SPECIFICATION DOCUMENT

FUND TRANSFER GATEWAY

(Version 1.5.3)

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1 Document Changes

Version	Author	Date	Description
1.0	Kuncoro Tri Atmoko/ IT Department	March 31st, 2009	Initial Document.
1.1	Kuncoro Tri Atmoko/ IT Department	April 6th, 2009	• Adjustment term Collecting Agent to be Sender. • Changes term Transfer Payment to be Transfer. • Changes in the configuration diagram, switching into the cloud ATM Bersama, without a database. • Changes DateTime to be TranDateTime. • The addition Country Code field. • The addition LocalDateTime field. • Changes Terminal ID length from 15 Alpha Numeric to be 8 Numeric • Changes field Name from 30 Alpha Numeric to be 30 Alpha Numeric Special. • Changes group IssuerData to be SenderData. • Changes group Destination to be BeneficiaryData. • Changes data rate from two digits decimal to be four digits decimal. • Changes RefNumber field to be CustRefNumber, BeneficiaryData group. • Changes ResponseCode group to be Response. • Changes ErrCode field to be Code. • Changes ErrDescription field to be Description.

1.2	Kuncoro Tri Atmoko/ IT Department	April 23rd, 2009	• Correction on the group tags from IssuerData and DestinationData become SenderData and BeneficiaryData. • Changes in the format of the DateTime MMDDhhmmss become YYYYMMDDhhnnss, length of 10 into 14. • Addition information Currency Code on the group tag BeneficiaryData. • Deletion of the flow transaction reversal. • The addition of Inquiry Status transaction flow. • The addition of a reference document.

			• Update processing code is used. • Update error code list.
1.2.1	Kuncoro Tri Atmoko/ IT Department. Novirnawaty/ IT Department.	May 13th 2009	• Deletion of reversal words. • Change BeneficiaryData.RefNumber to BeneficiaryData.CustRefNumber.
1.2.2	Kuncoro Tri Atmoko/ IT Department. Novirnawaty/ IT Department.	July 28th 2009	• Change in the information rate from the 4 digits on the back of a point to be 6 digits (6.1.1.2). • Change in the Signature status from Optional to be Mandatory in all message components. • Separation and addition of the data component signature for each message (7.3). • The separation between error code Fund Transfer Gateway and ATM Bersama Network.
1.2.3	Kuncoro Tri Atmoko/ IT Department. Novirnawaty/ IT Department.	July 28th 2009	• Addition information on the data component request Signature, TerminalID and LocalDateTime (7.3). • Deletion information on the data component response Signature, RefNumber (7.3).
1.2.4	Yumi Mulyani/ IT Department.	Sept 17th 2009	• The Addition of XML format message and flow of create and delete account. • Change the description of NF error code.
1.2.5	Yumi Mulyani/ IT Department.	Oct 15th 2009	• The Additional information of Create Account and Delete Account Process on section 6.4 and 6.5. • Change in Address length on section 6.4 and 6.5 (based on Shinetown requirement).
1.2.6	Bondan Sumbodo	Oct 2012	• Adding support for RegencyCode Tag, in order to provide Central Bank of Indonesia compliant report. • Adding regency code list. • Adding TransactionInfo.CountryCode to the signature components in Transfer Inquiry request, Transfer request.
1.2.7	Bondan Sumbodo	June 2013	• Fixing some typographical error in previous

			version. • Moving regency code list to appendix.
1.2.8	Bondan Sumbodo	Sept 2013	• Update sections 7.1 and 7.4 regarding Signature Establishment and Public Key exchange format.
1.2.9	Bondan Sumbodo	Sept 2013	• Revision for 1.2.6 implementation for Data Component Signature (`RegencyCode`).
1.3	Lafrania Taufik	June 2014	• Adding support for BirthPlace, CountryCode, and Email tag and their descriptions.
1.4	Lafrania Taufik	June 2014	• Adding mapping ATMB for Transfer Inquiry and Transfer transaction
1.4.1	Lafrania Taufik	June 2014	• Adding additional beneficiary data: Address, Province Code, Identification Number
1.5	Rakhmat Adhi P	October 2016	• Adding additional Sender Data for Inquiry and Transfer transaction: AreaCode, PurposeCode, PurposeDescription
1.5.1	Lafrania Taufik	December 2016	• Update additional sender data: BirthPlace, CountryCode, and Email to conditional. • Update additional beneficiary data: Address, Province Code, Identification Number to conditional
1.5.2	Rakhmat Adhi P	December 2016	• Move tag of AreaCode, PurposeCode and PurposeDestination from under SenderData to under BeneficiaryData
1.5.3	Lafrania Taufik	December 2016	• Move tag AreaCode from BeneficiaryData to Sender data

2 List of Contents

3 List of Terms

Terms	-	Description
Sender	-	Institutions that conduct cooperation with the Artajasa in the process of sending money (Fund Transfer).
Transfer Inquiry	-	The process to obtain information transfer based on the destination account number from the transfer destination
Transfer	-	The process of payment of money from the Sender to Beneficiary
Inquiry Status	-	The process used to obtain transfer status information which was sent previously
Request	-	The process of sending a message from the initiator to the destination
Response	-	Answers to the request that is sent from the initiator
Timeout	-	If up to that time limit has been determined response is awaited on the request is not received
Suspect Transaction	-	Success status transaction is not well known. It can be done after settlement process

4 Preface

4.1 Background

Artajasa wants to develop Fund Transfer services from non ATM Bersama institutions as senders and bank account of ATM Bersama member as the destinations or beneficiary.

To meet these needs, Sender and Artajasa required a message format that can accommodate all of the information and transaction flow, as already written down in specification transfer ATM Bersama. Message format to be used is ***the XML-Data Over HTTP Communication***.

4.2 Objective

The goal of this specification is describe the specification XML and the Transaction Flow that will be used by sender to make the transfer process with the destination is account in the bank of ATM Bersama members.

4.3 Scopes of System

The information contained in this document are:

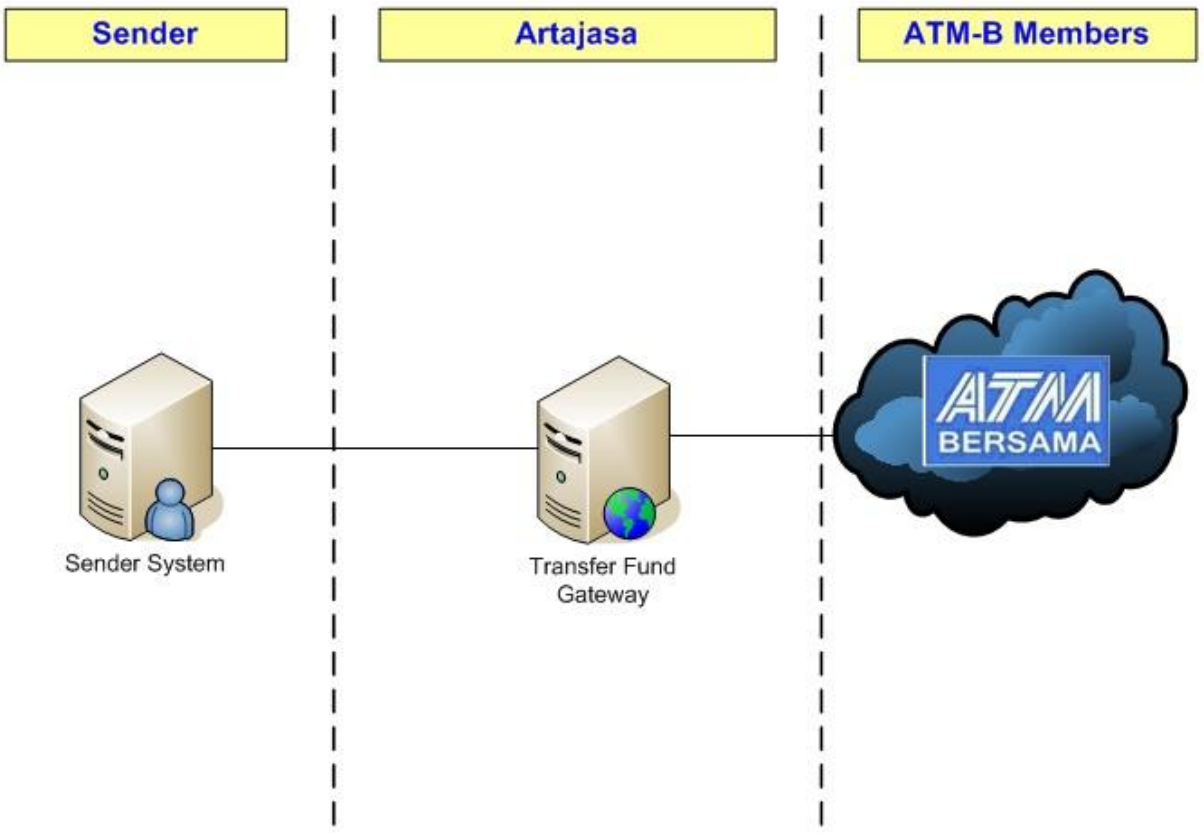
1. The XML-Data format to be used by the Sender to make the transfer process.
2. Transaction flow will be made from the Sender system to the Artajasa Gateway Fund Transfer.
3. Rules of the Digital Signature in message transaction.
4. Description transaction codes used in the message request and response.

5 System Configuration

This section will be describes the general configuration of the Fund Transfer Gateway following with other entities involved in the system.

5.1 Configuration

Following system configuration is viewed from customer, Sender, Artajasa and the Bank members of ATM Bersama.



5.2 Description

Here is a description of each entity involved in the transaction of Fund Transfer.

5.2.1 Sender

Sender is an institution that will accept transfer of funds from the sender / customer either directly or through the outlet. Sender system will send the request to the Fund Transfer Gateway Artajasa to process the transfer of these customers.

5.2.2 Transfer Fund Gateway

It is a gateway that will serve Sender to send the transfer process that is done by the customers with the destination is the account of the Bank's member of ATM Bersama.

5.2.3 ATM Bersama Network

It is Artajasa Switching that provides fund transfer between the bank members of ATM Bersama. Fund transfer service will use this switching to make fund transfer process with ATM Bersama members as the destination/beneficiary.

5.2.4 Bank

Bank is a bank member of ATM Bersama, the account will be used as a transfer destination by the Sender.

6 XML Document

In this part will be explain the XML document that will be used to process a transaction between the Sender and the Fund Transfer Artajasa Gateway . Basically there are five types of XML documents that will be used for five types of process, the process are Inquiry, Transfer, Inquiry Status, create account and delete account. For each process will be described the XML-data for both the request and response

6.1 Create Account

This process is used to store or update (re create) the sender data account and beneficiary data account in Artajasa. Those data are used during authentication (signature verification) process on remittance process. If this service is requested, first the process will delete all record based on its SenderData.AccountID and TransactionID.InstID. After Deletion process, then the process will insert all the data (SenderData and 5 BeneficiaryData). If there is additional information (additional XML tag element) that is not mentioned in this spec, then those additional information will be ingnored and the process will give the successfully response (as long as the data is comply with all the spec below).

6.1.1 Request

6.1.1.1 XML Message Format

General format of XML used for the Create-Request process is as follows :

```
<?xml version="1.0"?>
<MethodCall>
      <MethodID>
            <Name>Transfer.Artajasa.CreateRemittanceAccount</Name>
      </MethodID>
      <TransactionID>
            <STAN>STAN</STAN>
            <TransDateTime>TransDateTime</TransDateTime>
            <InstID>InstID</InstID>
      </TransactionID>
      <SenderData>
            <AccountID>AccountID</AccountID>
            <Name>Name</Name>
            <Address>Address</Address>
            <CountryCode>CountryCode</CountryCode>
            <BirthDate>BirthDate</BirthDate>
            <BirthPlace>BirthPlace</BirthPlace>
            <PhoneNumber>PhoneNumber</PhoneNumber>
            <Email>Email</Email>
            <Occupation>Occupation</Occupation>
            <Citizenship>Citizenship</Citizenship>
            <IDNumber>IDNumber</IDNumber>
            <FundResource>FundResource</FundResource>
      </SenderData>
```

```
<BeneficiaryData>
      <Acc01>
            <AccountID>AccountID</AccountID>
            <InstID>InstID</InstID>
            <Name>Name</Name>
            <Relationship>Relationship</Relationship>
            <RegencyCode>RegencyCode</RegencyCode>
            <Address>Address</Address>
            <ProvCode>ProvCode</ProvCode>
            <IDNumber>IDNumber</IDNumber>
      </Acc01>
      <Acc02>
            <AccountID>AccountID</AccountID>
            <InstID>InstID</InstID>
            <Name>Name</Name>
            <Relationship>Relationship</Relationship>
            <RegencyCode>RegencyCode</RegencyCode>
            <Address>Address</Address>
            <ProvCode>ProvCode</ProvCode>
            <IDNumber>IDNumber</IDNumber>
      </Acc02>
      <Acc03>
            <AccountID>AccountID</AccountID>
            <InstID>InstID</InstID>
            <Name>Name</Name>
            <Relationship>Relationship</Relationship>
            <RegencyCode>RegencyCode</RegencyCode>
            <Address>Address</Address>
            <ProvCode>ProvCode</ProvCode>
            <IDNumber>IDNumber</IDNumber>
      </Acc03>
       <Acc04>
            <AccountID>AccountID</AccountID>
            <InstID>InstID</InstID>
            <Name>Name</Name>
            <Relationship>Relationship</Relationship>
            <RegencyCode>RegencyCode</RegencyCode>
            <Address>Address</Address>
            <ProvCode>ProvCode</ProvCode>
            <IDNumber>IDNumber</IDNumber>
      </Acc04>
      <Acc05>
            <AccountID>AccountID</AccountID>
            <InstID>InstID</InstID>
            <Name>Name</Name>
            <Relationship>Relationship</Relationship>
            <RegencyCode>RegencyCode</RegencyCode>
            <Address>Address</Address>
            <ProvCode>ProvCode</ProvCode>
            <IDNumber>IDNumber</IDNumber>
       </Acc05>
 </BeneficiaryData>
 <Signature>
       <Data>Data</Data>
 </Signature>
</MethodCall>
```

6.1.1.2 Data Description

No.	Name	Type	Status	Description
MethodID				
1.	Name	String	M	• Method name. • **Transfer.Artajasa.CreateRemittanceAccount**.
TransactionID				
1.	STAN	String	M	• System Trace Audit Number. • The value is incremented by 1 from previous transaction. • Length: 6 – Numeric (Fixed) . • Right justified padded by zero.
2.	TransDateTime	String	M	• Transmission Date and Time, the transaction is transmitted. • Date and time is in **GMT** time. • Format : **YYYYMMDDhhnnss** • Length: 14 – Numeric (Fixed)
3.	InstID	String	M	• The value is the same as Transfer Inquiry/Transfer Request.
SenderData				
1.	AccountID	String	M	• Account ID of the sender. • Length: 18 – Numeric (Max).
2.	Name	String	M	• Name of the sender. • Length: 30 – Alpha Numeric Special (Max).
3.	Address	String	M	• Address of the sender. • Length: 100 – Alpha Numeric Special (Max).
4.	CountryCode	String	C	• Refer to ISO-3166 • Length: 2 – Alphabetic (fixed)
5.	BirthDate	String	M	• BirthDate of the sender data • Format : YYYY**MMDD** • Length: 8 – Numeric (Fixed)
6.	BirthPlace	String	C	• BirthPlace of the sender • Length: 30 -Alphanumeric
7.	PhoneNumber	String	M	• PhoneNumber of the sender data • Length : 30 Numeric
8.	Email	String	C	• Email of sender • Length : 30 - Alphanumeric
9.	Occupation	String	M	• Length: 50 Alphanumeric
10.	Citizenship	String	M	• Length: 30 Alphanumeric
11.	IDNumber	String	M	• Identity card number or paspor number • Length : 50 Alphanumeric
12.	FundResource	String	M	• Length: 50 Alphanumeric
BeneficiaryData				
1.	InstID	String	C	• Destination Bank Code. • Length: 3 – Numeric (Fixed) • Right justified padded by zero.
2.	AccountID	String	C	• Account ID/Number of the destination. • Length: 18 – Numeric (Max).

3.	Name	String	C	• Destination account holder name. • Length: 30 – Alpha Numeric Special
4.	Relationship	String	C	• Relationship with the sender • Length:30 - Alphanumeric
5.	RegencyCode	String	M	• Destination regency code • Refer to Regency Code Table (Appendix) • Length: 3 – Alphanumeric (Max)
6.	Address	String	C	• Destination address • Length: 100 – Alpha Numeric Special (Max).
7.	ProvCode	String	C	• Destination Province Code • Length: 5 - Alpha Numeric Special (Max)
8.	IDNumber	String	C	• Identity card number or passport number • Length : 50 Alphanumeric
Signature				
1.	Data	String	M	• Data signature create by Sender system to identify that the message is valid.

6.1.2 Response

6.1.2.1 XML Format

General format of XML used for the CreateAccount-Response is as follows:

```
<?xml version="1.0"?>
<MethodResponse>
	<TransactionID>
		<STAN>STAN</STAN>
		<TransDateTime>TransDateTime</TransDateTime>
		<InstID>InstID</InstID>
	</TransactionID>
	<SenderData>
		<AccountID>AccountID</AccountID>
		<Name>Name</Name>
		<Address>Address</Address>
		<CountryCode>CountryCode</CountryCode>
		<BirthDate>BirthDate</BirthDate>
		<BirthPlace>BirthPlace</BirthPlace>
		<PhoneNumber>PhoneNumber</PhoneNumber>
		<Email>Email</Email>
		<Occupation>Occupation</Occupation>
		<Citizenship>Citizenship</Citizenship>
		<IDNumber>IDNumber</IDNumber>
		<FundResource>FundResource</FundResource>
	</SenderData>
	<BeneficiaryData>
		<Acc01>
			<AccountID>AccountID</AccountID>
			<InstID>InstID</InstID>
			<Name>Name</Name>
			<Relationship>Relationship</Relationship>
			<RegencyCode>RegencyCode</RegencyCode>
			<Address>Address</Address>
			<ProvCode>ProvCode</ProvCode>
			<IDNumber>IDNumber</IDNumber>
		</Acc01>
		<Acc02>
			<AccountID>AccountID</AccountID>
```

```
                <InstID>InstID</InstID>
                <Name>Name</Name>
                <Relationship>Relationship</Relationship>
                <RegencyCode>RegencyCode</RegencyCode>
                <Address>Address</Address>
                <ProvCode>ProvCode</ProvCode>
                <IDNumber>IDNumber</IDNumber>
            </Acc02>
            <Acc03>
                <AccountID>AccountID</AccountID>
                <InstID>InstID</InstID>
                <Name>Name</Name>
                <Relationship>Relationship</Relationship>
                <RegencyCode>RegencyCode</RegencyCode>
                <Address>Address</Address>
                <ProvCode>ProvCode</ProvCode>
                <IDNumber>IDNumber</IDNumber>
            </Acc03>
            <Acc04>
                <AccountID>AccountID</AccountID>
                <InstID>InstID</InstID>
                <Name>Name</Name>
                <Relationship>Relationship</Relationship>
                <RegencyCode>RegencyCode</RegencyCode>
                <Address>Address</Address>
                <ProvCode>ProvCode</ProvCode>
                <IDNumber>IDNumber</IDNumber>
            </Acc04>
            <Acc05>
                <AccountID>AccountID</AccountID>
                <InstID>InstID</InstID>
                <Name>Name</Name>
                <Relationship>Relationship</Relationship>
                <RegencyCode>RegencyCode</RegencyCode>
                <Address>Address</Address>
                <ProvCode>ProvCode</ProvCode>
                <IDNumber>IDNumber</IDNumber>
            </Acc05>
        </BeneficiaryData>
        <Response>
            <Code>Code</Code>
            <Description>Description</Description>
        </Response>
        <Signature>
            <Data>Data</Data>
        </Signature>
</MethodResponse>
```

6.1.2.2 Data description

No.	Name	Type	Status	Description
TransactionID				
1.	STAN	String	M	• The value is the same as Status Request.
2.	TransDateTime	String	M	• The value is the same as Status Request.
3.	InstID	String	M	• The value is the same as Status Request.
QuerylTransactionID				
1.	STAN	String	M	• The value is the same as Status Request.
2.	TransDateTime	String	M	• The value is the same as Status Request.
TransferData.SenderData				

1.	AccountID	String	M	• The value is the same as Transfer Request.
2.	Name	String	M	• The value is the same as Transfer Request.
3.	Address	String	M	• The value is the same as Transfer Request.
4.	CountryCode	String	C	• The value is the same as Transfer Request.
5.	BirthDate	String	M	• The value is the same as Transfer Request.
6.	BirthPlace	String	C	• The value is the same as Transfer Request.
7.	PhoneNumber	String	M	• The value is the same as Transfer Request.
8.	Email	String	C	• The value is the same as Transfer Request.
9.	Occupation	String	M	• The value is the same as Transfer Request.
10.	Citizenship	String	M	• The value is the same as Transfer Request.
11.	IDNumber	String	M	• The value is the same as Transfer Request.
12.	FundResource	String	M	• The value is the same as Transfer Request.
TransferData.BeneficiaryData				
1.	InstID	String	M	• The value is the same as Transfer Request.
2.	AccountID	String	M	• The value is the same as Transfer Request.
3.	Name	String	M	• The value is the same as Transfer Request.
4.	Relationship	String	M	• The value is the same as Transfer Request.
5.	RegencyCode	String	M	• The value is the same as Transfer Request.
6.	Address	String	C	• The value is the same as Transfer Request.
7.	ProvCode	String	C	• The value is the same as Transfer Request.
8.	IDNumber	String	C	• The value is the same as Transfer Request.
ResponseCode				
1.	ErrCode	String	M	• Response Code • Length: 2 – Numeric (Fixed) • Detail and description of this Code could be found inf Transaction Code Description.
2.	ErrDescription	String	M	• Response code description • Length: 50 – Alpha Numeric (Max)
Signature				
1.	Data	String	M	• Data signature create by Artajasa system to identify that the message is valid.

6.2 Delete Account

This process is used to delete the sender data account and all its benerficiary data account in Artajasa. The rules of messaging is the same as Create Account above. The keys that are used for deletion process is SenderData.AccountID and TransactionID.InstID. The rest data is only used for signature verification process.

6.2.1 Request

6.2.1.1 XML Message Format

General fomat of XML used for the Delete-Request process is as follow:

```
<?xml version="1.0"?>
<MethodCall>
      <MethodID>
            <Name>Transfer.Artajasa.DeleteRemittanceAccount</Name>
      </MethodID>
```

```
<TransactionID>
	<STAN>STAN</STAN>
	<TransDateTime>TransDateTime</TransDateTime>
	<InstID>InstID</InstID>
</TransactionID>
<SenderData>
	<AccountID>AccountID</AccountID>
	<Name>Name</Name>
	<Address>Address</Address>
	<CountryCode>CountryCode</CountryCode>
	<BirthDate>BirthDate</BirthDate>
	<BirthPlace>BirthPlace</BirthPlace>
	<PhoneNumber>PhoneNumber</PhoneNumber>
	<Email>Email</Email>
	<Occupation>Occupation</Occupation>
	<Citizenship>Citizenship</Citizenship>
	<IDNumber>IDNumber</IDNumber>
	<FundResource>FundResource</FundResource>
</SenderData>
<BeneficiaryData>
	<Acc01>
		<AccountID>AccountID</AccountID>
		<InstID>InstID</InstID>
		<Name>Name</Name>
		<Relationship>Relationship</Relationship>
		<RegencyCode>RegencyCode</RegencyCode>
		<Address>Address</Address>
		<ProvCode>ProvCode</ProvCode>
		<IDNumber>IDNumber</IDNumber>
	</Acc01>
	<Acc02>
		<AccountID>AccountID</AccountID>
		<InstID>InstID</InstID>
		<Name>Name</Name>
		<Relationship>Relationship</Relationship>
		<RegencyCode>RegencyCode</RegencyCode>
		<Address>Address</Address>
		<ProvCode>ProvCode</ProvCode>
		<IDNumber>IDNumber</IDNumber>
	</Acc02>
	<Acc03>
		<AccountID>AccountID</AccountID>
		<InstID>InstID</InstID>
		<Name>Name</Name>
		<Relationship>Relationship</Relationship>
		<RegencyCode>RegencyCode</RegencyCode>
		<Address>Address</Address>
		<ProvCode>ProvCode</ProvCode>
		<IDNumber>IDNumber</IDNumber>
	</Acc03>
	<Acc04>
		<AccountID>AccountID</AccountID>
		<InstID>InstID</InstID>
		<Name>Name</Name>
		<Relationship>Relationship</Relationship>
		<RegencyCode>RegencyCode</RegencyCode>
		<Address>Address</Address>
		<ProvCode>ProvCode</ProvCode>
		<IDNumber>IDNumber</IDNumber>
	</Acc04>
	<Acc05>
		<AccountID>AccountID</AccountID>
		<InstID>InstID</InstID>
		<Name>Name</Name>
		<Relationship>Relationship</Relationship>
```

```
                    <RegencyCode>RegencyCode</RegencyCode>
                    <Address>Address</Address>
                    <ProvCode>ProvCode</ProvCode>
                    <IDNumber>IDNumber</IDNumber>
              </Acc05>
       </BeneficiaryData>
       <Signature>
              <Data>Data</Data>
       </Signature>
</MethodCall>
```

6.2.1.2 Data Description

No.	Name	Type	Status	Description
MethodID				

No.	Name	Type	Status	Description
1.	Name	String	M	• Method name. • **Transfer.Artajasa.DeleteRemittanceAccount**.
TransactionID				
1.	STAN	String	M	• System Trace Audit Number. • The value is incremented by 1 from previous transaction. • Length: 6 – Numeric (Fixed) . • Right justified padded by zero.
2.	TransDateTime	String	M	• Transmission Date and Time, the transaction is transmitted. • Date and time is in **GMT** time. • Format : **YYYYMMDDhhnnss** • Length: 14 – Numeric (Fixed)
3.	InstID	String	M	• The value is the same as Transfer Inquiry/Transfer Request.
SenderData				
1.	AccountID	String	M	• Account ID of the sender. • Length: 18 – Numeric (Max).
2.	Name	String	M	• Name of the sender. • Length: 30 – Alpha Numeric Special (Max).
3.	Address	String	M	• Address of the sender. • Length: 100 – Alpha Numeric Special (Max).
4.	CountryCode	String	C	• Refer to ISO-3166 • Length: 2 – Alphabetic (fixed)
5.	BirthDate	String	M	• BirthDate of the sender data • Format : YYYY**MMDD** • Length: 8 – Numeric (Fixed)
6.	BirthPlace	String	C	• BirthPlace of the sender • Length: 30 -Alphanumeric
7.	PhoneNumber	String	M	• PhoneNumber of the sender data • Length : 30 Numeric
8.	Email	String	C	• Email of sender • Length : 30 - Alphanumeric
9.	Occupation	String	M	• Length: 50 Alphanumeric with space
10.	Citizenship	String	M	• Length: 30 Alphanumeric with space
11.	IDNumber	String	M	• Indentity card number or paspor number • Length : 50 Alphanumeric
12.	FundResource	String	M	• Length: 50 Alphanumeric with space
BeneficiaryData				
1.	InstID	String	C	• Destination Bank Code. • Length: 3 – Numeric (Fixed) • Right justified padded by zero.
2.	AccountID	String	C	• Account ID/Number of the destination. • Length: 18 – Numeric (Max).
3.	Name	String	C	• Destination account holder name. • Length: 30 – Alpha Numeric Special

No.	Name	Type	Status	Description
4.	Relationship	String	C	• Relationship with the sender • Length:30 - Alphanumeric
5.	RegencyCode	String	M	• Destination regency code • Refer to Regency Code Table (Appendix) • Length: 3 – Alphanumeric (Max)
6.	Address	String	C	• Destination address • Length: 100 – Alpha Numeric Special (Max).
7.	ProvCode	String	C	• Destination Province Code • Length: 5 - Alpha Numeric Special (Max)
8.	IDNumber	String	C	• Identity card number or paspor number • Length : 50 Alphanumeric
Signature				
1.	Data	String	M	• Data signature create by Sender system to identify that the message is valid.

6.2.2 Response

6.2.2.1 XML Format

General format of XML used for the deleteAccount-Response is as follows:

```
<?xml version="1.0"?>
<MethodResponse>
	<TransactionID>
		<STAN>STAN</STAN>
		<TransDateTime>TransDateTime</TransDateTime>
		<InstID>InstID</InstID>
	</TransactionID>
	<SenderData>
		<AccountID>AccountID</AccountID>
		<Name>Name</Name>
		<Address>Address</Address>
		<CountryCode>CountryCode</CountryCode>
		<BirthDate>BirthDate</BirthDate>
		<BirthPlace>BirthPlace</BirthPlace>
		<PhoneNumber>PhoneNumber</PhoneNumber>
		<Email>Email</Email>
		<Occupation>Occupation</Occupation>
		<Citizenship>Citizenship</Citizenship>
		<IDNumber>IDNumber</IDNumber>
		<FundResource>FundResource</FundResource>
	</SenderData>
	<BeneficiaryData>
		<Acc01>
			<AccountID>AccountID</AccountID>
			<InstID>InstID</InstID>
			<Name>Name</Name>
			<Relationship>Relationship</Relationship>
			<RegencyCode>RegencyCode</RegencyCode>
			<Address>Address</Address>
			<ProvCode>ProvCode</ProvCode>
			<IDNumber>IDNumber</IDNumber>
		</Acc01>
		<Acc02>
```

```
                <AccountID>AccountID</AccountID>
                <InstID>InstID</InstID>
                <Name>Name</Name>
                <Relationship>Relationship</Relationship>
                <RegencyCode>RegencyCode</RegencyCode>
                <Address>Address</Address>
                <ProvCode>ProvCode</ProvCode>
                <IDNumber>IDNumber</IDNumber>
            </Acc02>
            <Acc03>
                <AccountID>AccountID</AccountID>
                <InstID>InstID</InstID>
                <Name>Name</Name>
                <Relationship>Relationship</Relationship>
                <RegencyCode>RegencyCode</RegencyCode>
                <Address>Address</Address>
                <ProvCode>ProvCode</ProvCode>
                <IDNumber>IDNumber</IDNumber>
            </Acc03>
            <Acc04>
                <AccountID>AccountID</AccountID>
                <InstID>InstID</InstID>
                <Name>Name</Name>
                <Relationship>Relationship</Relationship>
                <RegencyCode>RegencyCode</RegencyCode>
                <Address>Address</Address>
                <ProvCode>ProvCode</ProvCode>
                <IDNumber>IDNumber</IDNumber>
            </Acc04>
            <Acc05>
                <AccountID>AccountID</AccountID>
                <InstID>InstID</InstID>
                <Name>Name</Name>
                <Relationship>Relationship</Relationship>
                <RegencyCode>RegencyCode</RegencyCode>
                <Address>Address</Address>
                <ProvCode>ProvCode</ProvCode>
                <IDNumber>IDNumber</IDNumber>
            </Acc05>
        </BeneficiaryData>
        <Response>
            <Code>Code</Code>
            <Description>Description</Description>
        </Response>
        <Signature>
            <Data>Data</Data>
        </Signature>
</MethodResponse>
```


6.2.2.2 Data Description

No.	Name	Type	Status	Description
TransactionID				
1.	STAN	String	M	• The value is the same as Status Request.
2.	TransDateTime	String	M	• The value is the same as Status Request.
3.	InstID	String	M	• The value is the same as Status Request.

No.	Name	Type	Status	Description
QuerylTransactionID				
1.	STAN	String	M	• The value is the same as Status Request.
2.	TransDateTime	String	M	• The value is the same as Status Request.
TransferData.SenderData				
1.	AccountID	String	M	• The value is the same as Transfer Request.
2.	Name	String	M	• The value is the same as Transfer Request.
3.	Address	String	M	• The value is the same as Transfer Request.
4.	CountryCode	String	C	• The value is the same as Transfer Request.
5.	BirthDate	String	M	• The value is the same as Transfer Request.
6.	BirthPlace	String	C	• The value is the same as Transfer Request.
7.	PhoneNumber	String	M	• The value is the same as Transfer Request.
8.	Email	String	C	• The value is the same as Transfer Request.
9.	Occupation	String	M	• The value is the same as Transfer Request.
10.	Citizenship	String	M	• The value is the same as Transfer Request.
11.	IDNumber	String	M	• The value is the same as Transfer Request.
12.	FundResource	String	M	• The value is the same as Transfer Request.
TransferData.BeneficiaryData				
1.	InstID	String	M	• The value is the same as Transfer Request.
2.	AccountID	String	M	• The value is the same as Transfer Request.
3.	Name	String	M	• The value is the same as Transfer Request.
4.	Relationship	String	M	• The value is the same as Transfer Request.
5.	RegencyCode	String	M	• The value is the same as Transfer Request.
6.	Address	String	C	• The value is the same as Transfer Request.
7.	ProvCode	String	C	• The value is the same as Transfer Request.
8.	IDNumber	String	C	• The value is the same as Transfer Request.
ResponseCode				
1.	ErrCode	String	M	• Response Code • Length: 2 – Numeric (Fixed) • Detail and description of this Code could be found inf Transaction Code Description.
2.	ErrDescription	String	M	• Response code description • Length: 50 – Alpha Numeric (Max)
Signature				
1.	Data	String	M	• Data signature create by Artajasa system to identify that the message is valid.

6.3 Transfer Inquiry

Transfer Inquiry process is used to get the information of the name of the account owner of the transfer destination. After getting this information, customers can determine whether the purpose of such a transfer is in accordance with the intended or not. If appropriate, the customer can proceed to the transfer process.

6.3.1 Request

6.3.1.1 XML Format

General format of XML used for the Transfer Inquiry-Request process is as follows:

```
<?xml version="1.0"?>
<MethodCall>
	<MethodID>
		<Name>Inquiry.Artajasa.ATMBTransfer</Name>
	</MethodID>
	<TransactionID>
		<STAN>STAN</STAN>
		<TransDateTime>TransDateTime</TransDateTime>
		<InstID>InstID</InstID>
	</TransactionID>
	<TransactionInfo>
		<ProcCode>ProcCode</ProcCode>
		<ChannelType>ChannelType</ChannelType>
		<RefNumber>RefNumber</RefNumber>
		<TerminalID>TerminalID</TerminalID>
		<CountryCode>CountryCode</CountryCode>
		<LocalDateTime>LocalDateTime</LocalDateTime>
	</TransactionInfo>
	<SenderData>
		<AccountID>AccountID</AccountID>
		<Name>Name</Name>
		<CurrCode>CurrCode</CurrCode>
		<Amount>Amount</Amount>
		<Rate>Rate</Rate>
		<AreaCode>AreaCode</AreaCode>
	</SenderData>
	<BeneficiaryData>
		<InstID>InstID</InstID>
		<AccountID>AccountID</AccountID>
		<CurrCode>CurrCode</CurrCode>
		<Amount>Amount</Amount>
		<CustRefNumber>CustRefNumber</CustRefNumber>
		<RegencyCode>RegencyCode</RegencyCode>
		<PurposeCode>PurposeCode</PurposeCode>
		<PurposeDesc>PurposeDesc</PurposeDesc>
	</BeneficiaryData>
		<Signature>
			<Data>Data</Data>
		</Signature>
	</MethodCall>
```

6.3.1.2 Data description

No.	Name	Type	Status	Description
MethodID				
1.	Name	String	M	• Method name. • **Inquiry.Artajasa.ATMBTransfer**.
TransactionID				

1.	STAN	String	M	• System Trace Audit Number. • The value is incremented by 1 from previous transaction. • Length: 6 – Numeric (Fixed) . • Right justified padded by zero.
2.	TransDateTime	String	M	• Transmission Date and Time, the transaction is transmitted. • Date and time is in **GMT** time. • Format : YYYY**MMDDhhmmss** • Length: 14 – Numeric (Fixed)
3.	InstID	String	M	• Institution code or Sender Code. • The Code is unique for every Institution or Sender. • Length: 12 – Numeric (Max) • Right justified padded by zero.
TransactionInfo				
1.	ProcCode	String	M	• Processing Code. • Length: 6 – Numeric (Fixed). • Detail and description of this Code could be found in Transaction Code Description (Inquiry).
2.	ChannelType	String	M	• Channel Distribution Code, where the customer make a transaction.. • Length: 4 – Numeric (Fixed). • Detail and description of this Code could be found in Transaction Code Description.
3.	RefNumber	String	M	• Reference Number that is generated by Sender system. • It will be used also in a problem tracing. • Length: 12 –Numeric (Max).
4.	TerminalID	String	M	• Identification Code of the terminal that is used to make a transaction. • Length: 8 - Numeric (Max).
5.	CountryCode	String	M	• Refer to ISO-3166 • Length: 2 – Alphabetic (fixed)
6.	LocalDateTime	String	M	• Date and time the transaction is sent. • Date and time is in **Local time**. • Format : YYYY**MMDDhhmmss** • Length: 14 – Numeric (Fixed)
SenderData				
1.	AccountID	String	M	• Account ID of the sender. • Length: 18 – Numeric (Max).
2.	Name	String	M	• Name of the sender. • Length: 30 – Alpha Numeric Special(Max).
3.	CurrCode	String	M	• The origin currency code. • Length: 3 – Numeric (Fixed).

4.	Amount	String	M	• Amount of the transaction in the origin currency code. • Length: 12 – Numeric/Special char (Max). • Including the decimal code (.) and two digits decimal.
5.	Rate	String	M	• The rate factor between origin and destination currency. • Length: 12 – Numeric/Special char (Max). • Including the decimal code (.) and four six digits decimal.
6.	AreaCode	String	M	• Source area code • Refer to Area Code Table (Appendix) • Length: 4 – numeric (Max)
BeneficiaryData				
1.	InstID	String	M	• Destination Bank Code. • Length: 3 – Numeric (Fixed) • Right justified padded by zero.
2.	AccountID	String	M	• Account ID/Number of the destination. • Length: 18 – Numeric (Max).
3.	CurrCode	String	M	• The beneficiary currency code. • Length: 3 – Numeric (Fixed). • Refer to ISO 4217.
4.	Amount	String	M	• Amount of the transaction in the destination currency code. • Length: 12 – Numeric/Special char (Max). • **No decimal code (.) and no decimal digit.**
5.	CustRefNumber	String	M	• Customer reference number. • This reference number is determined by the customer as information that should be known by the destination. • This number will be printed on the receipt upon a success transaction. • Length: 16 –Numeric (Max).
6.	RegencyCode	String	M	• Destination regency code • Refer to Regency Code Table (Appendix) • Length: 3 – Alphanumeric (Max)
7.	PurposeCode	String	M	• purpose code of transaction • Refer to Purpose Code Table (Appendix) • Length: 1 – numeric (Max)
8.	PurposeDesc	String	C	• description of transaction purpose • Length:50 – alphanumeric (Max)
1.	Data	String	M	• Data signature create by Sender system to identify that the message is

Notes:

- M : Mandatory
- C : Conditional

6.3.2 Response

6.3.2.1 XML Format

General format of XML used for the Inquiry-Response process is as follows:

```
<?xml version="1.0"?>
<MethodResponse>
	<TransactionID>
		<STAN>STAN</STAN>
		<TransDateTime>TransDateTime</TransDateTime>
		<InstID>InstID</InstID>
	</TransactionID>
	<SenderData>
		<AccountID>AccountID</AccountID>
		<Name>Name</Name>
		<CurrCode>CurrCode</CurrCode>
		<Amount>Amount</Amount>
		<Rate>Rate</Rate>
		<AreaCode>AreaCode</AreaCode>
	</SenderData>
	<BeneficiaryData>
		<InstID>InstID</InstID>
		<AccountID>AccountID</AccountID>
		<CurrCode>CurrCode</CurrCode>
		<Amount>Amount</Amount>
		<CustRefNumber>CustRefNumber</CustRefNumber>
		<Name>Name</Name>
		<RegencyCode>RegencyCode</RegencyCode>
		<PurposeCode>PurposeCode</PurposeCode>
		<PurposeDesc>PurposeDesc</PurposeDesc>
	</BeneficiaryData>
	<Response>
		<Code>Code</Code>
		<Description>Description</Description>
	</Response>
	<Signature>
		<Data>Data</Data>
	</Signature>
</MethodResponse>
```

6.1.2.2 Data description

No.	Name	Type	Status	Description
TransactionID				
1.	STAN	String	M	• The value is the same as Transfer Inquiry Request.
2.	TransDateTime	String	M	• The value is the same as Transfer Inquiry Request.
3.	InstID	String	M	• The value is the same as Transfer Inquiry Request.
SenderData				
1.	AccountID	String	M	• The value is the same as Transfer Inquiry Request.

2.	Name	String	M	• The value is the same as Transfer Inquiry Request.
3.	CurrCode	String	M	• The value is the same as Transfer Inquiry Request.
4.	Amount	String	M	• The value is the same as Transfer Inquiry Request.
5.	Rate	String	M	• The value is the same as Transfer Inquiry Request.
6.	AreaCode	String	M	• The value is the same as Transfer Inquiry Request.
BeneficiaryData				
1.	InstID	String	M	• The value is the same as Transfer Inquiry Request.
2.	AccountID	String	M	• The value is the same as Transfer Inquiry Request.
3.	CurrCode	String	M	• The value is the same as Transfer Inquiry Request.
4.	Amount	String	M	• The value is the same as Transfer Inquiry Request.
5.	CustRefNumber	String	M	• The value is the same as Transfer Inquiry Request.
6.	Name	String	M	• Destination account holder name. • Length: 30 – Alpha Numeric Special
7.	RegencyCode	String	M	• The value is the same as Transfer Inquiry Request.
8.	PurposeCode	String	M	• The value is the same as Transfer Inquiry Request.
9.	PurposeDesc	String	C	• The value is the same as Transfer Inquiry Request.
Response				
1.	Code	String	M	• Response Code • Length: 2 – Numeric (Fixed) • Detail and description of this Code could be found in Transaction Code Description.
2.	Description	String	C	• Response code description • Length: 50 – Alpha Numeric (Max)
Signature				
1.	Data	String	M	• Data signature create by Artajasa system to identify that the message is valid.

6.4 Transfer

Message transfer format is used to make the transfer process from the customer account to the account with the purpose of using data from the customer with the data obtained from the Inquiry process which have been made previously.

6.4.1 Request

6.4.1.1 XML Format

General format of XML used for the Transfer-Request process is as follows:

```
<?xml version="1.0"?>
<MethodCall>
	<MethodID>
		<Name>Transfer.Artajasa.ATMBTransfer</Name>
	</MethodID>
	<TransactionID>
		<STAN>STAN</STAN>
		<TransDateTime>TransDateTime</TransDateTime>
		<InstID>InstID</InstID>
	</TransactionID>
	<TransactionInfo>
		<ProcCode>ProcCode</ProcCode>
		<ChannelType>ChannelType</ChannelType>
		<RefNumber>RefNumber</RefNumber>
		<TerminalID>TerminalID</TerminalID>
		<CountryCode>CountryCode</CountryCode>
		<LocalDateTime>LocalDateTime</LocalDateTime>
	</TransactionInfo>
	<SenderData>
		<AccountID>AccountID</AccountID>
		<Name>Name</Name>
		<CurrCode>CurrCode</CurrCode>
		<Amount>Amount</Amount>
		<Rate>Rate</Rate>
		<AreaCode>AreaCode</AreaCode>
	</SenderData>
	<BeneficiaryData>
		<InstID>InstID</InstID>
		<AccountID>AccountID</AccountID>
		<CurrCode>CurrCode</CurrCode>
		<Amount>Amount</Amount>
		<CustRefNumber>CustRefNumber</CustRefNumber>
		<Name>Name</Name>
		<RegencyCode>RegencyCode</RegencyCode>
		<PurposeCode>PurposeCode</PurposeCode>
		<PurposeDesc>PurposeDescription</PurposeDesc>
	</BeneficiaryData>
	<Signature>
		<Data>Data</Data>
	</Signature>
</MethodCall>
```

6.4.1.2 Data description

No.	Name	Type	Status	Description
MethodID				
1.	Name	String	M	• Method name. • **Transfer.Artajasa.ATMBTransfer**.
TransactionID				
1.	STAN	String	M	• System Trace Audit Number. • The value is incremented by 1 from previous transaction.
				• Length: 6 – Numeric (Fixed). • Right justified padded by zero.
2.	TransDateTime	String	M	• Transmission Date and Time, the transaction is transmitted. • Date and time is in **GMT** time. • Format : YYYY**MMDDhhmmss** • Length: 14 – Numeric (Fixed)
3.	InstID	String	M	• The value is the same as Transfer Inquiry Request.
TransactionInfo				
1.	ProcCode	String	M	• Processing Code. • Length: 6 – Numeric (Fixed). • Detail and description of this Code could be found in Transaction Code Description (Transfer).
2.	ChannelType	String	M	• The value is the same as Transfer Inquiry Request.
3.	RefNumber	String	M	• Reference Number that is generated by Sender system. • This number will be printed on the receipt upon a success transfer transaction. • It will be used also in a problem tracing. • Length: 12 –Numeric (Max).
4.	TerminalID	String	M	• The value is the same as Transfer Inquiry Request.
5.	CountryCode	String	M	• The value is the same as Transfer Inquiry Request.
6.	LocalDateTime	String	M	• Date and time the transaction is sent. • Date and time is in **Local time**. • Format : YYYY**MMDDhhmmss** • Length: 14 – Numeric (Fixed)
SenderData				
1.	AccountID	String	M	• The value is the same as Transfer Inquiry Request.

2.	Name	String	M	• The value is the same as Transfer Inquiry Request.
3.	CurrCode	String	M	• The value is the same as Transfer Inquiry Request.
4.	Amount	String	M	• The value is the same as Transfer Inquiry Request.
5.	Rate	String	M	• The value is the same as Transfer Inquiry Request.
6.	AreaCode	String	M	• The value is the same as Transfer Inquiry Request.
BeneficiaryData				
1.	InstID	String	M	• The value is the same as Transfer Inquiry Request.
2.	AccountID	String	M	• The value is the same as Transfer
				Inquiry Request.
3.	CurrCode	String	M	• The value is the same as Transfer Inquiry Request.
4.	Amount	String	M	• The value is the same as Transfer Inquiry Request.
5.	CustRefNumber	String	M	• The value is the same as Transfer Inquiry Request.
6.	Name	String	M	• The value is the same as Transfer Inquiry **Response**.
7.	RegencyCode	String	M	• The value is the same as Transfer Inquiry Request.
8.	PurposeCode	String	M	• The value is the same as Transfer Inquiry Request.
9.	PurposeDesc	String	C	• The value is the same as Transfer Inquiry Request.
Signature				
1.	Data	String	M	• Data signature create by Sender system to identify that the message is valid.

6.4.2 Response

6.4.2.1 XML Format

General format of XML used for the Transfer-Response process is as follows :

```
<?xml version="1.0"?>
<MethodResponse>
      <TransactionID>
            <STAN>STAN</STAN>
            <TransDateTime>TransDateTime</TransDateTime>
            <InstID>InstID</InstID>
      </TransactionID>
      <SenderData>
            <AccountID>AccountID</AccountID>
            <Name>Name</Name>
            <CurrCode>CurrCode</CurrCode>
            <Amount>Amount</Amount>
            <Rate>Rate</Rate>
            <AreaCode>AreaCode</AreaCode>
      </SenderData>
```

```
	<BeneficiaryData>
		<InstID>InstID</InstID>
		<AccountID>AccountID</AccountID>
		<CurrCode>CurrCode</CurrCode>
		<Amount>Amount</Amount>
		<CustRefNumber>CustRefNumber</CustRefNumber>
		<Name>Name</Name>
		<RegencyCode>RegencyCode</RegencyCode>
		<PurposeCode>AreaCode</PurposeCode>
		<PurposeDesc>PurposeDescription</PurposeDesc>
	</BeneficiaryData>
	<Response>
		<Code>Code</Code>
		<Description>Description</Description>
	</Response>
	<Signature>
		<Data>Data</Data>
	</Signature>
</MethodResponse>
```

6.4.2.2 Data Description

No.	Name	Type	Status	Description
TransactionID				
1.	STAN	String	M	• The value is the same as Transfer Request.
2.	TransDateTime	String	M	• The value is the same as Transfer Request.
3.	InstID	String	M	• The value is the same as Transfer Request.
SenderData				
1.	AccountID	String	M	• The value is the same as Transfer Request.
2.	Name	String	M	• The value is the same as Transfer Request.
3.	CurrCode	String	M	• The value is the same as Transfer Request.
4.	Amount	String	M	• The value is the same as Transfer Request.
5.	Rate	String	M	• The value is the same as Transfer Request.
6.	AreaCode	String	M	• The value is the same as Transfer Request.
BeneficiaryData				
1.	InstID	String	M	• The value is the same as Transfer Request.
2.	AccountID	String	M	• The value is the same as Transfer Request.
3.	CurrCode	String	M	• The value is the same as Transfer Request.
4.	Amount	String	M	• The value is the same as Transfer Request.
5.	CustRefNumber	String	M	• The value is the same as Transfer Request.
6.	Name	String	M	• The value is the same as Transfer Request.
7.	RegencyCode	String	M	• The value is the same as Transfer Request.
8.	PurposeCode	String	M	• The value is the same as Transfer Request.
9.	PurposeDesc	String	C	• The value is the same as Transfer Request.
Response				
1.	Code	String	M	• Response Code • Length: 2 – Numeric (Fixed) • Detail and description of this Code could be found in Transaction Code Description.
2.	Description	String	C	• Response code description • Length: 50 – Alpha Numeric (Max)
Signature				
1.	Data	String	M	• Data signature create by Artajasa system to identify that the message is valid.

6.5 Inquiry Status

Inquiry Status message format is used to perform queries on the status of a transfer transaction that has been sent previously.

6.5.1 Request

6.5.1.1 XML Format

General format of XML used for the Status-Request process is as follows :

```
<?xml version="1.0" ?>
<MethodCall>
	<MethodID>
		<Name>Status.Artajasa.ATMBTransfer</Name>
	</MethodID>

	<TransactionID>
		<STAN>STAN</STAN>
		<TransDateTime>TransDateTime</TransDateTime>
		<InstID>InstID</InstID>
	</TransactionID>
	<TransactionInfo>
		<CountryCode>CountryCode</CountryCode>
		<LocalDateTime>LocalDateTime</LocalDateTime>
	</TransactionInfo>
	<QueryTransactionID>
		<STAN>STAN</STAN>
		<TransDateTime>TransDateTime</TransDateTime>
	</QueryTransactionID>
	<Signature>
		<Data>Data</Data>
	</Signature>
</MethodCall>
```

6.5.1.2 Data description

No.	Name	Type	Status	Description
MethodID				
1.	Name	String	M	• Method name. • **Status.Artajasa.ATMBTransfer**.
TransactionID				
1.	STAN	String	M	• System Trace Audit Number. • The value is incremented by 1 from previous transaction. • Length: 6 – Numeric (Fixed) . • Right justified padded by zero.
2.	TransDateTime	String	M	• Transmission Date and Time, the transaction is transmitted. • Date and time is in **GMT** time. • Format : **YYYYMMDDhhnnss** • Length: 14 – Numeric (Fixed)
3.	InstID	String	M	• The value is the same as Transfer Inquiry/Transfer Request.
TransactionInfo				
1.	CountryCode	String	M	• The value is the same as Transfer Request.
2.	LocalDateTime	String	M	• Date and time the transaction is sent. • Date and time is in **Local time**. • Format : YYYY**MMDDhhmmss** • Length: 14 – Numeric (Fixed)
QueryTransactionID				
1.	STAN	String	M	• The value is the same as Transfer Request, TransactionID.STAN.

2.	TransDateTime	String	M	• The value is the same as Transfer Request, TransactionID.TransDateTime.
Signature				
1.	Data	String	M	• Data signature create by Sender system to

No.	Name	Type	Status	Description
				identify that the message is valid.

6.5.2 Response

6.5.2.1 XML Format

General format of XML used for the Status.Response process is as follows:

```
<?xml version="1.0"?>
<MethodResponse>
	<TransactionID>
		<STAN>STAN</STAN>
		<TransDateTime>TransDateTime</TransDateTime>
		<InstID>InstID</InstID>
	</TransactionID>
	<QueryTransactionID>
		<STAN>STAN</STAN>
		<TransDateTime>TransDateTime</TransDateTime>
	</QueryTransactionID>
	<TransferData>
		<SenderData>
			<AccountID>AccountID</AccountID>
			<Name>Name</Name>
			<CurrCode>CurrCode</CurrCode>
			<Amount>Amount</Amount>
			<Rate>Rate</Rate>
		</SenderData>
		<BeneficiaryData>
			<InstID>InstID</InstID>
			<AccountID>AccountID</AccountID>
			<CurrCode>CurrCode</CurrCode>
			<Amount>Amount</Amount>
			<CustRefNumber>CustRefNumber</CustRefNumber>
			<Name>Name</Name>
			<RegencyCode>RegencyCode</RegencyCode>
		</BeneficiaryData>
		<Response>
			<Code>Code</Code>
			<Description>Description</Description>
		</Response>
	</TransferData>
	<Response>
		<Code>Code</Code>
		<Description>Description</Description>
	</Response>
	<Signature>
		<Data>Data</Data>
	</Signature>
</MethodResponse>
```

6.5.2.2 Data description

No.	Name	Type	Status	Description
TransactionID				
1.	STAN	String	M	• The value is the same as Status Request.
No.	**Name**	**Type**	**Status**	**Description**
2.	TransDateTime	String	M	• The value is the same as Status Request.
3.	InstID	String	M	• The value is the same as Status Request.
QuerylTransactionID				
1.	STAN	String	M	• The value is the same as Status Request.
2.	TransDateTime	String	M	• The value is the same as Status Request.
TransferData.SenderData				
1.	AccountID	String	M	• The value is the same as Transfer Request.
2.	Name	String	M	• The value is the same as Transfer Request.
3.	CurrCode	String	M	• The value is the same as Transfer Request.
4.	Amount	String	M	• The value is the same as Transfer Request.
5.	Rate	String	M	• The value is the same as Transfer Request.
TransferData.BeneficiaryData				
1.	InstID	String	M	• The value is the same as Transfer Request.
2.	AccountID	String	M	• The value is the same as Transfer Request.
3.	CurrCode	String	M	• The value is the same as Transfer Request.
4.	Amount	String	M	• The value is the same as Transfer Request.
5.	CustRefNumber	String	M	• The value is the same as Transfer Request.
6.	Name	String	M	• The value is the same as Transfer Request.
7.	RegencyCode	String	M	• The value is the same as Transfer Request.
TransferData.ResponseCode				
1.	ErrCode	String	M	• The value is the same as Transfer Response.
2.	ErrDescription	String	C	• The value is the same as Transfer Response.
ResponseCode				
1.	ErrCode	String	M	• Response Code • Length: 2 – Numeric (Fixed) • Detail and description of this Code could be found inf Transaction Code Description.
2.	ErrDescription	String	C	• Response code description • Length: 50 – Alpha Numeric (Max)
Signature				
1.	Data	String	M	• Data signature create by Artajasa system to identify that the message is valid.

7 Signature

Signature data is used to ensure that the data sent and received is the 'original' data come from the appropriate sender. Signature was formed with the encryption RSA (1024) and hashing MD5. Before the two sides can establish Signature, they must exchange public key first

7.1 The Establishment of The Signature

Generate Signature by the sender's message before the message is sent, and will be included in a message component. The process of forming the signature is as follows:

1. Several data component are combined (concatenate) into one unit data.
2. Apply EMSA-PKCS1-v1_5 (PKCS#1) signature schemes to the data.
   a. Apply the MD5 hash function to the message M to produce a hash value H:

      ```
      H = Hash(M)
      ```

   b. Encode the algorithm ID for the hash function and the hash value into an ASN.1 value of type DigestInfo, following is the syntax:

      ```
      DigestInfo ::= SEQUENCE {
       digestAlgorithm AlgorithmIdentifier,
       digest OCTET STRING
      }
      ```

      Note: Fund Transfer Gateway server is using MD5withRSA algorithm ID.

      Following is sample DigestInfo in DER notation for H value of "033BD94B1168D7E4F0D644C3C95E35BF":

      Raw:

      ```
      30 20 30 0C 06 08 2A 86 48 86 F7 0D 02 05 05 00 04 10 03 3B D9
      4B 11 68 D7 E4 F0 D6 44 C3 C9 5E 35 BF
      ```

      Decoded:

      ```
      3020 – Sequence
            300C – Squence
                  0608 – Object Identifier
                        2A864886F70D0205 – Algorithm ID for MD5 with RSA
                  0500 – Null
            0410 – Octet String
                  033BD94B1168D7E4F0D644C3C95E35BF – MD5 digest
      ```

   c. Generate an octet string consisting of 128 – Length(DigestInfo) - 3 octets with hexadecimal value (0xff). Let be PS is the name of generated octet string.
   d. Concate DigestInfo and PS into as the result using following form:

      ```
      Result = 0x00 + 0x01 + PS + 0x00 + DigestInfo
      ```

3. Encrypt result data using **Private Key**.

Results from three steps above is the Signature that will be sent in the message.

7.2 Authentication Signature

In the message recipient, he must ensure that there is a Signature, in accordance with the message that is sent. Signature review process is as follows:

1. Several components message is received are combined (concatenate) into one unit data.
2. Apply EMSA-PKCS1-v1_5 (PKCS#1) signature schemes to the data (H1).
3. Decrypt Signature using the **Public Key** of the message sender (H2).
4. Compare the value of the H1 and H2, if that is have same value then the Signature of the message is valid, the system can continue processing the message. Otherwise, the system must response with a specific error code. Its must declare error Signature.

7.3 Data Component Signature

To form the signature data, both from the Sender to the Fund Transfer Artajasa Gateway must use the same key data, so that each can make the process of verification of signatures is received, based on data that is sent in one transaction.

7.3.1 Transfer Inquiry

7.3.1.1 Request

In the process of transfer inquiry request, the signature components used are as follows:

1. TransactionID.STAN
2. TransactionID.TransDateTime
3. TransactionID.InstID
4. TransactionInfo.RefNumber
5. TransactionInfo.TerminalID
6. TransactionInfo.LocalDateTime
7. SenderData.AccountID
8. SenderData.Amount
9. BeneficiaryData.InstID
10. BeneficiaryData.AccountID
11. BeneficiaryData.Amount
12. BeneficiaryData.CustRefNumber
13. TransactionInfo.CountryCode

7.3.1.2 Response

In the process of transfer inquiry response, the signature components used are as follows:

1. TransactionID.STAN
2. TransactionID.TransDateTime
3. TransactionID.InstID
4. SenderData.AccountID

5. SenderData.Amount
6. BeneficiaryData.InstID
7. BeneficiaryData.AccountID
8. BeneficiaryData.Amount
9. BeneficiaryData.CustRefNumber
10. BeneficiaryData.Name
11. ResponseCode.ErrCode

7.3.2 Transfer

7.3.2.1 Request

In the process of transfer request, the signature components used are as follows:

1. TransactionID.STAN
2. TransactionID.TransDateTime
3. TransactionID.InstID
4. TransactionInfo.RefNumber
5. TransactionInfo.TerminalID
6. TransactionInfo.LocalDateTime
7. SenderData.AccountID
8. SenderData.Amount
9. BeneficiaryData.InstID
10. BeneficiaryData.AccountID
11. BeneficiaryData.Amount
12. BeneficiaryData.CustRefNumber
13. TransactionInfo.CountryCode

7.3.2.2 Response

In the process of transfer response, the signature components used are as follows:

1. TransactionID.STAN
2. TransactionID.TransDateTime
3. TransactionID.InstID
4. SenderData.AccountID
5. SenderData.Amount
6. BeneficiaryData.InstID
7. BeneficiaryData.AccountID
8. BeneficiaryData.Amount
9. BeneficiaryData.CustRefNumber
10. ResponseCode.ErrCode

7.3.3 Inquiry Status

7.3.3.1 Request

In the process of inquiry status request, the data used are as follows:

1. TransactionID.STAN
2. TransactionID.TransDateTime
3. TransactionID.InstID
4. TransactionInfo.LocalDateTime
5. QueryTransactionID.STAN
6. QueryTransactionID.TransDateTime

7.3.3.2 Response

In the process of inquiry status response, the data used are as follows:

1. TransactionID.STAN
2. TransactionID.TransDateTime
3. TransactionID.InstID
4. QueryTransactionID.STAN
5. QueryTransactionID.TransDateTime
6. ResponseCode.ErrCode

7.3.4 Create Account

7.3.4.1 Request

In the process of create account request, the data used are as follows:

1. TransactionID.STAN
2. TransactionID.TransDateTime
3. TransactionID.InstID
4. SenderData.AccountID
5. SenderData.Name
6. SenderData.Address
7. SenderData.PhoneNumber
8. SenderData.IDNumber
9. BeneficiaryData.Acc01.AccountID
10. BeneficiaryData.Acc01.InstID
11. BeneficiaryData.Acc02.AccountID
12. BeneficiaryData.Acc02.InstID
13. BeneficiaryData.Acc03.AccountID
14. BeneficiaryData.Acc03.InstID
15. BeneficiaryData.Acc04.AccountID
16. BeneficiaryData.Acc04.InstID
17. BeneficiaryData.Acc05.AccountID
18. BeneficiaryData.Acc05.InstID

7.3.4.2 Response

In the process of create account response, the data used are as follows:

1. TransactionID.STAN

2. TransactionID.TransDateTime
3. TransactionID.InstID
4. SenderData.AccountID
5. SenderData.Name
6. SenderData.Address
7. SenderData.PhoneNumber
8. SenderData.IDNumber
9. BeneficiaryData.Acc01.AccountID
10. BeneficiaryData.Acc01.InstID
11. BeneficiaryData.Acc02.AccountID
12. BeneficiaryData.Acc02.InstID
13. BeneficiaryData.Acc03.AccountID
14. BeneficiaryData.Acc03.InstID
15. BeneficiaryData.Acc04.AccountID
16. BeneficiaryData.Acc04.InstID
17. BeneficiaryData.Acc05.AccountID
18. BeneficiaryData.Acc05.InstID
19. Response.Code
20. Response.Description

7.3.5 Delete Account

7.3.5.1 Request

The component is the same as create account request.

7.3.5.2 Response

The component is the same as create account response.

7.4 Conditions of use The Signature

Here are some provisions that are used in forming the signature of the sender and the recipient of the message.

1. Both parties need to exchange Public Key, which will be used by the recipient message for to Authentication message. Public Key will be exchange using X.509 certificate standard.
2. Signature is generated by the message sender. So when the receiver sends response to message request, then the sender must re-generate the Signature using its **private key**.

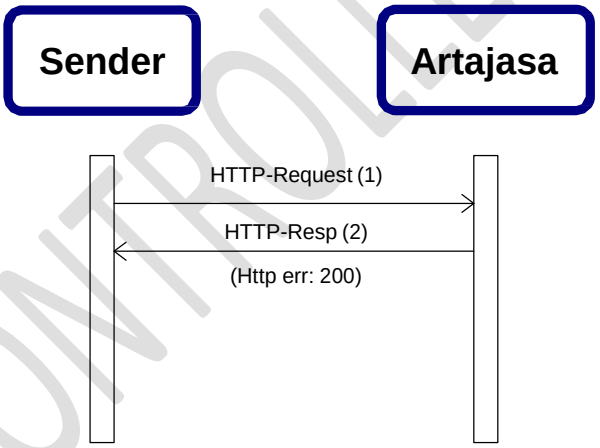
8 Transaction Flow

In this section, there will be explained transaction flow of three type's transaction which the format message already discussed in previous chapters, there are ***Transfer Inquiry***, ***Transfer***, ***Inquiry Status, Create Account and Delete Account***.

8.1 Overview

Communication media that is used to allow the process message sending is the single http (post). Data XML request entered on the body of HTTP requests, and the result of XML will be received in the body of http response. HTTP Request that the message is delivered successfully if the http error code received was 200.

Sender will be as a HTTP Client and Artajasa will provide one port HTTP server that will accept every request that is sent.

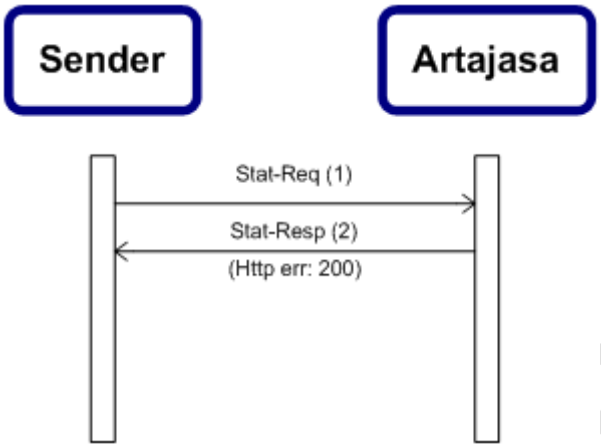


8.1 Create Account

Create Account is used to store the data of sender account and its beneficiary account. This function can be used to modify the data of sender account or its beneficiary as well. If the data is exist, Artajasa will replace all the data with the new one. If it is not exist, then Artajasa will insert the Data.

8.1.1 Normal

The normal transaction Create Account will be sent by Sender to Artajasa. Artajasa will process the request and store to the Database. The data will be used for authorization process during remittance.



The flow transaction is :

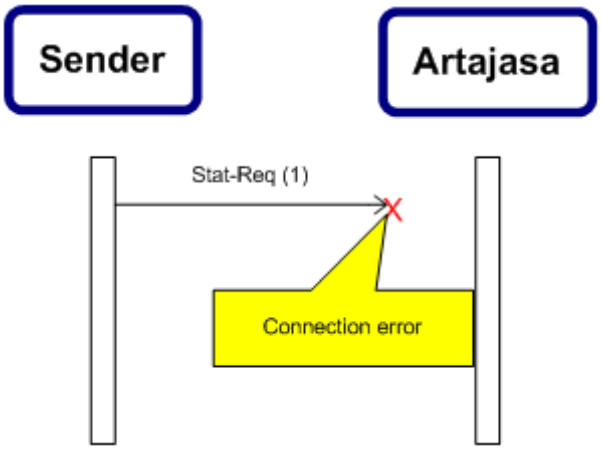
1. Sender send message CreateAccount-Request to Artajasa.
2. Artajasa send response on the CreateAccount-Request message is received.

Status:

1. The HTTP error code is 200.
2. Success status CreateAccount-Request can be seen on the error code in the XML data body.

8.1.2 Link Down

If between the link between Sender and Artajasa is down, then request that is sent by Sender will be failed to be sent. The system will go into exception.



The flow transaction is:

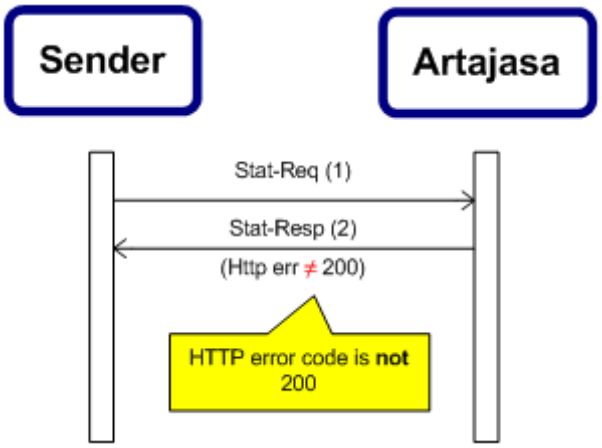
1. Sender sends message CreateAccount-Request to Artajasa, link conditions or the server Artajasa has not ready. System in Sender will get *exception* on which the request.

Status:

1. System in the sender will be exception.
2. Transaction CreateAccount-Request **failed**.

8.1.3 Http response Error

When the sender receives HTTP Error code with a value not equal to 200, then the Status-Request sent by the sender is considered failed.



The flow transaction is:

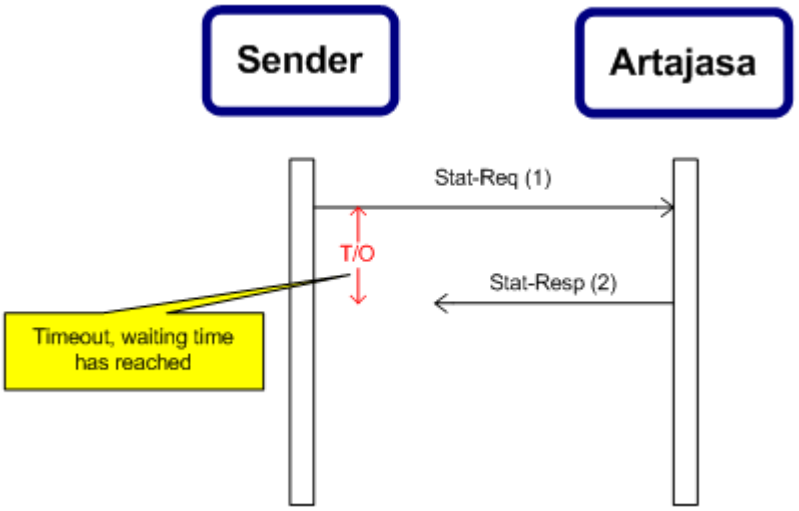
1. Sender sends message CreateAccount-Request to Artajasa.
2. HTTP response error code received from the Sender not equal with 200.

Status:

1. HTTP error code is not equal with 200.
2. Transaction Status-Request failed, the transaction status information in the request can not be obtained.

8.1.4 Timeout

When sending request to the Artajasa system, Sender will run a timer. It's used to determine the time waiting response from the Artajasa. When waiting time is reached, then response from Artajasa considered **timeout**, go through the waiting time has been determined.



The flow transaction is:

1. Sender sends message CreateAccount-Request to the Artajasa.
2. Up to that time limit has been determined, the Artajasa response is not received. Sender system will decided HTTP request that was made before.

Status:

1. Transaction CreateAccount-Request **failed**, the transaction status information in the request can not be obtained.

8.2 Delete Account

Delete Account is used to delete the data of sender account and its beneficiary account, so the account and its beneficiary is unavailable to do the remittance and will get error code EE that indicate the remittance process is fail during authorization process in Artajasa side. The Account that has been deleted can be use for another user in sender side.

8.2.1 Normal

The flow is the same as Normal flow on Create account

8.2.2 Link Down

The flow is the same as Link Down flow on Create Account.

8.2.3 Http response Error

The flow is the same as Http response Error on Create Account.

8.2.4 Timeout

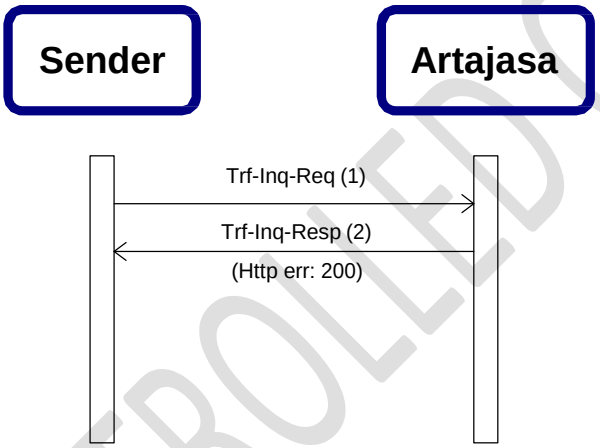
The flow is the same as Timeoutflow on Create Account.

8.3 Inquiry

The financial, transfer inquiry transactions involving process has not to do debit of funds from the customer for the transfer process.

8.3.1 Normal

Normally, transfer inquiry transaction will be sent by sender to Artajasa. Artajasa will be process requests and provide response to the request sender.



Transaction flow are below:

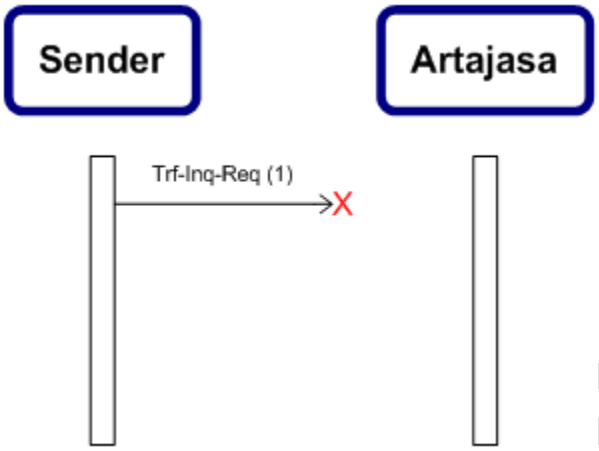
1. Sender send message transfer-inquiry-request to Artajasa.
2. Artajasa send response for the message transfer-inquiry-request it receives.

Status:

1. HTTP Error code is 200.
2. Result of the transfer-request-inquiry can be seen in the response code in the XML.

8.3.2 Link Down/Server Down

If the link between Sender and Artajasa is in problem, or Artajasa system is not ready, then request that is sent by Sender will be failed to be sent. The system will go into exception .



The transaction flow is:

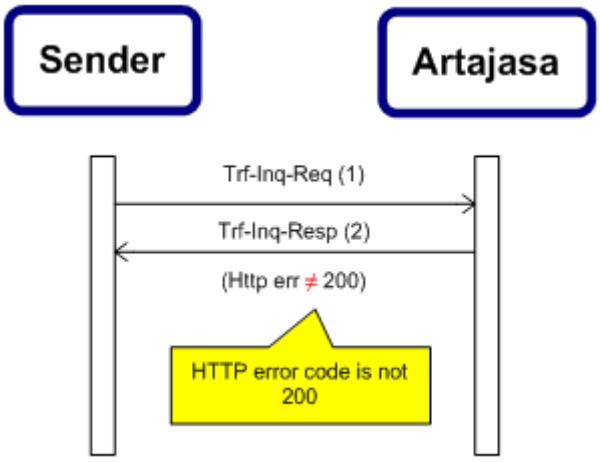
1. Sender sends message Transfer-Inquiry-Request to the Artajasa, with the condition problem link or on the server Artajasa is not ready. System in the sender will get exception on which the request.

Status:

1. System exception.
2. Transfer-Inquiry-Request Transactions failed.

8.3.3 HTTP Response Error

Server in the Artajasa is likely to crash, so it can not be process the request that is sent by Sender. This failure will be send the response to Sender using http error code value that is not 200. Request is considered failed to do.



The flow transaction are:

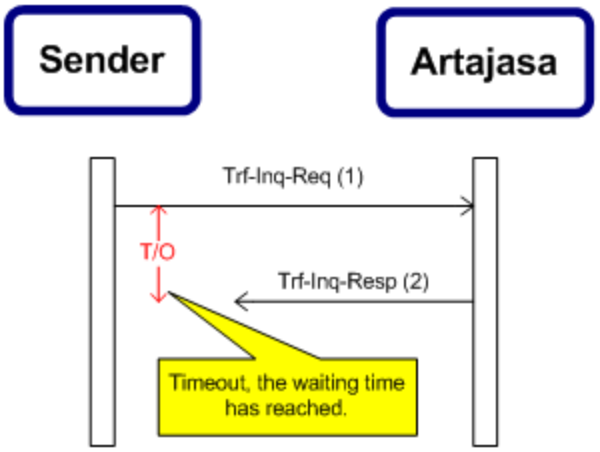
1. Sender sent message Transfer-Inquiry-Request to Artajasa.
2. HTTP response error code received from the Sender not equal with 200.

Status:

1. HTTP error code not equal with 200.
2. Transfer-Inquiry-Request transaction **failed**.

8.3.4 Timeout

When sending a request to the system Artajasa, Sender will run a timer. The timer function to determine the waiting response time from Artajasa. When waiting time is reached, then response from the Artajasa considered timeout, because the waiting time has been passing through the determined.



The flow transaction is:

1. Sender send message Transfer-Inquiry-Request to Artajasa.
2. Up to that time limit has been determined, the Artajasa response is not received. Sender system will be decided HTTP request that was made before.

Status:

1. Transaction Transfer-Inquiry-Request **failed**.

8.4 Transfer

Transfer is a process of sending message transaction for funds transfer from account issuer to the beneficiary.

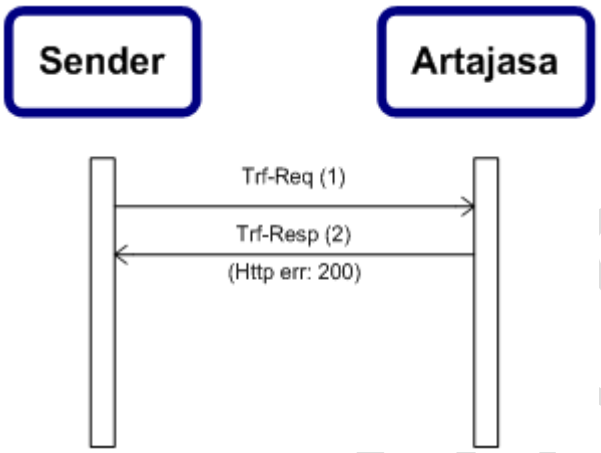
In the system, before send this message, the sender system will debit first from issuer account with a number of values that have defined by customer. By doing debit first, the system will be avoided the possibility of not sufficient funds on the customer when this process is success.

If the payment transaction failed then the funds that are charged they will be a **re-credit** to customer accounts.

For transactions that result is **suspect**, the funds will still be saved (**suspend**), until the settlement is made, so it can be determined whether the transaction is success or not.

8.4.1 Normal

The normal transfer transaction will be sent by Sender to the Artajasa. Artajasa will process the request by sending a message to the Switching ATM Bersama. After get the response from switching, Artajasa will send response request to the Sender.



The flow transaction is:

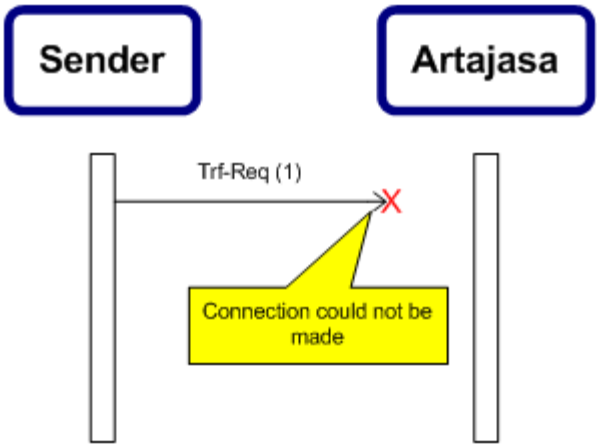
1. Sender send message Transfer-Request to Artajasa.
2. Artajasa to send up response Transfer-Request message it receives.

Status:

1. HTTP error code is 200.
2. Success status can be seen on the error code in the XML data in the HTTP body.

8.4.2 Link Down/Server Down

If the link or server down between Sender and Artajasa, or a server Artajasa is not ready, then request that is sent by Sender will be failed to sent. The system will go into exception.



The flow transaction is:

1. Sender sends Transfer-Request message to the Artajasa, the link condition problem or in the

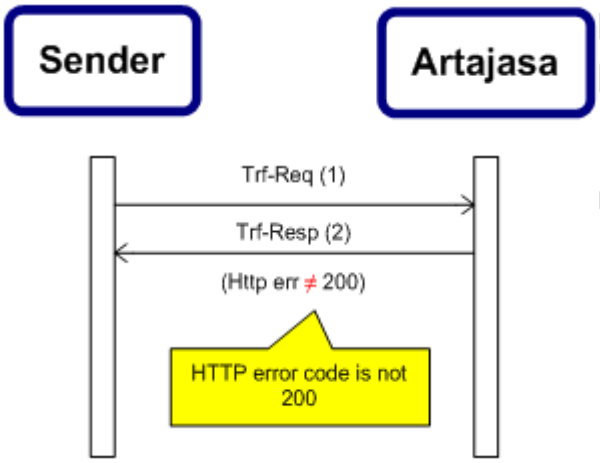
server Artajasa has not Up. Sender system will get exception on which the request.

Status:

1. System exception.
2. Transaction Transfer-Request **failed**.

8.4.3 HTTP Response Error

Server in the Artajasa is likely to crash, so it can not process request that is sent by Sender. This failure will be response to Sender using http error code which the value is not 200. Request is considered failed to do.



The flow transaction is:

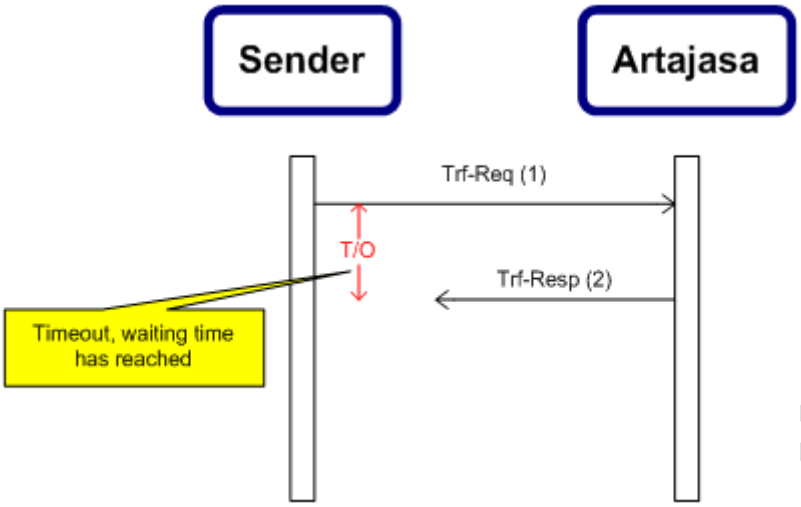
1. Sender send the message Transfer-Request to Artajasa.
2. HTTP response error code received from the Sender not equal with 200.

Status:

1. HTTP error code not equal with 200.
2. Transaction Transfer-Request **failed**.

8.4.4 Timeout

When sending a request to the system Artajasa, Sender will run a timer. The timer is used to determine the response time from the waiting Artajasa. When waiting time is reached, the response from the Artajasa considered **timeout**, have been through the waiting time has been determined.



The flow transaction is:

1. Sender send message Transfer-Request to Artajasa.
2. Up to that time limit has been determined, response from Artajasa is not received. Sender system will decided HTTP request that was made before.

Status:

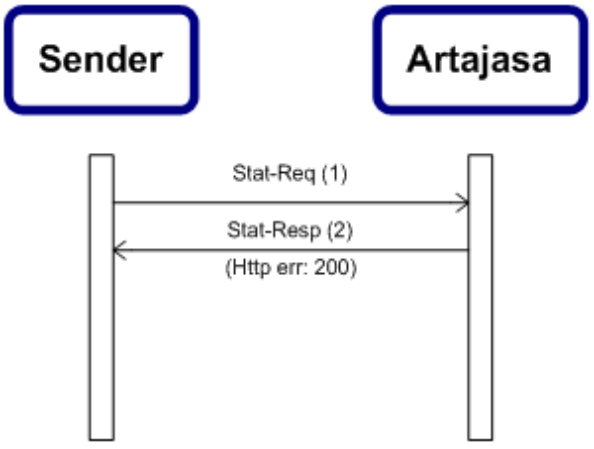
1. Status of these transactions is **suspect.**
2. Transaction status can be known in a way, sender sends a query message status.

8.5 Inquiry Status

Inquiry status used to get information on the transfer that has been done before. This function can be used in case of abnormal cases in the previous transfer transaction, or the function is used to handling the problems.

8.5.1 Normal

The normal transaction Inquiry Status will be sent by Sender to the Artajasa. Artajasa will process the request and send response to the Merchant based on data that is in the Artajasa.



The flow transaction is:

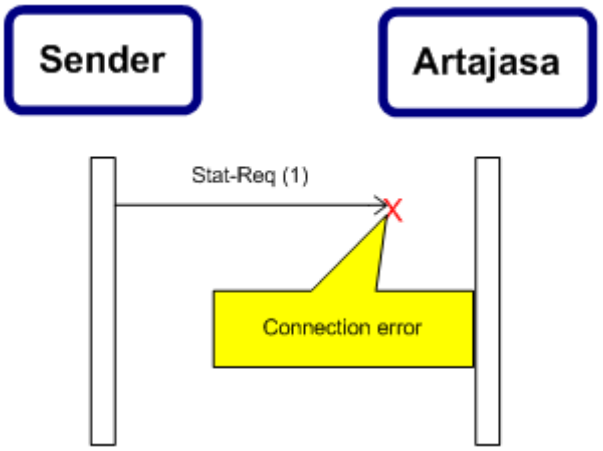
1. Sender sends message Status-Request to Artajasa.
2. Artajasa send response on the Status-Request message is received.

Status:

1. The HTTP error code is 200.
2. Success status Status-Request can be seen on the error code in the XML data body. If error code is approve ("00"), the Merchant will get information on the transfer transaction in the previous response message is received.

8.5.2 Link Down

If between the link between Sender and Artajasa is down, then request that is sent by Sender will be failed to be sent. The system will go into exception.



The flow transaction is:

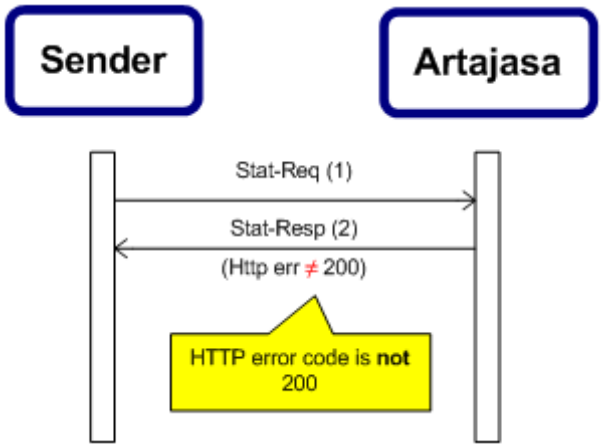
1. Sender sends message Status-Request to Artajasa, link conditions or the server Artajasa has not ready. System in Sender will get *exception* on which the request.

Status:

1. System in the sender will be exception.
2. Transaction Status-Request **failed**.

8.5.3 HTTP Response Error

When the sender receives HTTP Error code with a value not equal to 200, then the Status-Request sent by the sender is considered failed.



The flow transaction is:

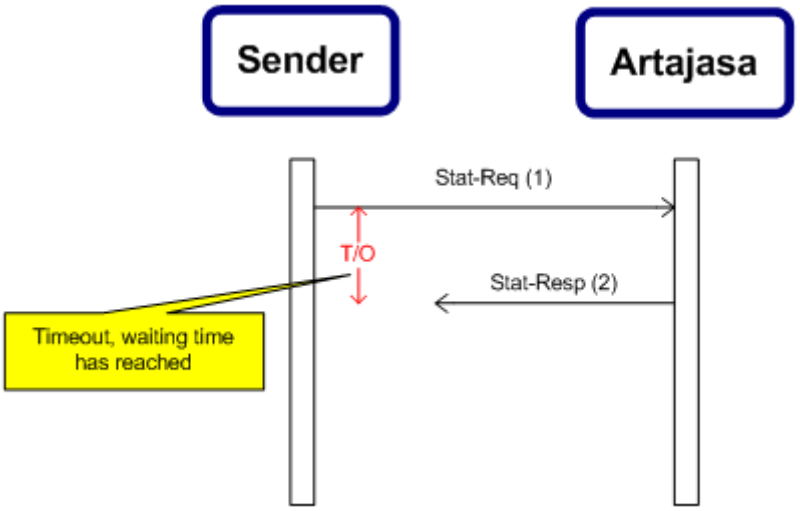
1. Sender sends message Status-Request to Artajasa.
2. HTTP response error code received from the Sender not equal with 200.

Status:

1. HTTP error code is not equal with 200.
2. Transaction Status-Request failed, the transaction status information in the request can not be obtained.

8.5.4 Timeout

When sending request to the Artajasa system, Sender will run a timer. It's used to determine the time waiting response from the Artajasa. When waiting time is reached, then response from Artajasa considered **timeout**, go through the waiting time has been determined.



The flow transaction is:

1. Sender sends message Status-Request to the Artajasa.
2. Up to that time limit has been determined, the Artajasa response is not received. Sender system will decided HTTP request that was made before.

Status:

1. Transaction Status-Request **failed**, the transaction status information in the request can not be obtained.

9 Description of Transaction Code

9.1 Processing Code

Here is the processing code (ProcCode) that can be used in the transaction. Processing code consists of three sub-fields, with their respective functions as follows:

1. Types of transactions, the digits 1 and 2.
2. Type of the account origin, the digits 3 and 4.
3. Type of the purpose account, the digits 5 and 6.

Type of transaction:

No.	Code	Description
1.	39	Transfer Inquiry
2.	40	Transfer

Type of account:

No.	Code	Description
1.	00	Default account (account not specified or not applicable)
2.	10	Saving account
3.	20	Checking account
4.	30	Credit card account

Processing code that allowed:

No.	Code	Description	Transaction
1.	390000	Transfer Inquiry from default account	INQ
2.	400000	Transfer from default account	PAY

9.2 Delivery Channel Code

Delivery channel Code is used to inform the type of delivery channel used by the user to conduct transactions.

No.	Code	Description
1.	6010	Teller
2.	6011	ATM
3.	6012	POS, EDC
4.	6013	Telephone
5.	6014	Internet
6.	6015	Kiosk
7.	6016	Autodebet/Directdebet
8.	6017	Mobile banking
9.	6018	ADM, Automatic Deposit Machine

9.3 Error Code

9.3.1 ATM Bersama Network Error Code

Here is a list of error codes that could be generated by ATM Bersama Network.

Resp. Code	Action, Acquirer-Issuer	Response Code Definition / Description
00	Approve	Approved or completed successfully
01	Decline	Refer to card issuer
03	Decline	Invalid merchant
04	Pick-up	Pick-up / capture card
05	Decline	Do not honor
12	Decline	Invalid transaction
13	Decline	Invalid amount.
14	Decline	Invalid card number (no such number)
15	Decline	No such issuer
20	Decline	Invalid response
30	Decline	Format error
31	Decline	Bank not supported by switch
33	Pick-up	Expired card
36	Pick-up	Restricted card
38	Pick-up	Allowable PIN tries exceeded
39	Decline	No credit account
40	Decline	Requested function not supported
41	Pick-up	Lost card
43	Pick-up	Stolen card
51	Decline	Insufficient funds / over credit limit
52	Decline	No chequing account
53	Decline	No savings account
54	Decline	Expired card
55	Decline	Invalid PIN
57	Decline	Transaction not permitted to cardholder
58	Decline	Transaction not permitted to terminal
61	Decline	Exceeds withdrawal amount limit
62	Decline	Restricted card
63	Decline	Security violation
65	Decline	Exceeds withdrawal frequency limit
67	Pick-up	Hard capture (requires that card be picked up at ATM)
68	Decline and Suspend Credit	Response received too late
75	Decline	Allowable number of PIN tries exceeded
76	Decline	Invalid to account
77	Decline	Invalid from account
78	Decline	Account is closed
89	Decline	Link to Host down
91	Decline	Issuer, Destination or switch is inoperative
92	Decline	Unable to route transaction
94	Decline	Duplicate transmission / request
96	Decline	System malfunction / system error

9.3.2 Transfer Fund Gateway Error Code

Here is a list of error codes that could be generated by Transfer Fund Gateway.

Resp. Code	Action, Acquirer-Issuer	Response Code Definition / Description
00	Approve	Approved or completed successfully (numeric). This response code will be generated by Transfer Fund Gateway just only for Inquiry Status Response.
EE	Declined	General error. Details of the error is in the description of the response.
TO	Suspend	Reponse time-out from ATM Bersama Network.
LD	Declined	Link problem between Gateway and ATM Bersama Network.
NF	Declined	Transaction has not recorded on Remittance gateway, NF is also used for delete account. If Delete account request get NF response, it's means the Data is not found or is not registered in Artajasa.
SG	Declined	Signature error code
IF	Declined	Insufficient Deposit

9.4 Country Code

Please refer to Appendix Document, section 3.1 for `CountryCode` list.

9.5 Regency Code

Please refer to Appendix Document, section 3.2 for `RegencyCode` list.

9.6 Area Code

Please refer to Appendix Document, section 3.3 for `AreaCode` list.

9.7 Purpose Code

Purpose Code is used to inform the purpose of transfer/transaction

No.	Code	Description
1.	1	Work
2.	2	Education
3.	3	Other

10 Reference

1. Currency Code, ISO-4217,
   http://www.iso.org/iso/support/currency_codes_list-1.htm
2. Country Code, ISO-3166,
   http://www.iso.org/iso/english_country_names_and_code_elements
3. SNI 7657:2010, National Standardization Agency of Indonesia,
   http://sisni.bsn.go.id/index.php/sni_main/sni/detail_sni/11703
4. Public-Key Cryptography Standards (PKCS) #1: RSA Cryptography Specifications Version 2.1
   http://tools.ietf.org/html/rfc3447