughout the entire end-to-end chain. |
|---|---|---|
| | IDTP Rule | Use MessageId |
| | XML Tag | <EndToEndId> |
| | Type | Max35Text |
| | Occurrences | [1..1] |

**Interbank Settlement Amount**

| CdtTrfTxInf +IntrBkSttlmAmt | ISO Definition | Amount of money moved between the instructing agent and the instructed agent. |
|---|---|---|
| | XML Tag | <IntrBkSttlmAmt> |
| | IDTP Rule | RestrictedFINActiveCurrencyAndAmount (based on decimal)<br><br>- fractionDigits: 5<br>- totalDigits: 14<br>- minInclusive: 0 |
| | Occurrences | [1..1] |
| | Type | ActiveCurrencyAndAmount |
| | Attribute: | Currency<br>The number of fractional digits (or minor unit of currency) must comply with ISO 4217.<br>Note: The decimal separator is a dot. |

**Interbank Settlement Date**

| CdtTrfTxInf +IntrBkSttlmDt | ISO Definition | Date on which the amount of money ceases to be available to the agent that owes it and when the |
|---|---|---|
| | | amount of money becomes available to the agent to which it is due. |
| | XML Tag | <IntrBkSttlmDt> |
| | Occurrences | [0..1] |

| | Type | ISODate |
|---|---|---|

| **Debtor** | | |
|---|---|---|
| `CdtTrfTxInf`<br>`+Dbtr` | **ISO Definition** | Party that owes an amount of money to the (ultimate) creditor. |
| | **XML Tag** | <Dbtr> |
| | **Occurrences** | [1..1] |
| | **Rule** | Conditional Rule "Name And BIC Rule"<br><br>This is a cross-element rule.<br>Definition<br> If Identification\OrganizationIdentification\AnyBIC is not present, DebtorName must be present.<br>If<br> Identification\OrganizationIdentification\AnyBIC is present<br>Then<br> Name is optional.<br>Else<br> Name must be present.<br><br>Conditional Rule "Name And Street Name Rule"<br><br>This is a cross-element rule.<br>Definition<br> If the length of the Name is more than 33 characters, the length of the StreetName is restricted to 33 characters.<br>If<br> Name length is more than 33 characters<br>Then<br> StreetName has a maximum length of 33 characters<br>Else<br> StreetName has a maximum length of 70 characters |

| **Financial Institution Identification** | | |
|---|---|---|
| `CdtTrfTxInf`<br>`+Dbtr`<br>`++FinInstnId` | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

**BICFI**

| CdtTrfTxInf +Dbtr ++FinInstnId +++BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
|---|---|---|
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

**Debtor Account**

| CdtTrfTxInf +DbtrAcct | **ISO Definition** | Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction. |
|---|---|---|
| | **XML Tag** | <DbtrAcct> |
| | **Occurrences** | [0..1] |

**Identification**

| CdtTrfTxInf +DbtrAcct ++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Other**

| CdtTrfTxInf +DbtrAcct ++Id +++Othr | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | <Othr> |
| | **Occurrences** | [1..1] |

**Identification**

| CdtTrfTxInf +DbtrAcct ++Id +++Othr ++++Id | **ISO Definition** | Identification assigned by an institution. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |
| | **Type** | Max34Text |
| | **IDTP Rule** | RestrictedFINXMax34Text (based on string)<br><br>- pattern: ([0-9a-zA-Z\-\?:\(\)\.,'\+ ]([0-9a-zA-Z\-\?:\(\)\.,'\+ ]*(/[0-9a-zA-Z\-\?:\(\)\.,'\+ ])?)*)<br>- minLength: 1<br>- maxLength: 34 |

**Creditor**

| CdtTrfTxInf +Cdtr | **ISO Definition** | Party to which an amount of money is due. |
|---|---|---|
| | **XML Tag** | <Cdtr> |
| | **Occurrences** | [1..1] |

**Financial Institution Identification**

| CdtTrfTxInf +Cdtr ++FinInstnId | **ISO Definition** | Unique and unambiguous identification of a financial institution, as assigned under an internationally recognized or proprietary identification scheme. |
|---|---|---|
| | **XML Tag** | <FinInstnId> |
| | **Occurrences** | [1..1] |

**BICFI**

| CdtTrfTxInf +Cdtr ++FinInstnId +++BICFI | **ISO Definition** | Code allocated to a financial institution by the ISO 9362 Registration Authority as described in ISO 9362 "Banking - Banking telecommunication messages - Business identifier code (BIC)". |
|---|---|---|
| | **XML Tag** | <BICFI> |
| | **Occurrences** | [1..1] |

**Creditor Account**

| CdtTrfTxInf +CdtrAcct | **ISO Definition** | Unambiguous identification of the account of the creditor to which a credit entry will be made as a result of the transaction. |
|---|---|---|
| | **XML Tag** | <CdtrAcct> |
| | **Occurrences** | [1..1] |

**Identification**

| CdtTrfTxInf +CdtrAcct ++Id | **ISO Definition** | Unique and unambiguous identification for the account between the account owner and the account servicer. |
|---|---|---|
| | **XML Tag** | <Id> |
| | **Occurrences** | [1..1] |

**Other**

| CdtTrfTxInf +CdtrAcct ++Id +++Othr | **ISO Definition** | Unique identification of an account, as assigned by the account servicer, using an identification scheme. |
|---|---|---|
| | **XML Tag** | <Othr> |

| | **Occurrences** | [1..1] |
|---|---|---|

**Identification**

| | | |
|---|---|---|
| CdtTrfTxInf<br>+CdtrAcct<br>++Id<br>+++Othr<br>++++Id | **ISO Definition** | Identification assigned by an institution. |
| | **XML Tag** | \<Id\> |
| | **Occurrences** | [1..1] |
| | **IDTP Rule** | RestrictedFINXMax34Text (based on string)<br>- pattern: ([0-9a-zA-Z\-\?:\(\)\.,'\+ ]([0-9a-zA-Z\-\?:\(\)\.,'\+ ]*(/[0-9a-zA-Z\-\?:\(\)\.,'\+ ])?)*)<br>- minLength: 1, maxLength: 34 |

**Supplementary Data**

| | | |
|---|---|---|
| CdtTrfTxInf<br>+SplmtryData | **ISO Definition** | Additional information that cannot be captured in the structured elements and/or any other specific block. |
| | **XML Tag** | \<SplmtryData\> |
| | **Occurrences** | [0..n] |
| | **Rules** | This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element. |

**Place And Name**

| | | |
|---|---|---|
| CdtTrfTxInf<br>+SplmtryData<br>++PlcAndNm | **ISO Definition** | Unambiguous reference to the location where the supplementary data must be inserted in the message instance.<br>In the case of XML, this is expressed by a valid XPath. |
| | **XML Tag** | \<PlcAndNm\> |
| | **Occurrences** | [1..1] |
| | **Rules** | Maximum 350 characters allowed. |

**Envelope**

| | | |
|---|---|---|
| CdtTrfTxInf<br>+ SplmtryData<br>++ Envlp | **ISO Definition** | Technical element wrapping the supplementary data. |
| | **XML Tag** | \<Envlp\> |
| | **Occurrences** | [1..1] |

## J. ISO Message Structure Definition

| XML Tag | Element Name |
|---|---|
| AccptncDtTm | Acceptance Date Time |
| Acct | Account |
| AcctCrit | Account Criteria |
| AcctId | Account Identification |
| AcctOrErr | Account or Error |
| AcctOwnr | Account Owner |
| AcctQryDef | Account Query Definition |
| AcctRpt | Account Report |
| AddtlInf | Additional Information |
| AddtlTxInf | Additional Transaction Information |
| Amt | Amount |
| AmtWthtCcy | Amount without currency |
| AnyBIC | Any BIC |
| AppHdr | Application Header |
| BICFI | BICFI |
| BizMsgIdr | Business Message Identifier |
| BizSvc | Business Service |
| BkToCstmrDbtCdtNtfctn | Bank To Customer Debit Credit Notification |
| BkTxCd | Bank Transaction Code |
| BranchId | Branch Identification |
| BtchBookg | Batch Booking Indicator |
| Ccy | Currency |
| Cd | Code |
| CdtDbtInd | Credit Debit Indicator |
| Cdtr | Creditor |
| CdtrAcct | Creditor Account |
| CdtrAgt | Creditor Agent |
| CdtrAgtAcct | Creditor Agent Account |
| CdtrPmtActvtnReq | Creditor Payment Activation Request |

| | |
|---|---|
| `CdtTrfTx` | Credit Transfer Transaction |
| `CdtTrfTxInf` | Credit Transfer Transaction Information |
| `ChrgBr` | Charge Bearer |
| `ClrChanl` | Clearing Channel |
| `ClrSysId` | Clearing System Identification |
| `ClrSysMmbId` | Clearing System Member Identification |
| `CreDt` | Creation Date |
| `CreDtTm` | Creation Date Time |
| `CstmrCdtTrfInitn` | Customer Credit Transfer Initiation |
| `CtgyPurp` | Category Purpose |
| `CtrlSum` | Control Sum |
| `CtryOfRes` | Country of Residence |
| `CurMulLmt` | Current Multilateral Limit |
| `Dbtr` | Debtor |
| `DbtrAcct` | Debtor Account |
| `DbtrAgt` | Debtor Agent |
| `DbtrAgtAcct` | Debtor Agent Account |
| `Dt` | Date |
| `EndToEndId` | End To End Identification |
| `Envlp` | Envelop |
| `EQ` | Equal |
| `FIId` | Financial Institution Identification (Branch and Financial Institution Identification) |
| `FinInstnId` | Financial Institution Identification (Unique Identification of Financial Institution) |
| `FIToFICstmrCdtTrf` | FI To FI Customer Credit Transfer |
| `FIToFIPmtStsRpt` | FI To FI Payment Status Report |
| `Fr` | From |
| `GetAcct` | Get Account |
| `GrpHdr` | Group Header |
| `GrpSts` | Group Status |
| `Id` | Identification |

| InitgPty | Initiating Party |
|---|---|
| InstdAgt | Instructed Agent |
| InstdAmt | Instructed Amount |
| InstgAgt | Instructing Agent |
| InstrId | Instruction Identification |
| IntrBkSttlmAmt | Interbank Settlement Amount |
| IntrBkSttlmDt | Interbank Settlement Date |
| LclInstrm | Local Instrument |
| MmbId | Member Identification |
| MsgDefIdr | Message Definition Identifier |
| MsgHdr | Message Header |
| MsgId | Message Identification |
| NbOfTxs | Number of Transactions |
| NewCrit | New Criteria |
| Nm | Name |
| Ntfctn | Notification |
| Ntry | Entry |
| NtryDtls | Entry Details |
| NtryRef | Entry Reference |
| OrgId | Organization Identification |
| OrgnlBizQry | Original Business Query |
| OrgnlCreDtTm | Original Creation Date Time |
| OrgnlEndToEndId | Original End to End Identification |
| OrgnlGrpInfAndSts | Original Group Information and Status |
| OrgnlInstrId | Original Instruction Identification |
| OrgnlMsgId | Original Message Identification |
| OrgnlMsgNmId | Original Message Name Identification |
| OrgnlNbOfTxs | Original Number of Transactions |
| OrgnlPmtInfAndSts | Original Payment Information and Status |
| OrgnlPmtInfId | Original Payment Information Identification |
| OrgnlTxId | Original Transaction Identification |

| OrgnlTxRef | Original Transaction Reference |
|---|---|
| Othr | Other |
| Ownr | Owner |
| PlcAndNm | Place And Name |
| PmtId | Payment Identification |
| PmtInf | Payment Information |
| PmtInfId | Payment Information Identification |
| PmtMtd | Payment Method |
| PmtTpInf | Payment Type Information |
| Prtry | Proprietary |
| QryNm | Query Name |
| Refs | References |
| ReqdExctnDt | Requested Execution Date |
| RltdDts | Related Dates |
| RltdPties | Related Parties |
| RmtInf | Remittance Information |
| RptOrErr | Report or Error |
| Rsn | Reason |
| RtrAcct | Return Account |
| SchCrit | Search Criteria |
| SchmeNm | Scheme Name |
| SplmtryData | Supplementary Data |
| Sts | Status |
| StsRsnInf | Status Reason Information |
| SttlmInf | Settlement Information |
| SttlmMtd | Settlement Method |
| SvcLvl | Service Level |
| To | To |
| Tp | Type |
| TtlIntrBkSttlmAmt | Total Interbank Settlement Amount |
| TxDtls | Transaction Details |

| TxDtTm | Transaction Date Time |
|---|---|
| TxId | Transaction Identification |
| TxInfAndSts | Transaction Information and Status |
| TxSts | Transaction Status |
| Ustrd | Unstructured |
| ValDt | Value Date |

## K. List of Abbreviations

| Terms | Description |
|-------|-------------|
| IDTP | Interoperable Digital Transaction Platform |
| STAT | Code Of Transaction Status |
| AA | Account is not locked |
| DBIT | Borne By Debtor |
| TRF | Transfer |
| SHAR | Shared |
| BOOK | Book Transfer |
| NTAV | Not Available |
| SLEV | Following Service Level |
| ACSP | Accepted Settlement In Process |
| RJCT | Rejected |
| SDVA | Same Day Value |
| AM04 | Insufficient Funds |
| CRED | Borne By Creditor |