



# IPS BUSINESS PROCESS USE CASES FULL SET

Buna – An Arab Regional Payment Platform

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## Document information

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			<ul style="list-style-type: none"> <li>Use Case IPS-PM-02: IPS transaction automated timeout rejection for cases with authorization was changed according to the MoM after IPS Workshop</li> </ul>
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2021-06-22	CMA Small Systems AB	4.3	Use Case IPS-LIQ-06: «Top-up (increase) of Settlement limit account Debit cap after foreign exchange support operation» was extended
2021-07-22	CMA Small Systems AB	4.4	<p>Use Case IPS-LIQ-01: «Manual top-up (increase) of Settlement limit account Debit cap» was changed was enriched with Funds/account status check</p> <p>Use Case IPS-LIQ-03: «Settlement limit account withdrawal (decrease)»</p>



			was enriched with account status check
2021-08-05	CMA Small Systems AB	4.5	Use Case IPS-PM-15 «IPS Final Settlement». SLA account owners were added as addressees of account balance reports.
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2023-04-26	CMA Small Systems AB	4.9	Use Case IPS-LIQ-02: Automatic top-up (increase) of Settlement limit account Debit cap. Copy of payment on reserve increase (camt.050) to participant and (pacs.002) Status/Rejection message were deleted.
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## TABLE OF CONTENTS

<b>Table of Contents</b> .....	<b>4</b>
<b>Table of Figures</b> .....	<b>7</b>
<b>Glossary</b> .....	<b>9</b>
<b>Assumptions</b> .....	<b>10</b>
<b>1 Account Topology</b> .....	<b>11</b>
1.1 Accounting scheme.....	11
<b>2 Business Process Use Cases List</b> .....	<b>12</b>
2.1 Payment processing Use Cases.....	12
2.2 Liquidity Management Use Cases.....	12
2.3 Central addressing scheme Use Cases .....	13
2.3.1 Customer, Aliases and Accounts Registration Use Cases.....	13
2.3.2 Central addressing scheme. Management and Control of Customer data, Aliases and Accounts Use Cases. 13	
2.3.3 Central addressing scheme. Payment and RTP initiation Use Cases. ....	13
2.3.4 Central addressing scheme. Access to Customer data Use Cases.....	13
2.4 End-To-End Tracker Use Cases .....	14
2.5 Pre-validation and Consultation Service Use Cases .....	14
2.6 Message types .....	14
2.6.1 The incoming messages processed by the system.....	14
2.6.2 The outgoing messages created by the system.....	15
2.7 Error messages – types to error cases links .....	15
<b>3 Use cases schemes notation description</b> .....	<b>16</b>
<b>4 Business Process Use Cases</b> .....	<b>17</b>
4.1 Generic Flow.....	17
4.2 Payment processing Use Cases.....	18
4.2.1 Use Case IPS-PM-01: Single Credit Transfer (with authorization by Counterparty) from RTGS account holder 18	
4.2.2 Use Case IPS-PM-02: IPS transaction automated timeout rejection for cases with authorization24	
4.2.3 Use Case IPS-PM-03: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder 26	
4.2.4 Use Case IPS-PM-04: Single Credit Transfer (with authorization by Counterparty) from Non-Settlement Participant.....	30
4.2.5 Use Case IPS-PM-05: Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant.....	32
4.2.6 Use Case IPS-PM-06: Batch payments from RTGS account holder/NSP.....	33
4.2.7 Use Case IPS-PM-08: RTP from Creditor to Debtor .....	36



4.2.8	<i>Use Case IPS-PM-09: Request for Return</i>	40
4.2.9	<i>Use Case IPS-PM-10: Return payments from RTGS account holder</i>	44
4.2.10	<i>Use Case IPS-PM-11: Return payments from Non-Settlement Participant</i>	45
4.2.11	<i>Use Case IPS-PM-12: Payment Validation</i>	46
4.2.12	<i>Use Case IPS-PM-13: Threshold check</i>	49
4.2.13	<i>Use Case IPS-PM-14: Non-payment message validation</i>	50
4.2.14	<i>Use Case IPS-PM-15: IPS Final Settlement</i>	51
4.3	<b>Liquidity Management Use Cases</b>	52
4.3.1	<i>Use Case IPS-LIQ-01: Manual top-up (increase) of Settlement limit account Debit cap</i>	52
4.3.2	<i>Use Case IPS-LIQ-02: Automatic top-up (increase) of Settlement limit account Debit cap</i>	54
4.3.3	<i>Use Case IPS-LIQ-03: IPS Settlement limit account withdrawal (decrease)</i>	56
4.3.4	<i>Use Case IPS-LIQ-04: Position IPS account Debit cap change</i>	58
4.3.5	<i>Use Case IPS-LIQ-05: Request the Position IPS account Debit cap value</i>	60
4.4	<b>Central Addressing Scheme Use Cases</b>	61
4.4.1	<i>Central Addressing Scheme. Customer, Aliases and Accounts registration Use cases</i>	61
4.4.1.1	<i>Use Case CAS-REG-01: Register customer information</i>	61
4.4.1.2	<i>Use Case CAS-REG-02: Account registration</i>	62
4.4.1.3	<i>Use Case CAS-REG-03: Alias registration</i>	63
4.4.1.4	<i>Use Case CAS-REG-04: One-step Customer registration</i>	64
4.4.1.5	<i>Use Case CAS-REG-05: One-step Alias and Account registration</i>	66
4.4.1.6	<i>Use Case CAS-REG-06: Bulk upload of CAS information to DBO</i>	67
4.4.2	<i>Central addressing scheme. Management and control of customer data, aliases and accounts use cases.</i>	68
4.4.2.1	<i>Use Case CAS-MAN-01: Suspend customer</i>	68
4.4.2.2	<i>Use Case CAS-MAN-02 : Activate customer</i>	69
4.4.2.3	<i>Use Case CAS-MAN -03: Delete customer</i>	70
4.4.2.4	<i>Use Case CAS-MAN -04: Update customer information</i>	71
4.4.2.5	<i>Use Case CAS-MAN -05: Update alias</i>	72
4.4.2.6	<i>Use Case CAS-MAN -06: Delete alias</i>	73
4.4.2.7	<i>Use Case CAS-MAN -07: Suspend alias</i>	74
4.4.2.8	<i>Use Case CAS-MAN -08: Activate alias</i>	75
4.4.2.9	<i>Use Case CAS-MAN-09: Link alias and account</i>	76
4.4.2.10	<i>Use Case CAS-MAN-10: Unlink alias and account</i>	77
4.4.2.11	<i>Use Case CAS-MAN-11: Update account</i>	78
4.4.2.12	<i>Use Case CAS-MAN-12: Define “To be used by default” Account for Alias</i>	78
4.4.2.13	<i>Use Case CAS-MAN-13: Delete account</i>	80
4.4.3	<i>Central addressing scheme. Payment and RTP initiation use cases.</i>	80



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4.4.3.1	<i>Use Case CAS-PMT-01: Get default account by alias</i>	81
4.4.3.2	<i>Use Case CAS-PMT-02: Get the list of accounts by alias</i>	82
4.4.4	<i>Central addressing scheme. Access to customer data use cases</i>	83
4.4.4.1	<i>Use Case CAS-MON-01: Get customer information</i>	83
4.4.4.2	<i>Use Case CAS-MON-02: Get customer aliases</i>	84
4.4.4.3	<i>Use Case CAS-MON-03: Get customer accounts</i>	85
4.4.4.4	<i>Use Case CAS-MON-04: Get account and customer info</i>	86
4.4.4.5	<i>Use Case CAS-MON-05: Get account information</i>	87
4.4.4.6	<i>Use Case CAS-MON-06: Get alias information</i>	88
4.4.4.7	<i>Use Case CAS-MON-07: Get aliases linked to account</i>	89
4.4.4.8	<i>Use Case CAS-MON-08: Get accounts linked to alias</i>	90
4.5	<b>End-To-End Tracker Use Cases</b>	<b>91</b>
4.5.1	<i>Use Case IPS-ETRAC-01: Report on Payment Status to the End-to-End Tracker Service</i>	91
4.5.2	<i>Use Case IPS-ETRAC-02: Request a Payment Status from the End-to-End Tracker Service</i>	92
4.5.3	<i>Use Case IPS-ETRAC-03: End-To-End Tracker in Proxy mode</i>	93
4.6	<b>Pre-Validation and Consultation Service Use Cases</b>	<b>94</b>
4.6.1	<i>Use Case IPS-CONS-01: Request pre-validation and information from Counterparty for a single transfer</i>	94
4.6.2	<i>Use Case IPS-CONS-03: Request exchange rate from the FX Provider</i>	95
5	<b>Monitoring</b>	<b>98</b>



## TABLE OF FIGURES

Figure 1: IPS Accounting scheme .....	11
Figure 2: Use Cases Scheme Notation Description .....	16
Figure 3: Overall description of IPS data flow .....	17
Figure 4: Single Credit Transfer (with authorization by Counterparty) from RTGS account holder .....	19
Figure 5: IPS transaction automated timeout rejection for cases with authorization .....	25
Figure 6: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder .....	27
Figure 7: Single Credit Transfer (with authorization by Counterparty) from Non-Settlement Participant .....	31
Figure 8: Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant .....	32
Figure 9: Batch payments from RTGS account holder/NSP .....	34
Figure 9: File structure scheme .....	35
Figure 9: Request to Pay from Creditor to Debtor .....	37
Figure 10: Request for Return .....	41
Figure 11: Payment Validation .....	47
Figure 12: Threshold check .....	49
Figure 13: Non-payment message validation .....	50
Figure 14: IPS Final Settlement .....	51
Figure 15: Manual top-up of Settlement limit account limit .....	53
Figure 16: Automatic top-up of Settlement limit account limit .....	55
Figure 17: Settlement limit account withdrawal .....	57
Figure 18: Position IPS account limit set up .....	59
Figure 19: Position IPS account limit set up .....	60
Figure 20: Register customer (individual person) information .....	62
Figure 21: Account registration .....	63
Figure 22: Alias registration .....	64
Figure 23: One-step Customer registration .....	65
Figure 24: One-step Alias and Account registration .....	66
Figure 25: Bulk upload of CAS information to DBO .....	67
Figure 26: Suspend customer .....	68
Figure 27: Activate customer .....	69
Figure 28: Delete customer .....	70
Figure 29: Update customer (individual person) information .....	71
Figure 30: Update alias .....	72
Figure 31: Delete alias .....	73
Figure 32: Suspend alias .....	74
Figure 33: Activate alias .....	75
Figure 34: Link alias to account .....	76
Figure 35: Unlink alias from account .....	77
Figure 36: Update account .....	78
Figure 37: Define "To be used by default" Account for Alias .....	79
Figure 38: Delete account .....	80
Figure 39: Get default account by alias .....	81
Figure 40: Get the list of accounts by alias .....	82
Figure 41: Get customer (individual person) information .....	83
Figure 42: Get customer aliases .....	84
Figure 43: Get customer accounts .....	85
Figure 44: Get account and customer info .....	86
Figure 45: Get account information .....	87
Figure 46: Get alias information .....	88
Figure 47: Get aliases linked to account .....	89
Figure 48: Get accounts linked to alias .....	90
Figure 49: Report on Payment Status to the End-to-End tracker Service .....	91





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Figure 50: Request a Payment Status from the End-to-End tracker Service.....	92
Figure 51: Request a Payment Status from the End-to-End tracker Service.....	93
Figure 52: Request fee cost from Instructed Agent.....	94
Figure 53: Request fee cost from Instructed Agent.....	<b>Error! Bookmark not defined.</b>
Figure 54: Request exchange rate from the FX Provider.....	96



## GLOSSARY

Abbreviation or term	Description
<b>AMF</b>	Arab Monetary Fund
<b>Buna</b>	Arab regional payment system
<b>CAS</b>	Central Addressing Scheme
<b>CBS</b>	Core Banking System
<b>CEB</b>	Central Banks, who are within the same country as a participant of Buna. Regulatory authority institutions for Master Participant. They can also act as a Master Participant pending their payments to the system
<b>Master Participant (MP)</b>	Participant, registered at Buna with type "Master Participant", having an account at Buna. Central Banks, should they choose to do so, may also be Master Participant in Buna, submitting cross-border payments on their behalf or on behalf of their local market participants. Can send payments on behalf of their Linked Participants
<b>Linked Participant (LP)</b>	Participant, registered at Buna with type "Linked Participant", having no accounts. Can be linked with Master Participant.
<b>EOD</b>	End Of Day
<b>FHI</b>	Fund holding institution. It will be the Central Bank of issuance of a currency supported by Buna, if the currency passes Buna eligibility criteria. Where this is not possible (i.e. currencies outside the Arab region), commercial banks will be utilized as the fund holding institution
<b>FX Provider</b>	External Provider of Foreign Exchange rates
<b>IPS</b>	Instant Payments System
<b>Non-Settlement Participant (NSP)</b>	Financial or Non-Financial Institution having only Position account at Buna IPS. Uses RTGS account of Buna Master Participant to cover IPS payment processing.
<b>RTP</b>	Request to Pay. The Request to Pay (RtP) feature allows any business or individual, wishing to receive a payment, to send an electronic request for that payment to the debtor account. The RtP is a new proposition designed to give consumers and businesses further flexibility when making payments and provides more control over and visibility over their cash flow.
<b>SA</b>	Settlement account
<b>SOD</b>	Start Of Day
<b>Sponsored institution</b>	Participant without account at Buna RTGS in current section having only Position account
<b>Sponsoring bank</b>	Buna RTGS DP having Settlement limit account at Buna IPS, who covers Payments on Position Account of the Participant without account at Buna RTGS in current section.
<b>Settlement limit</b>	Debit Cap on Settlement limit account



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## ASSUMPTIONS

All Use Cases below are described in the assumption that Parties involved in Use Cases support:

- IPS messaging via SWIFT network for individual transactions and for batches
- API calls as Service requestor via SWIFT network
- API calls as Service providers via SWIFT network (where necessary for IPS Proxy services and API Push mode)). Connectivity through VPN via API Gateway functions infrastructure should be ready and participants should be able to provide appropriate responses on API Gateway requests if VPN channel is eligible for this Participant.

# 1 ACCOUNT TOPOLOGY

## 1.1 ACCOUNTING SCHEME

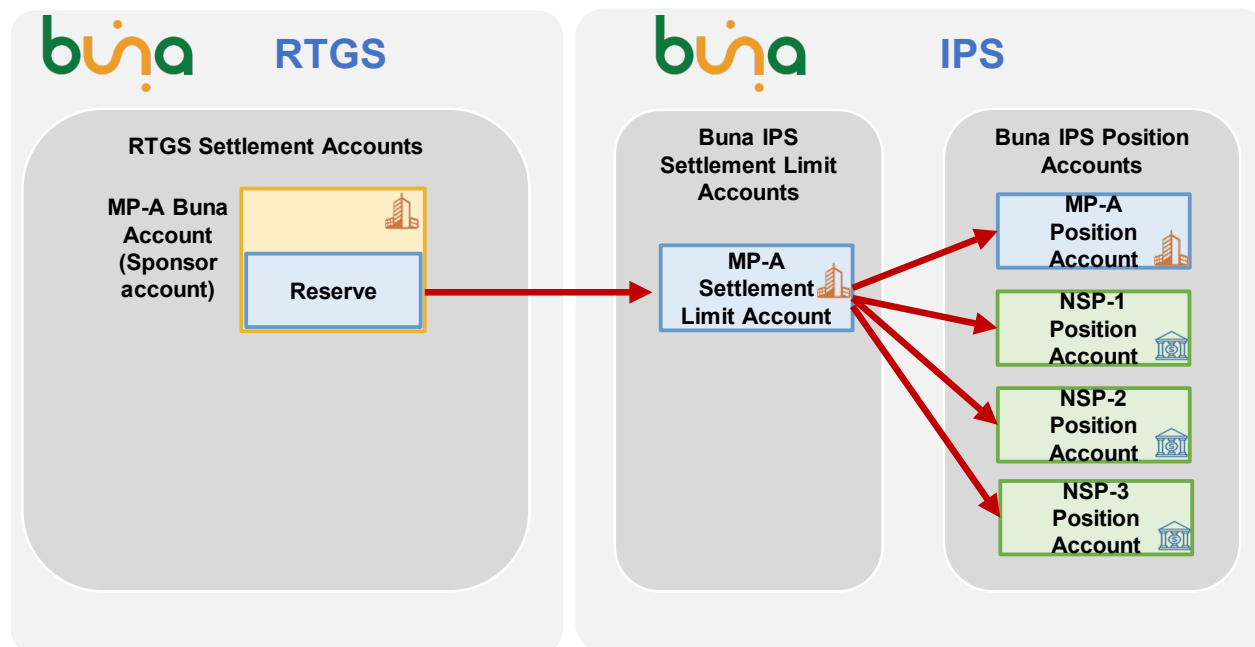


Figure 1: IPS Accounting scheme

**IPS Settlement limit accounts** can be opened for RTGS account holder only.

Debit cap (limit) of this account synchronizes with the Reserve for IPS operations on RTGS Settlement Account.

Balance = Sum of IPS account positions.

**Position accounts** could be opened for RTGS account holders and Non-Settlement Participants (not having RTGS account in Buna).

Position accounts has:

- Debit cap – limit of IPS operations for this account
- Position – positive or negative result of IPS operations
- Available Position = Debit cap + Position

**Posting** on Position accounts and settlement limit accounts will be done immediately after successful processing of each IPS transaction.

**Final Settlement** on RTGS accounts will be done at cut-off times (several times during RTGS working time).



## 2 BUSINESS PROCESS USE CASES LIST

### 2.1 PAYMENT PROCESSING USE CASES

ID	Name	Role
IPS-PM-01	Single Credit Transfer (with authorization by Counterparty) from RTGS account holder	Master Participant , Non-Settlement Participant
IPS-PM-01-1	Single Credit Transfer (with authorization by Counterparty) from Linked Participant linked with RTGS account holder	Master Participant, Linked Participant
IPS-PM-02	IPS transaction automated timeout rejection for cases with authorization	Master Participant, Non-Settlement Participant
IPS-PM-03	Single Credit Transfer (without authorization by Counterparty) from RTGS account holder	Master Participant, Non-Settlement Participant
IPS-PM-03-1	Single Credit Transfer (without authorization by Counterparty) from Linked Participant linked with RTGS account holder	Master Participant, Linked Participant
IPS-PM-04	Single Credit Transfer (with authorization by Counterparty) from Non-Settlement Participant	Master Participant, Non-Settlement Participant
IPS-PM-05	Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant	Master Participant, Non-Settlement Participant
IPS-PM-06	Batch payments (without authorization by Counterparty, one-to-one aggregation on IPS Participant level) from RTGS account holder	Master Participant, Non-Settlement Participant
IPS-PM-08	RTP from Creditor to Debtor	Master Participant, Non-Settlement Participant
IPS-PM-08-1	RTP from Creditor to Debtor with Linked Participant	Master Participant, Linked Participant
IPS-PM-09	Request for Return	Master Participant, Non-Settlement Participant
IPS-PM-09-1	Request for Return with Linked Participant	Master Participant, Linked Participant
IPS-PM-10	Return payments from RTGS account holder	Master Participant, Non-Settlement Participant
IPS-PM-11	Return payments from Non-Settlement Participant	Master Participant, Non-Settlement Participant
IPS-PM-12	Payment Validation	Buna IPS
IPS-PM-13	Threshold check	Buna IPS
IPS-PM-14	Non-payment message validation	Buna IPS
IPS-PM-15	IPS Final Settlement	Buna IPS, Buna RTGS

### 2.2 LIQUIDITY MANAGEMENT USE CASES

ID	Name	Role
IPS-LIQ-01	Manual top-up (increase) of Settlement limit account Debit cap	Master Participant



<b>IPS-LIQ-02</b>	Automatic top-up (increase) of Settlement limit account Debit cap	Master Participant
<b>IPS-LIQ-03</b>	Settlement limit account withdrawal (decrease).	Master Participant
<b>IPS-LIQ-04</b>	Position IPS account Debit cap set up	Master Participant, Non-Settlement Participant
<b>IPS-LIQ-05</b>	Request the Position IPS account Debit cap value	Master Participant, Non-Settlement Participant

## 2.3 CENTRAL ADDRESSING SCHEME USE CASES

### 2.3.1 Customer, Aliases and Accounts Registration Use Cases.

ID	Name	Role
<b>CAS-REG-01</b>	Register customer information	Participant's application
<b>CAS-REG-02</b>	Account registration	Participant's application
<b>CAS-REG-03</b>	Alias registration	Participant's application
<b>CAS-REG-04</b>	One-step Customer registration	Participant's application
<b>CAS-REG-05</b>	One-step Alias and Account registration	Participant's application
<b>CAS-REG-06</b>	Bulk upload of CAS information to DBO	Participant's application

### 2.3.2 Central addressing scheme. Management and Control of Customer data, Aliases and Accounts Use Cases.

ID	Name	Role
<b>CAS-MAN-01</b>	Suspend customer	Participant's application
<b>CAS-MAN-02</b>	Activate customer	Participant's application
<b>CAS-MAN-03</b>	Delete customer	Participant's application
<b>CAS-MAN-04</b>	Update customer information	Participant's application
<b>CAS-MAN-05</b>	Update alias	Participant's application
<b>CAS-MAN-06</b>	Delete alias	Participant's application
<b>CAS-MAN-07</b>	Suspend alias	Participant's application
<b>CAS-MAN-08</b>	Activate alias	Participant's application
<b>CAS-MAN-09</b>	Link alias and account	Participant's application
<b>CAS-MAN-10</b>	Unlink alias and account	Participant's application
<b>CAS-MAN-11</b>	Update account	Participant's application
<b>CAS-MAN-12</b>	Define "To be used by default" Account for Alias	Participant's application
<b>CAS-MAN-13</b>	Delete account	Participant's application

### 2.3.3 Central addressing scheme. Payment and RTP initiation Use Cases.

ID	Name	Role
<b>CAS-PMT-01</b>	Get default account by alias	Participant's application
<b>CAS-PMT-02</b>	Get the list of accounts by alias	Participant's application

### 2.3.4 Central addressing scheme. Access to Customer data Use Cases.



ID	Name	Role
CAS-MON-01	Get customer information	Participant's application
CAS-MON-02	Get customer aliases	Participant's application
CAS-MON-03	Get customer accounts	Participant's application
CAS-MON-04	Get account and customer info	Participant's application
CAS-MON-05	Get account information	Participant's application
CAS-MON-06	Get alias information	Participant's application
CAS-MON-07	Get aliases linked to account	Participant's application
CAS-MON-08	Get accounts linked to alias	Participant's application

## 2.4 END-TO-END TRACKER USE CASES

ID	Name	Role
IPS-ETRAC-01	Report on Payment Status to the End-To-End Tracker Service	Participant's application
IPS-ETRAC-02	Request a Payment Status from the End-To-End Tracker Service	Participant's application
IPS-ETRAC-03	End-To-End Tracker in Proxy mode	Participant's application

## 2.5 PRE-VALIDATION AND CONSULTATION SERVICE USE CASES

ID	Name	Role
IPS-CONS-01	Request pre-validation and information from Counterparty for a single transfer	Participant's application
IPS-CONS-03	Request exchange rate from the FX Provider	Participant's application

## 2.6 MESSAGE TYPES

### 2.6.1 The incoming messages processed by the system

MX ISO 20022	Description
pacs.008	Single customer credit transfer
pacs.008	File with many single customer credit transfers inside
pacs.002	Payment Authorization
pain.013	Request to pay
pain.014	RTP status
pacs.004	Return payment
camt.056	Request for return
camt.029	Request for return approval/ rejection message
camt.011	Request to change Debit cap
camt.050	Request to increase reserve



<b>camt.051</b>	Request to decrease reserve
<b>camt.009</b>	Request of Position account Debit cap

## 2.6.2 The outgoing messages created by the system

MX ISO 2022	Description
<b>pacs.008</b>	Single customer credit transfer
<b>camt.025</b>	Processing error/Success notification
<b>pacs.002</b>	Payment Status
<b>admi.002</b>	Message rejection
<b>pain.013</b>	Request to pay
<b>pain.014</b>	RTP status
<b>pacs.004</b>	Return payment
<b>camt.029</b>	Request for return approval/ rejection message
<b>camt.056</b>	Request for return
<b>camt.052</b>	Notification about top-up needed
<b>camt.010</b>	Confirmation of Debit cap change/Current Debit cap value/Notification about top-up needed
<b>pacs.009</b>	Interbank Payment
<b>camt.054</b>	Debit confirmation
<b>camt.053</b>	Account statement

## 2.7 ERROR MESSAGES – TYPES TO ERROR CASES LINKS

MX Type	Error case
<b>admi.002</b>	Format error (xml structure), low level transport errors
<b>camt.025</b>	System can't create incoming document or transaction
<b>pacs.002</b>	Error after creation of incoming message or transaction
<b>camt.029</b>	In a case of unsuccessful validation of Request for return
<b>pain.014</b>	Rejection for request to pay



### 3 USE CASES SCHEMES NOTATION DESCRIPTION

The following legend will be used to describe all of the business process use cases.

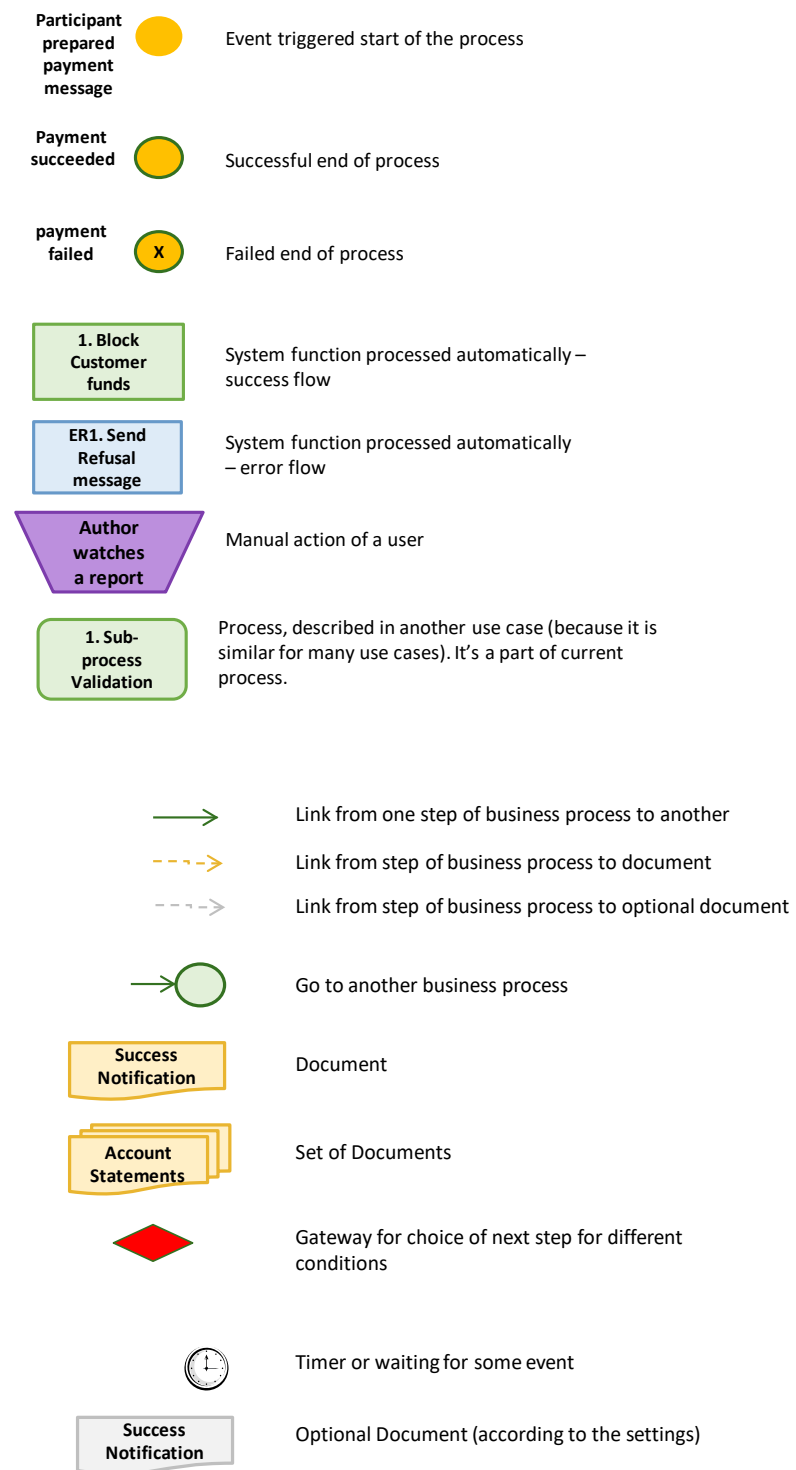


Figure 2: Use Cases Scheme Notation Description

## 4 BUSINESS PROCESS USE CASES

### 4.1 GENERIC FLOW

Overall description of IPS data flow

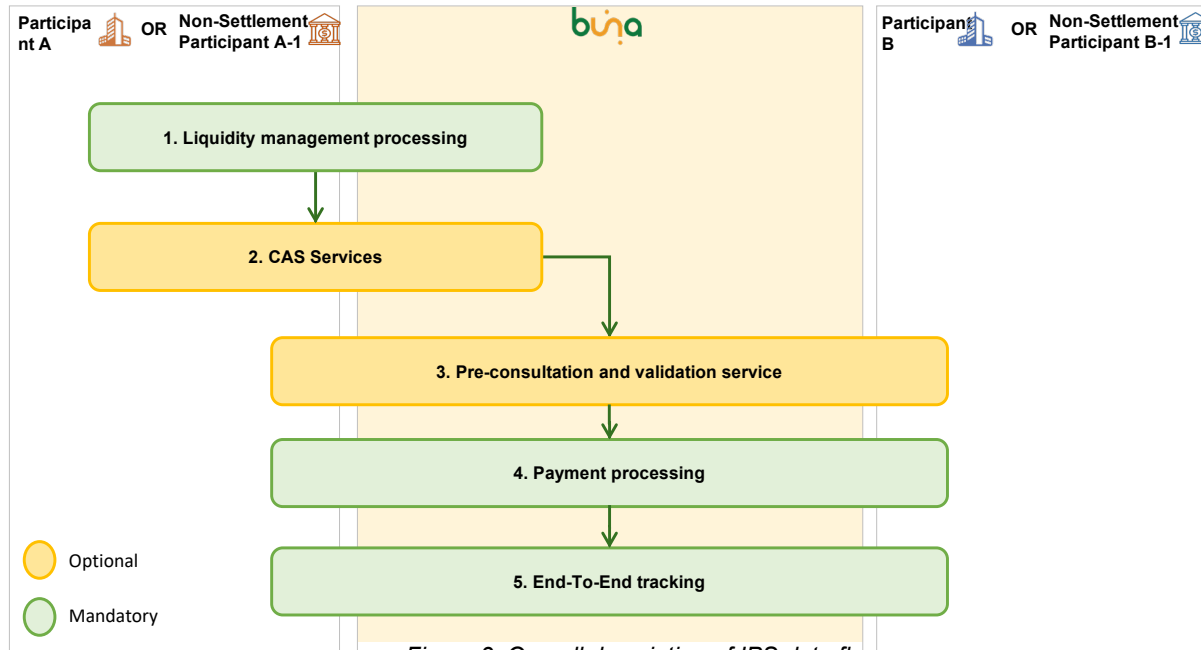


Figure 3: Overall description of IPS data flow

1. Before starting sending payments Buna IPS participant (Participant having settlement account at Buna RTGS or Non-Settlement Participant) has to ensure that it has enough funds for payment processing on its Position account.

Buna RTGS Participant – Sponsor of Position account has to ensure that it has enough funds for payment processing on its Settlement limit account.

For the details please refer to 4.3 Liquidity Management Use Cases

In case when threshold will be reached notification will be sent to Buna IPS Participant: 4.2.12 Use Case IPS-PM-13: Threshold check

2. Customers, accounts and aliases involved in Payments processing can be registered in Buna CAS module to make process of receiving customer's account data easier. This flow is optional, as bank can receive customer's account codes from other sources.

For the details please refer to 4.4 Central Addressing Scheme

3. Before sending a payment Buna IPS Participant A or NSP A (payment sender) could request information from the Participant B or NSP B or from FX provider. This informational request



could be regarding fee costs that will be taken for Single transfer or Batch payment or regarding Exchange rate.

This flow is optional. Could not be used.

For the details please refer to 4.6 Pre-Validation and Consultation Service Use Cases

4. Buna IPS scope contains processing of payment types:
- Single credit transfer with authorization by counterparty
  - Single credit transfer based on RtP – without authorization by counterparty
  - Batch payments - with a batch split functionality
  - Return payment (based on Request for return and on Original Payment's receiver initiative)

Final settlement for IPS obligations happens at BUNA RTGS after end of IPS session.

For the details please refer to 4.2 Payment processing Use Cases

5. Buna End-To-End tracker allows to report end request payment final status (crediting of End customer).

For the details please refer to 4.5 End-To-End Tracker Use Cases

**Processing principles:**

IPS Payments will be processed with the Priority = 100.

IPS Payments will be processed in Settle or Reject mode. In case of lack of funds payment will be rejected.

In case of Participant is suspended payment will be rejected.

## **4.2 PAYMENT PROCESSING USE CASES**

### **4.2.1 Use Case IPS-PM-01: Single Credit Transfer (with authorization by Counterparty) from RTGS account holder**

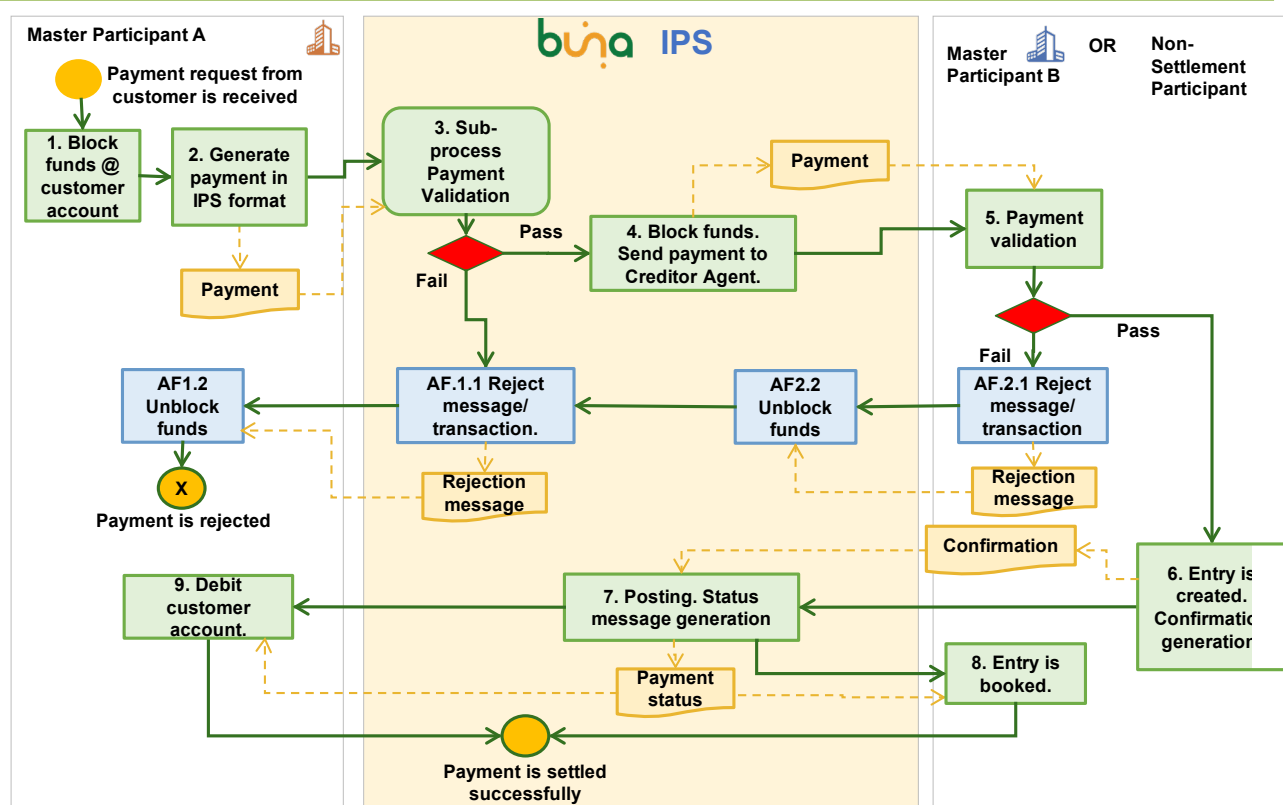


Figure 4: Single Credit Transfer (with authorization by Counterparty) from RTGS account holder

<b>Use Case ID</b>	<b>IPS-PM-01</b>
<b>Use Case Name</b>	Single Credit Transfer (with authorization by Counterparty) from RTGS account holder
<b>Use Case Description</b>	Single Credit Transfer (with authorization by Counterparty) from RTGS account holder (Instructing Agent) to other Buna Master Participant or Non-Settlement Participant (Instructed Agent) or Buna Master Participant.
<b>Primary Actors</b>	Master Participants, Non-Settlement Participant, Buna IPS
<b>Trigger Event</b>	Buna Master Participant A (Instructing Agent) received Customer's IPS payment request via own channel
<b>Use Case Business Rules</b>	
<ul style="list-style-type: none"> <li>▪ Participants shall submit the payments after checking that the IPS instruction meets all its processing conditions (e.g., originator authentication and authorization, and availability of funds) and that the submitted participant's IPS request meets all the mandatory attributes for interbank processing.</li> <li>▪ Buna IPS shall reject payment transactions if no sufficient funds are available.</li> <li>▪ Buna IPS will post payment transactions immediately and shall not queue or hold payment transactions for later processing.</li> <li>▪ Future dated payments are not allowed</li> <li>▪ Buna IPS will temporarily queue transactions only if the maximum capacity of transactions processing has been reached. The queued transactions will automatically be processed on a first in first out basis as long as they do not exceed the time execution window set. If they exceed the execution window, the transactions will be rejected.</li> </ul>	



- Buna IPS will post payment transactions individually, without netting.
- Buna IPS will post the instructed amount with finality on Buna IPS accounts. Posting will be irrevocable.
- Buna IPS will post payment transactions directly after a successful validation of a positive receiving participant reply message.
- Buna IPS will always settle for the full amount as specified in the payment transaction.
- Buna IPS shall confirm the posting of transactions via payment confirmation messages to sender and receiver participants.
- Buna IPS will not support any recalls instead the Request for Return is supported (for details refer to section 4.2.8 Use Case IPS-PM-09: Request for Return). Request for return could also be requested through the inquiry and communication module in Buna Portal.
- Final Settlement on RTGS accounts will be done at the end of IPS session.

#### Pre-Conditions

**Buna Master Participant A (Instructing Agent) has an RTGS settlement account, a settlement limit account and a position account.**  
**Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least a position account.**

#### Post Conditions

**Payment is posted successfully**

#### Basic Flow

<b>1</b>	Buna Master Participant A (Instructing Agent) accepts the payment request from its customer. Activities for this step include necessary validations of customer entered data (in CBS) and choice of Creditor account. Instructing Agent gets default account of Creditor from CAS (Use Case CAS-PMT-01: Get default account by alias) or list of accounts to represent them for customer's choice (Use Case CAS-PMT-02: Get the list of accounts by alias). After choosing the account CBS blocks funds required for payment processing till payment completion.
<b>2</b>	Buna Master Participant A generates a payment in IPS format (pacs.008) and sends the payment to BUNA IPS.
<b>3</b>	Execute sub-process «Payment Validation» (Use Case IPS-PM-12: Payment Validation): <ul style="list-style-type: none"> <li>• Passed - go to 4;</li> <li>• Failed- go to AF1.</li> </ul>
<b>4</b>	Buna IPS blocks payment amount at the Participant A position account and sends the payment to the Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent).
<b>5</b>	The payment is delivered to Instructed Agent. The Instructed Agent performs validation of the payment: <ul style="list-style-type: none"> <li>• Passed - go to 6;</li> <li>• Failed- go to AF2.</li> </ul>
<b>6</b>	CBS of Instructed Agent creates entries and a payment confirmation notification, sends the payment confirmation notification (pacs.002) to Buna IPS
<b>7</b>	Buna IPS (in case the confirmation is received before timeout): <ul style="list-style-type: none"> <li>• applies payment to the positions of the counterparties and settlement limit account</li> </ul>



	<ul style="list-style-type: none"> <li>notifies counterparties on current status of the payment (pacs.002).</li> </ul> <p>But if confirmation from Instructed Agent is received after timeout execute Use Case IPS-PM-02: IPS transaction automated timeout rejection for cases with authorization</p>
8	CBS of Instructed Agent finalizes entries. Customer account is credited.
9	CBS of Instructing Agent debits customer account.
<b>Alternate Flows</b>	
<b>AF1</b>	<b>Payment validation is failed at Buna IPS</b>
1	Buna IPS creates a rejection message (pacs.002 or camt.025 or admi.002) to Participant A
2	Rejection message is delivered to Participant A's CBS, customer's funds are unblocked
<b>AF2</b>	<b>Payment validation is failed at Instructed Agent's side</b>
1	Instructed Agent creates a rejection message (pacs.002) and sends it to Buna IPS
2	Buna IPS unblocks funds. Go to AF1

*Incoming messages*

Senders	MX ISO 20022	Description
Buna Master Participant	pacs.008	Single Customer credit transfer
Buna Master Participant , Non-Settlement Participant	pacs.002	Payment Authorization

*Outgoing messages*

Receivers	MX ISO 20022	Description
Buna Master Participant , Non-Settlement Participant	pacs.008	Single Customer credit transfer
Buna Master Participant	camt.025	Processing error
Buna Master Participant , Non-Settlement Participant	pacs.002	Status of transfer
Buna Master Participant	admi.002	Message rejection

**4.2.1.1 Use Case IPS-PM-01-1: Single Credit Transfer (with authorization by Counterparty) from Linked Participant linked with RTGS account holder**

<b>Use Case ID</b>	<b>IPS-PM-01-1</b>
<b>Use Case Name</b>	Single Credit Transfer (with authorization by Counterparty) from Linked Participant linked with RTGS account holder
<b>Use Case Description</b>	Single Credit Transfer (with authorization by Counterparty) from Linked Participant which linked to Master Participant, RTGS account holder (Instructing Agent) to other Buna Master Participant (Instructed Agent) or Linked Participant
<b>Primary Actors</b>	Master Participants, Linked Participant, Buna IPS
<b>Trigger Event</b>	Buna Master Participant A (Instructing Agent) received Customer's IPS payment request via own channel
<b>Use Case Business Rules</b>	
<ul style="list-style-type: none"> <li>Participants shall submit the payments after checking that the IPS instruction meets all its processing conditions (e.g., originator authentication and authorization, and availability of funds) and that the submitted participant's IPS request meets all the mandatory attributes for interbank processing.</li> </ul>	



- **Buna IPS shall reject payment transactions if no sufficient funds are available.**
- **Buna IPS will post payment transactions immediately and shall not queue or hold payment transactions for later processing.**
- **Future dated payments are not allowed**
- **Buna IPS will temporarily queue transactions only if the maximum capacity of transactions processing has been reached. The queued transactions will automatically be processed on a first in first out basis as long as they do not exceed the time execution window set. If they exceed the execution window, the transactions will be rejected.**
- **Buna IPS will post payment transactions individually, without netting.**
- **Buna IPS will post the instructed amount with finality on Buna IPS accounts. Posting will be irrevocable.**
- **Buna IPS will post payment transactions directly after a successful validation of a positive receiving participant reply message.**
- **Buna IPS will always settle for the full amount as specified in the payment transaction.**
- **Buna IPS shall confirm the posting of transactions via payment confirmation messages to sender and receiver participants.**
- **Buna IPS will not support any recalls instead the Request for Return is supported (for details refer to section 4.2.8 Use Case IPS-PM-09: Request for Return). Request for return could also be requested through the inquiry and communication module in Buna Portal.**
- **Final Settlement on RTGS accounts will be done at the end of IPS session.**

#### **Pre-Conditions**

**Buna Master Participant A (Instructing Agent) has an RTGS settlement account, a settlement limit account and a position account.  
Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least a position account.**

#### **Post Conditions**

**Payment is posted successfully**

#### **Basic Flow**

<b>1</b>	Buna Master Participant A (Instructing Agent) accepts the payment request from Linked Participant. Activities for this step include necessary validations of customer entered data (in CBS) and choice of Creditor account. Instructing Agent gets default account of Creditor from CAS (Use Case CAS-PMT-01: Get default account by alias) or list of accounts to represent them for customer's choice (Use Case CAS-PMT-02: Get the list of accounts by alias). After choosing the account CBS blocks funds required for payment processing till payment completion.
<b>2</b>	Buna Master Participant A generates a payment in IPS format (pacs.008) and sends the payment to BUNA IPS.
<b>3</b>	Execute sub-process «Payment Validation» (Use Case IPS-PM-12: Payment Validation): <ul style="list-style-type: none"> <li>• Passed - go to 4;</li> <li>• Failed- go to AF1.</li> </ul>
<b>4</b>	Buna IPS blocks payment amount at the Participant A position account and sends the payment to the Buna Master Participant B



5	The payment is delivered to Instructed Agent. The Instructed Agent performs validation of the payment: <ul style="list-style-type: none"> <li>Passed - go to 6;</li> <li>Failed- go to AF2.</li> </ul>
6	CBS of Instructed Agent creates entries and a payment confirmation notification, sends the payment confirmation notification (pacs.002) to Buna IPS
7	Buna IPS (in case the confirmation is received before timeout): <ul style="list-style-type: none"> <li>applies payment to the positions of the counterparties and settlement limit account</li> <li>notifies counterparties on current status of the payment (pacs.002).</li> </ul> <p>But if confirmation from Instructed Agent is received after timeout execute Use Case IPS-PM-02: IPS transaction automated timeout rejection for cases with authorization</p>
8	CBS of Instructed Agent finalizes entries. Customer account is credited.
9	CBS of Instructing Agent debits customer account.
<b>Alternate Flows</b>	
<b>AF1</b>	<b>Payment validation is failed at Buna IPS</b>
1	Buna IPS creates a rejection message (pacs.002 or camt.025 or admi.002) to Participant A
2	Rejection message is delivered to Participant A's CBS, customer's funds are unblocked
<b>AF2</b>	<b>Payment validation is failed at Instructed Agent's side</b>
1	Instructed Agent creates a rejection message (pacs.002) and sends it to Buna IPS
2	Buna IPS unblocks funds. Go to AF1

*Incoming messages*

Senders	MX ISO 20022	Description
Buna Master Participant	pacs.008	Single Customer credit transfer
Buna Master Participant	pacs.002	Payment Authorization

*Outgoing messages*

Receivers	MX ISO 20022	Description
Buna Master Participant	pacs.008	Single Customer credit transfer
Buna Master Participant	camt.025	Processing error
Buna Master Participant	pacs.002	Status of transfer
Buna Master Participant	admi.002	Message rejection



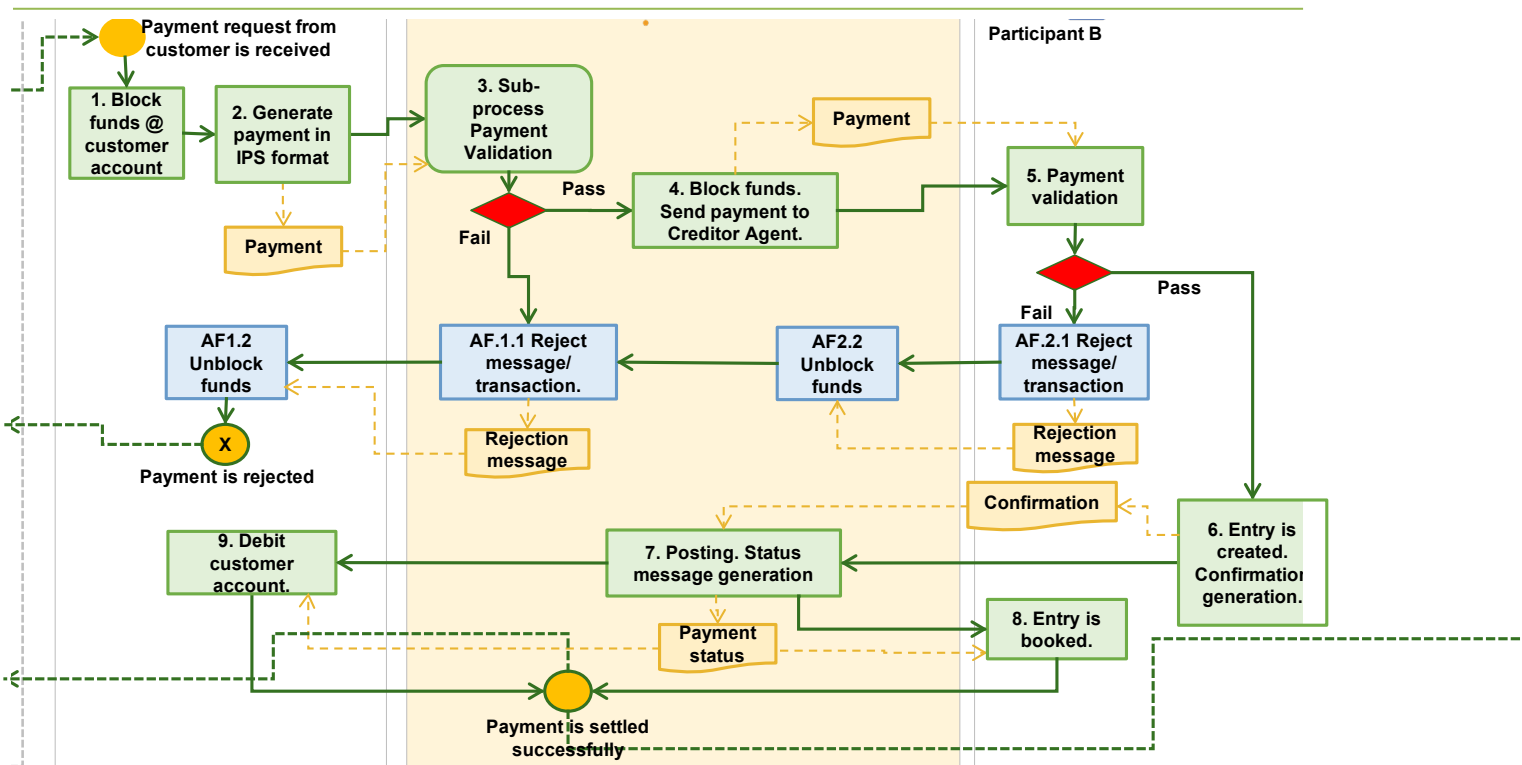


Figure 5-1: Single Credit Transfer (with authorization by Counterparty) from RTGS account holder from Linked Participant linked with RTGS account holder.

#### 4.2.2 Use Case IPS-PM-02: IPS transaction automated timeout rejection for cases with authorization

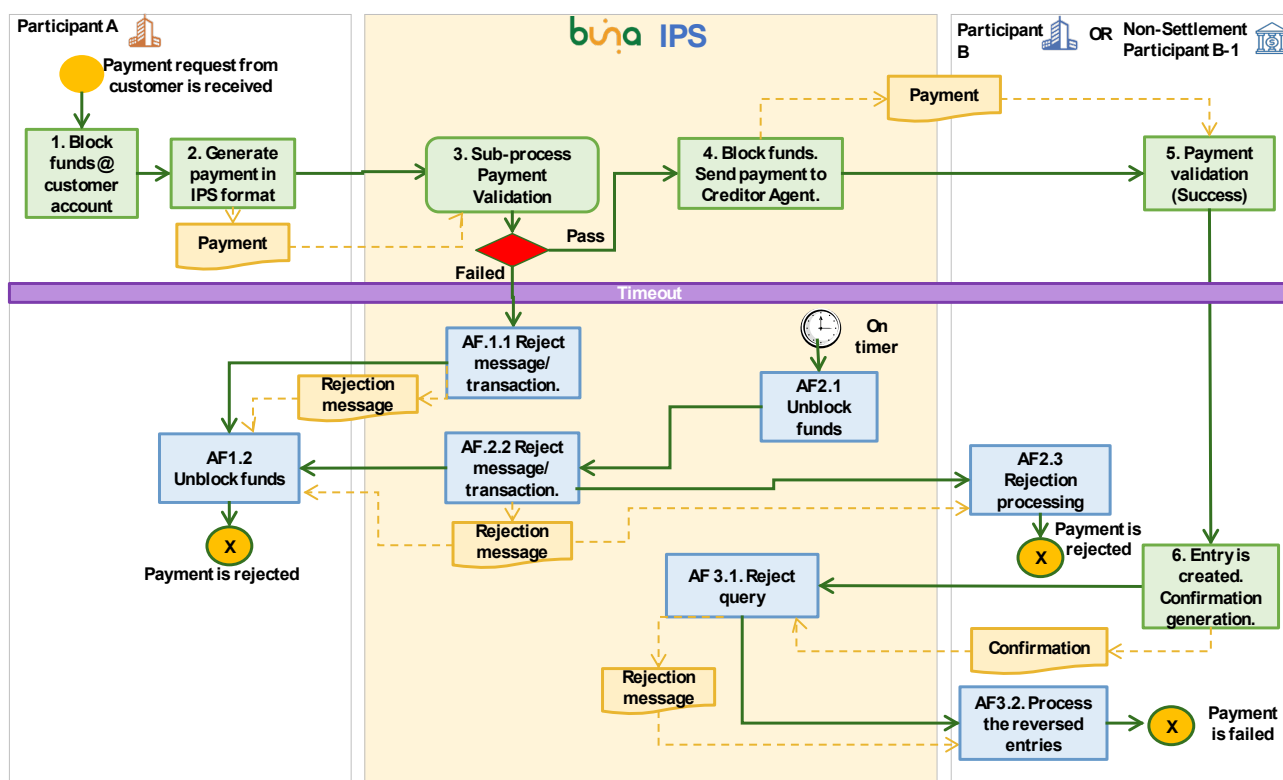


Figure 6: IPS transaction automated timeout rejection for cases with authorization

<b>Use Case ID</b>	<b>IPS-PM-02</b>
<b>Use Case Name</b>	IPS transaction automated timeout rejection for cases with authorization
<b>Use Case Description</b>	IPS transaction automated timeout rejection for cases with authorization: <ul style="list-style-type: none"> <li>• Use Case IPS-PM-01: Single Credit Transfer (with authorization by Counterparty) from RTGS account holder</li> <li>• Use Case IPS-PM-04: Single Credit Transfer (with authorization by Counterparty) from Non-Settlement Participant</li> </ul>
<b>Primary Actors</b>	Master Participant, Non-Settlement Participant, Buna IPS
<b>Trigger Event</b>	On receiving confirmation after timeout is exceeded
<b>Use Case Business Rules</b>	
<ul style="list-style-type: none"> <li>▪ If the receiving participant does not respond within a configurable timeframe, Buna should stop the outbound liquidity transfer process and will then reject the transaction.</li> <li>▪ Buna should offer a preconfigured timeframe (Timeout) end-to-end, which is calculated as a difference between sending transaction to the receiver and receiving a confirmation .</li> <li>▪ In its initial phases, Buna might review the configurable window of the execution time to a higher value to allow participants to adapt to the speed of execution of the system.</li> <li>▪ Timeouts are not applicable for Batch Payments.</li> </ul>	
<b>Pre-Conditions</b>	
<p>Buna Master Participant A (Instructing Agent) has an RTGS settlement account, a settlement limit account and a position account.  Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least a position account.</p>	
<b>Post Conditions</b>	
Payment is rejected	



<b>Basic Flow</b>	
<b>1-6</b>	Basic flow is the same as in main Payment Use Cases with authorization
<b>Alternate Flows</b>	
<b>AF1</b>	<b>Reject Payment if payment message validation is failed</b>
<b>1</b>	Buna IPS rejects the payment and sends rejection payment to the message sender (Instructing Agent)
<b>2</b>	Instructing Agent unblocks funds
<b>AF2</b>	<b>Unblock funds on timer (for cases when IPS was not able to deliver payment to Buna Master Participant B or Non-Settlement Participant B-1 on time, when confirmation was not received and when confirmation was received after timeout)</b>
<b>1</b>	Buna IPS unblocks funds
<b>2</b>	Buna IPS creates a rejection message (pacs.002) to Participant A and Participant B or Non-Settlement Participant B-1
<b>3</b>	Rejection message (pacs.002) is delivered to Participant A CBS, customer's funds are unblocked. Rejection message (pacs.002) is delivered to Participant B or Non-Settlement Participant B-1
<b>4</b>	Participant B or Non-Settlement Participant B-1 (Instructed Agent) rejects Payment if entries were not created yet.
<b>AF3</b>	<b>Reject Payment confirmation in case when it was received by Buna IPS after timeout</b>
<b>1</b>	Buna IPS rejects the Payment confirmation (camt.025). This rejection message can be received along with AF2.3 in case confirmation is received after the timeout.
<b>2</b>	CBS of Instructed Agent reverses the entry

*Incoming messages*

<b>Senders</b>	<b>MX ISO 20022</b>	<b>Description</b>
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.002	Payment Authorization
<b>Buna Master Participant</b>	pacs.008	Single Customer credit transfer

*Outgoing messages*

<b>Receivers</b>	<b>MX ISO 20022</b>	<b>Description</b>
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.008	Single Customer credit transfer
<b>Buna Master Participant</b>	camt.025	Processing error
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.002	Status of transfer
<b>Buna Master Participant</b>	admi.002	Message rejection

**4.2.3 Use Case IPS-PM-03: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder**

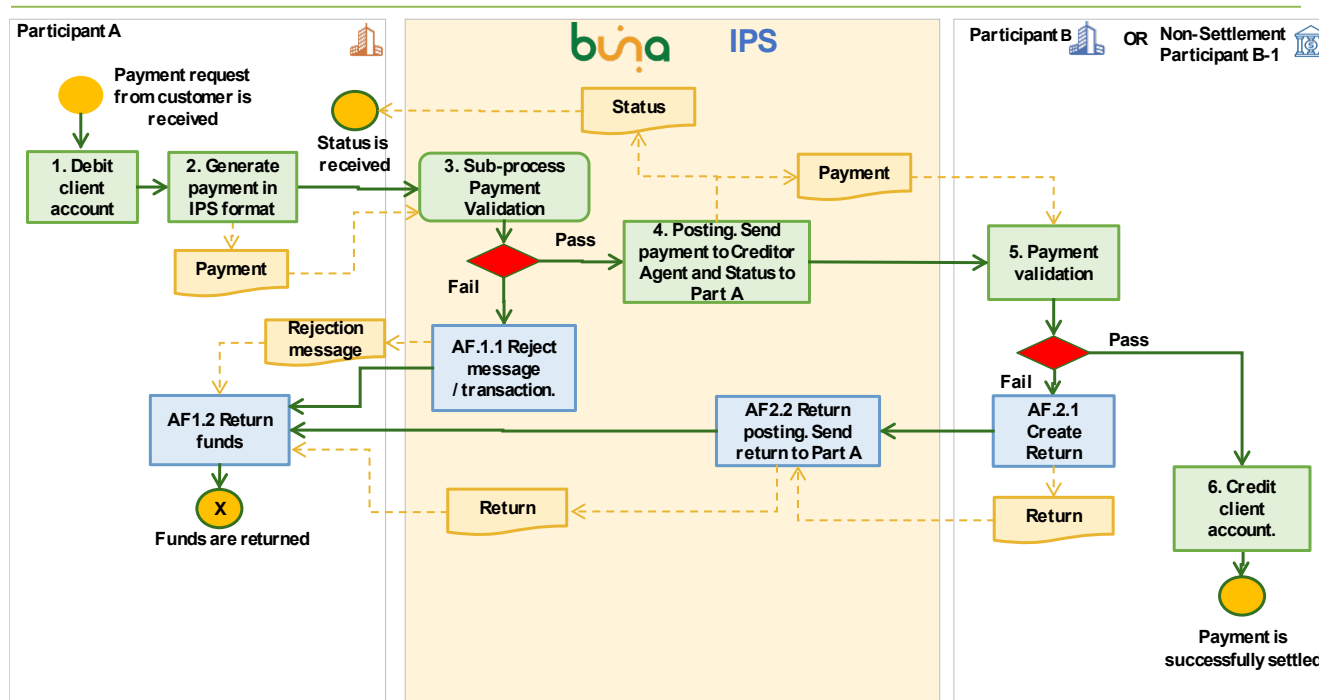


Figure 7: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder

<b>Use Case ID</b>	<b>IPS-PM-03</b>
<b>Use Case Name</b>	Single Credit Transfer (without authorization by Counterparty) from RTGS account holder
<b>Use Case Description</b>	Single Credit Transfer (without authorization by Counterparty) from RTGS account holder (Buna RTGS Master Participant – Instructing Agent) to other Buna Master Participant or Non-Settlement Participant (Instructed Agent)
<b>Primary Actors (Sender)</b>	Master Participant, Non-Settlement Participant, Buna IPS
<b>Trigger Event</b>	Buna Master Participant A (Instructing Agent) received Customer's IPS payment via own channel following a Request to Pay
<b>Use Case Business Rules</b>	
This use case will be applicable only as a response on RTP (for details of differentiating between response on RTP and other payments, refer to IPS Message formats document, please). In other cases, confirmation will be required. Confirmation from Instructed Agent is not expected for this case.	
<b>Pre-Conditions</b>	
Buna Master Participant A (Instructing Agent) has registered an RTGS settlement account, a settlement limit account and a position account. Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least a position account.	
<b>Post Conditions</b>	
Payment is posted successfully	
<b>Basic Flow</b>	
1	Buna Master Participant A (Instructing Agent) accepts the payment from customer. Activities for this step include necessary validations of customer entered data (in CBS). CBS debits customer's account.
2	Buna Master Participant A generates payment in IPS format (pacs.008) and sends payment to BUNA IPS.



<b>3</b>	Execute sub-process «Payment Validation» (Use Case IPS-PM-12: Payment Validation) In addition to standard validation check the timeout of payment creation after RTP sending. <ul style="list-style-type: none"> <li>• Passed - go to 4;</li> <li>• Failed- go to AF1.</li> </ul>
<b>4</b>	Buna process the Payment: applies payment to the positions of the counterparties and settlement limit account BUNA sends status message (pacs.002) to Instructing Agent (Master Participant A of Buna). BUNA sends copy of payment (pacs.008) to Instructed Agent (Buna Master Participant B or Non-Settlement Participant B-1)
<b>5</b>	The payment is delivered to Instructed Agent. Instructed Agent performs validation of the payment <ul style="list-style-type: none"> <li>• Passed - go to 6;</li> <li>• Failed- go to AF2.</li> </ul>
<b>6</b>	CBS of Instructed Agent credits account of its customer.
<b>Alternate Flows</b>	
<b>AF1</b>	<b>Payment validation is failed at Buna IPS</b>
<b>1</b>	Buna IPS creates rejection message (pacs.002 or camt.025 or admi.002) to Participant A
<b>2</b>	Rejection message is delivered to Participant A CBS, customer's funds are returned
<b>AF2</b>	<b>Payment validation is failed at Instructed Agent's side</b>
<b>1</b>	Instructed Agent creates a return message (pacs.004) and sends it to Buna IPS. This has to be done before the end of retention period. For the details kindly refer to 4.2.9 Use Case IPS-PM-10: Return payments from RTGS account holder and Use Case IPS-PM-11: Return payments from Non-Settlement Participant
<b>2</b>	Buna IPS posts the return and sends its copy to Instructing Agent

*Incoming messages*

Senders	MX ISO 20022	Description
<b>Buna Master Participant</b>	pacs.008	Single Customer credit transfer
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.004	Return payment

*Outgoing messages*

Receivers	MX ISO 20022	Description
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.008	Single Customer credit transfer
<b>Buna Master Participant</b>	camt.025	Processing error
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.002	Status of transfer
<b>Buna Master Participant</b>	admi.002	Message rejection
<b>Buna Master Participant</b>	pacs.004	Return payment

**4.2.3.1 Use Case IPS-PM-03-1: Single Credit Transfer (without authorization by Counterparty) from Linked Participant linked with RTGS account holder**

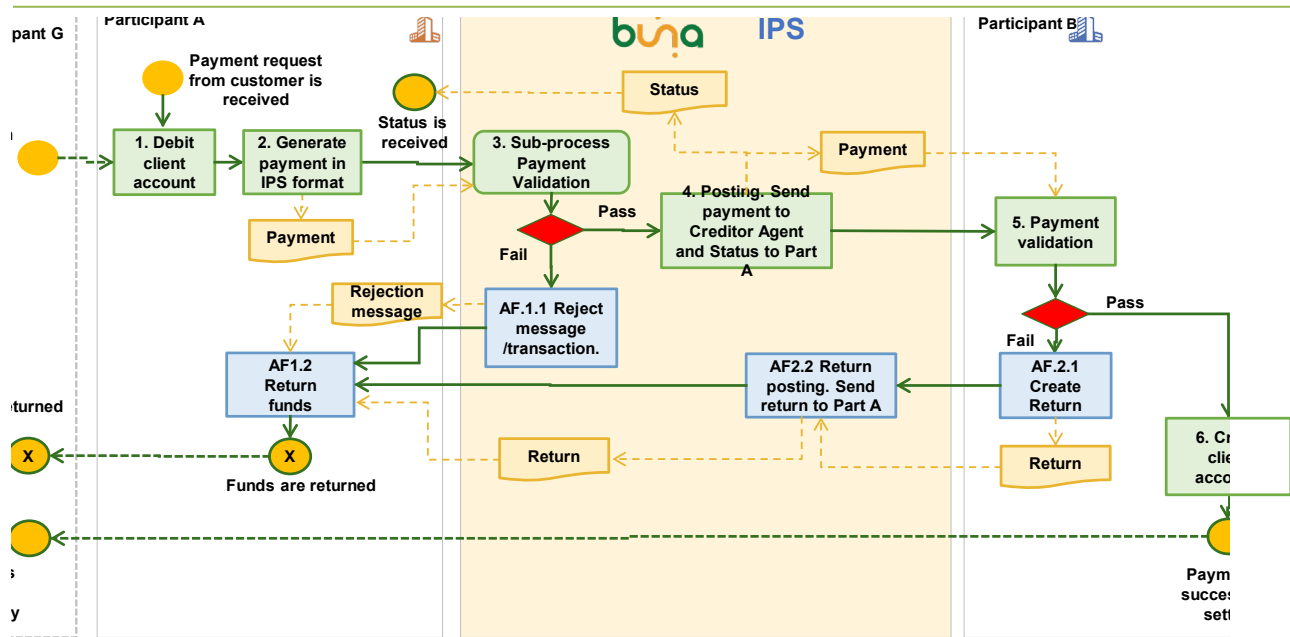


Figure 8: Single Credit Transfer (without authorization by Counterparty) from Linked Participant linked with RTGS account holder

<b>Use Case ID</b>	<b>IPS-PM-03-1</b>
<b>Use Case Name</b>	Single Credit Transfer (without authorization by Counterparty) from Linked Participant linked with RTGS account holder
<b>Use Case Description</b>	Single Credit Transfer (without authorization by Counterparty) from Linked Participant which linked to Master Participant, RTGS account holder (Instructing Agent) to other Buna Master Participant (Instructed Agent) or Linked Participant
<b>Primary Actors (Sender)</b>	Master Participant, Linked Participant, Buna IPS
<b>Trigger Event</b>	Buna Master Participant A (Instructing Agent) received Customer's IPS payment via own channel following a Request to Pay
<b>Use Case Business Rules</b>	
This use case will be applicable only as a response on RTP (for details of differentiating between response on RTP and other payments, refer to IPS Message formats document, please). In other cases, confirmation will be required. Confirmation from Instructed Agent is not expected for this case.	
<b>Pre-Conditions</b>	
Buna Master Participant A (Instructing Agent) has registered an RTGS settlement account, a settlement limit account and a position account. Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least a position account.	
<b>Post Conditions</b>	
Payment is posted successfully	
<b>Basic Flow</b>	
1	Buna Master Participant A (Instructing Agent) accepts the payment request from Linked Participant. Activities for this step include necessary validations of customer entered data (in CBS). CBS debits customer's account.



2	Buna Master Participant A generates payment in IPS format (pacs.008) and sends payment to BUNA IPS.
3	Execute sub-process «Payment Validation» (Use Case IPS-PM-12: Payment Validation) In addition to standard validation check the timeout of payment creation after RTP sending. <ul style="list-style-type: none"> <li>• Passed - go to 4;</li> <li>• Failed- go to AF1.</li> </ul>
4	Buna process the Payment: applies payment to the positions of the counterparties and settlement limit account BUNA sends status message (pacs.002) to Instructing Agent (Master Participant A of Buna). BUNA sends copy of payment (pacs.008) to Instructed Agent (Buna Master Participant B or Non-Settlement Participant B-1)
5	The payment is delivered to Instructed Agent. Instructed Agent performs validation of the payment <ul style="list-style-type: none"> <li>• Passed - go to 6;</li> <li>• Failed- go to AF2.</li> </ul>
6	CBS of Instructed Agent credits account of its customer.
<b>Alternate Flows</b>	
<b>AF1</b>	<b>Payment validation is failed at Buna IPS</b>
1	Buna IPS creates rejection message (pacs.002 or camt.025 or admi.002) to Participant A
2	Rejection message is delivered to Participant A CBS, customer's funds are returned
<b>AF2</b>	<b>Payment validation is failed at Instructed Agent's side</b>
1	Instructed Agent creates a return message (pacs.004) and sends it to Buna IPS. This has to be done before the end of retention period. For the details kindly refer to 4.2.9 Use Case IPS-PM-10: Return payments from RTGS account holder and Use Case IPS-PM-11: Return payments from Non-Settlement Participant
2	Buna IPS posts the return and sends its copy to Instructing Agent

*Incoming messages*

Senders	MX ISO 20022	Description
Buna Master Participant	pacs.008	Single Customer credit transfer
Buna Master Participant	pacs.004	Return payment

*Outgoing messages*

Receivers	MX ISO 20022	Description
Buna Master Participant	pacs.008	Single Customer credit transfer
Buna Master Participant	camt.025	Processing error
Buna Master Participant	pacs.002	Status of transfer
Buna Master Participant	admi.002	Message rejection
Buna Master Participant	pacs.004	Return payment

#### 4.2.4 Use Case IPS-PM-04: Single Credit Transfer (with authorization by Counterparty) from Non-Settlement Participant

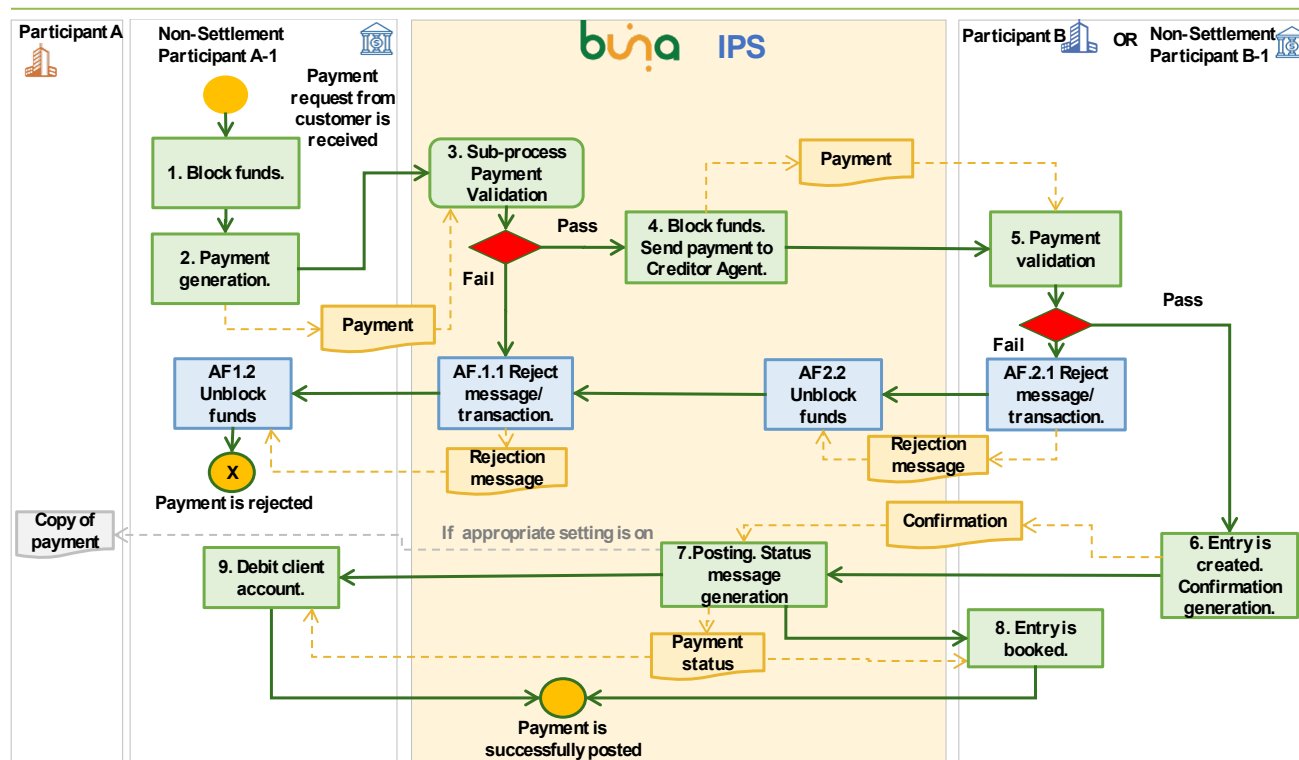


Figure 9: Single Credit Transfer (with authorization by Counterparty) from Non-Settlement Participant

<b>Use Case ID</b>	<b>IPS-PM-04</b>
<b>Use Case Name</b>	Single Credit Transfer (with authorization by Counterparty) from Non-Settlement Participant
<b>Use Case Description</b>	Single Credit Transfer (with authorization by Counterparty) from Non-Settlement Participant to other Buna Master Participant or Non-Settlement Participant
<b>Primary Actors</b>	Master Participant, Non-Settlement Participant, Buna IPS
<b>Trigger Event</b>	Non-Settlement Participant (Instructing Agent) received Customer's IPS payment via own channel
<b>Use Case Business Rules</b>	
The same as in Extended Use Case	
<b>Extends</b>	
Use Case IPS-PM-01: Single Credit Transfer (with authorization by Counterparty) from RTGS account holder	
<b>Pre-Conditions</b>	
Non-Settlement Participant (Instructing Agent) has a position account at Buna IPS. Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least position account.	
<b>Post Conditions</b>	
Payment is posted successfully	
<b>Basic Flow</b>	
<b>1-6</b>	The same as in Use Case IPS-PM-01: Single Credit Transfer (with authorization by Counterparty) from RTGS account holder
<b>7</b>	In addition to extended Use case – Buna IPS checks notification settings. If Sponsor RTGS account owner wants to receive a copy of payment related to sponsored Position accounts, then buna sends copy of payment (pacs.008) to Master Participant .





8-9	The same as in Extended Use Case
<b>Alternate Flows</b>	
AF	The same as in Extended Use Case

*Incoming messages*

Senders	MX ISO 20022	Description
Non-Settlement Participant	pacs.008	Single Customer credit transfer
Non-Settlement Participant	pacs.002	Status of transfer

*Outgoing messages*

Receivers	MX ISO 20022	Description
Buna Master Participant , Non-Settlement Participant	pacs.008	Single Customer credit transfer (copy of payment)
Non-Settlement Participant	camt.025	Processing error
Non-Settlement Participant	pacs.002	Status of transfer
Non-Settlement Participant	admi.002	Message rejection

#### 4.2.5 Use Case IPS-PM-05: Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant

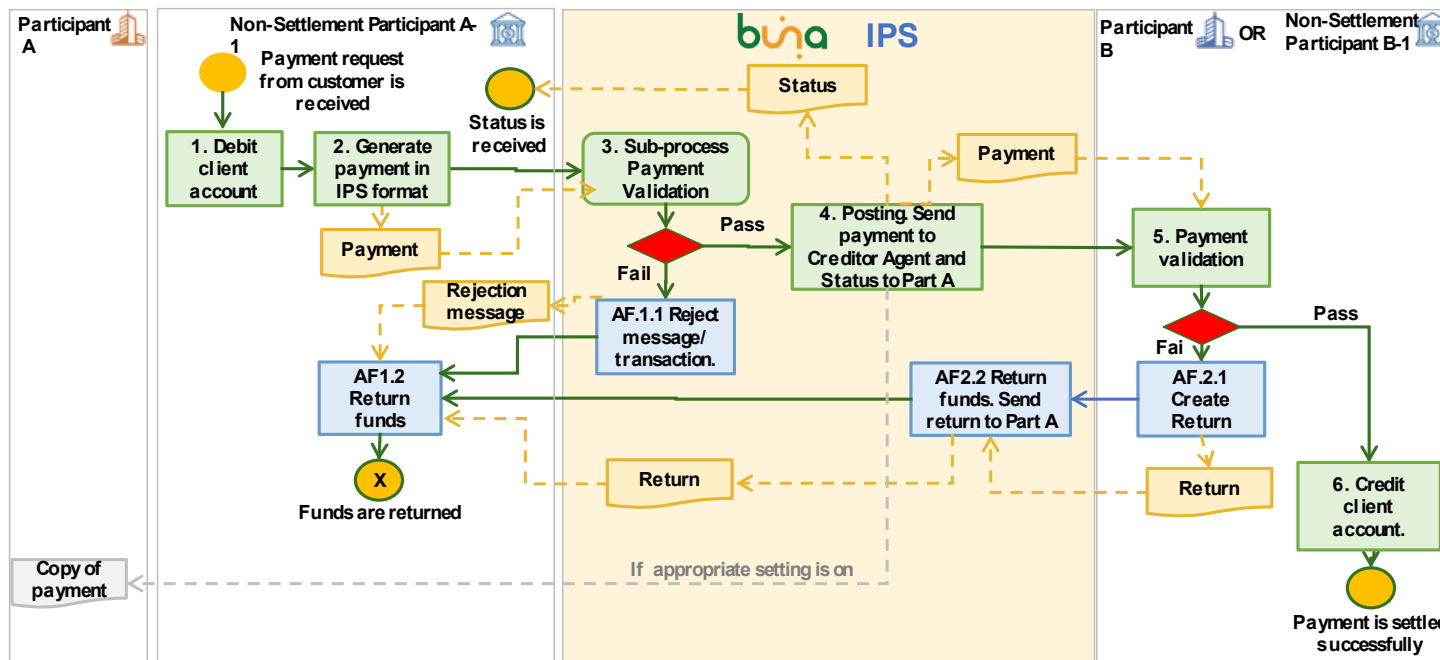


Figure 10: Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant

<b>Use Case ID</b>	IPS-PM-05
<b>Use Case Name</b>	Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant
<b>Use Case Description</b>	Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant to other Buna Master Participant or Non-Settlement Participant
<b>Primary Actors</b>	Master Participant, Non-Settlement Participant, Buna IPS



<b>Trigger Event</b>	Non-Settlement Participant (Instructing Agent) received Customer's IPS payment via own channel
<b>Use Case Business Rules</b>	
This use case will be applicable only as a response on RTP. In other cases, confirmation will be required. The same as in Extended Use Case	
<b>Extends</b>	
Use Case IPS-PM-03: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder	
<b>Pre-Conditions</b>	
Non-Settlement Participant (Instructing Agent) has a position account at Buna IPS. Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least a position account.	
<b>Post Conditions</b>	
Payment is posted successfully	
<b>Basic Flow</b>	
<b>1-6</b>	The same as in Use Case IPS-PM-03: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder
<b>7</b>	In addition to extended Use case, Buna IPS checks notification settings. If Sponsor RTGS account owner wants to receive copy of payments related to sponsored Position accounts, then Buna sends copy of payment (pacs.008) to the Master Participant
<b>Alternate Flows</b>	
<b>AF</b>	The same as in Extended Use Case

*Incoming messages*

<b>Senders</b>	<b>MX ISO 20022</b>	<b>Description</b>
<b>Non-Settlement Participant</b>	pacs.008	Single Customer credit transfer
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.002	Payment Authorization
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.004	Return payment

*Outgoing messages*

<b>Receivers</b>	<b>MX ISO 20022</b>	<b>Description</b>
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.008	Single Customer credit transfer (copy of payment)
<b>Non-Settlement Participant</b>	camt.025	Processing error
<b>Non-Settlement Participant</b>	pacs.002	Status of transfer
<b>Non-Settlement Participant</b>	admi.002	Message rejection
<b>Non-Settlement Participant</b>	pacs.004	Return payment

#### 4.2.6 Use Case IPS-PM-06: Batch payments from RTGS account holder/NSP

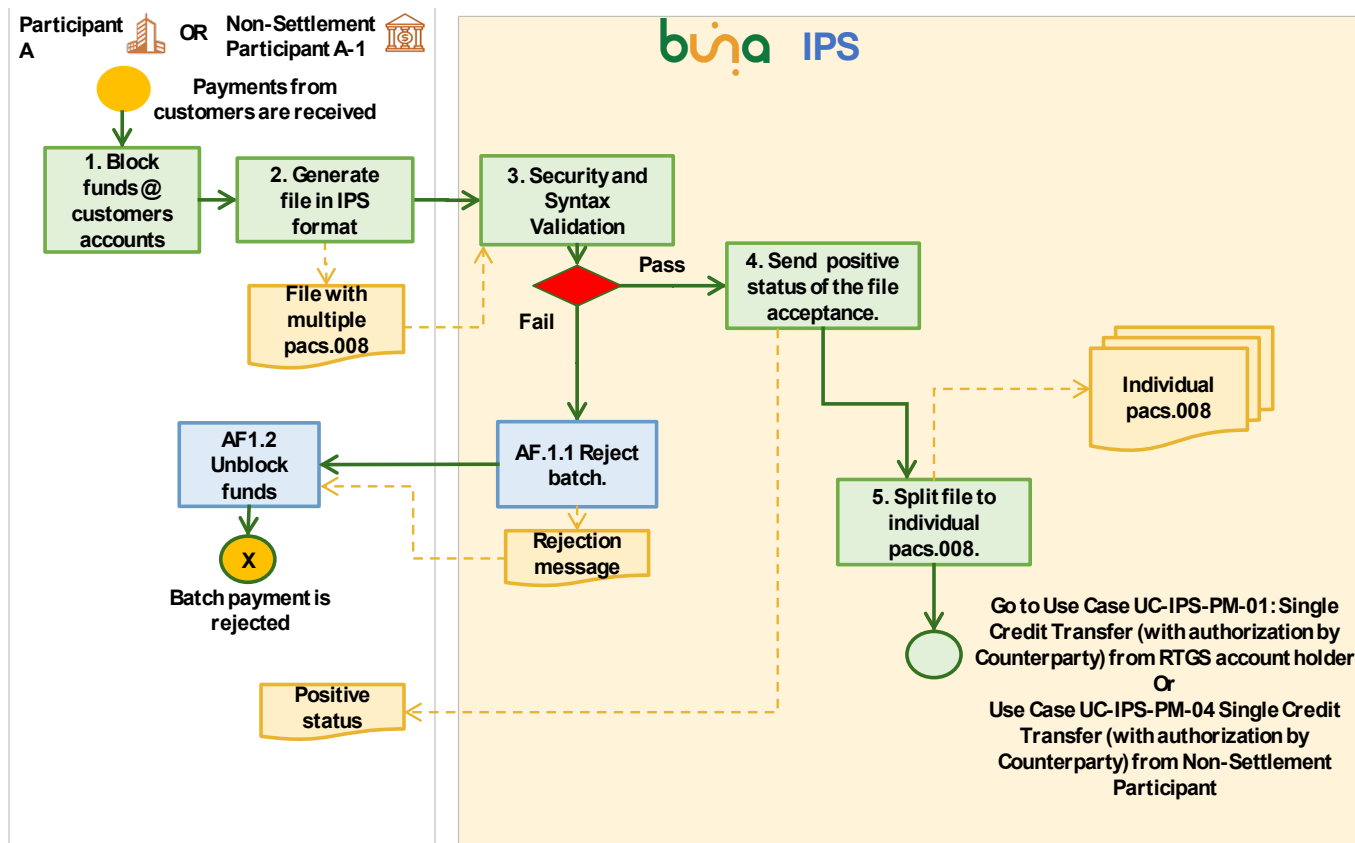


Figure 11: Batch payments from RTGS account holder/NSP

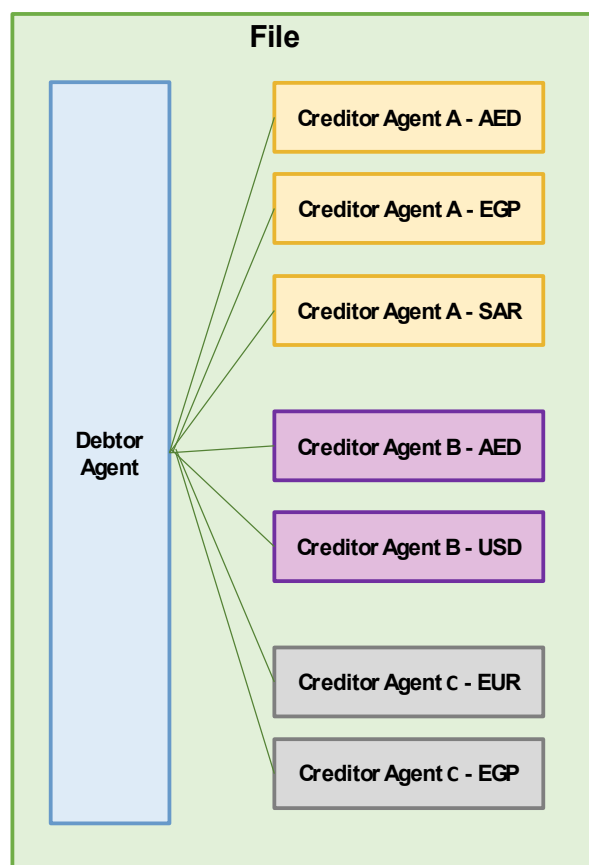


Figure 12: File structure scheme

<b>Use Case ID</b>	<b>IPS-PM-06</b>
<b>Use Case Name</b>	Batch payments from RTGS account holder/NSP
<b>Use Case Description</b>	Batch payments from RTGS account holder or Non-Settlement Participant to other Buna Master Participant or Non-Settlement Participant
<b>Primary Actors</b>	Master Participant, Non-Settlement Participant, Buna IPS
<b>Trigger Event</b>	Non-Settlement Participant (Instructing Agent) received Customer's IPS payment via own channel
<b>Use Case Business Rules</b>	
<ul style="list-style-type: none"> <li>▪ There will be a file with multiple pacs.008 Inside. Each pacs.008 inside the file will be a single pacs.008 (not a batch).</li> <li>▪ Single pacs.008s can have only the same Instructing Agent as other pacs.008 and different (from other pacs.008) Instructed Agents and currencies.</li> <li>▪ File will be divided to individual pacs.008, each of them will be processed separately.</li> <li>▪ Timeout for individual pacs.008 is starting from the moment of sending pacs.008 to receiver.</li> <li>▪ After dividing the file status messages will be created for individual payments only, not for the whole file.</li> </ul>	



<ul style="list-style-type: none"> <li>Whole file can be rejected during accepting the file.</li> </ul>	
<b>Pre-Conditions</b>	
<b>Buna Master Participant A or Non-Settlement Participant A (Instructing Agent) has a position account at Buna IPS.</b> <b>Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least position account.</b>	
<b>Post Conditions</b>	
<b>Instructions from the file divided and processed at Buna IPS</b>	
<b>Basic Flow</b>	
<b>1</b>	Buna Master Participant A/NSP A (Instructing Agent) groups payments into the file and blocks funds for the payments inside the file.
<b>2</b>	Buna Master Participant A/ NSP A generates file in IPS format (file with multiple pacs.008 inside) and sends the file to BUNA IPS.
<b>3</b>	Buna IPS processes security and syntax checks. <ul style="list-style-type: none"> <li>Passed - go to 4;</li> <li>Failed- go to AF1.</li> </ul>
<b>4</b>	Buna IPS creates positive status of the file acceptance (camt.998) to Participant A/NSP A – one message for a whole file
<b>5</b>	Buna IPS divides the file to the individual pacs.008. Go to step 3 of the Use Case IPS-PM-01: Single Credit Transfer (with authorization by Counterparty) from RTGS account holder Or Go to step 3 of the Use Case IPS-PM-04 Single Credit Transfer (with authorization by Counterparty) from Non-Settlement Participant
<b>Alternate Flows</b>	
<b>AF1</b>	<b>File validation is failed at Buna IPS</b>
<b>1</b>	Buna IPS creates a rejection message (camt.998) to Participant A/NSP A – one message for a whole file
<b>2</b>	Rejection message is delivered to Participant A's CBS, customer's funds are unblocked

*Incoming messages*

Senders	MX ISO 20022	Description
Buna Master Participant	File with multiple pacs.008 inside	Batch payment

*Outgoing messages*

Receivers	MX ISO 20022	Description
Buna Master Participant , Non-Settlement Participant	Single pacs.008	Single Customer credit transfer
Buna Master Participant	camt.998	Processing error

#### 4.2.7 Use Case IPS-PM-08: RTP from Creditor to Debtor

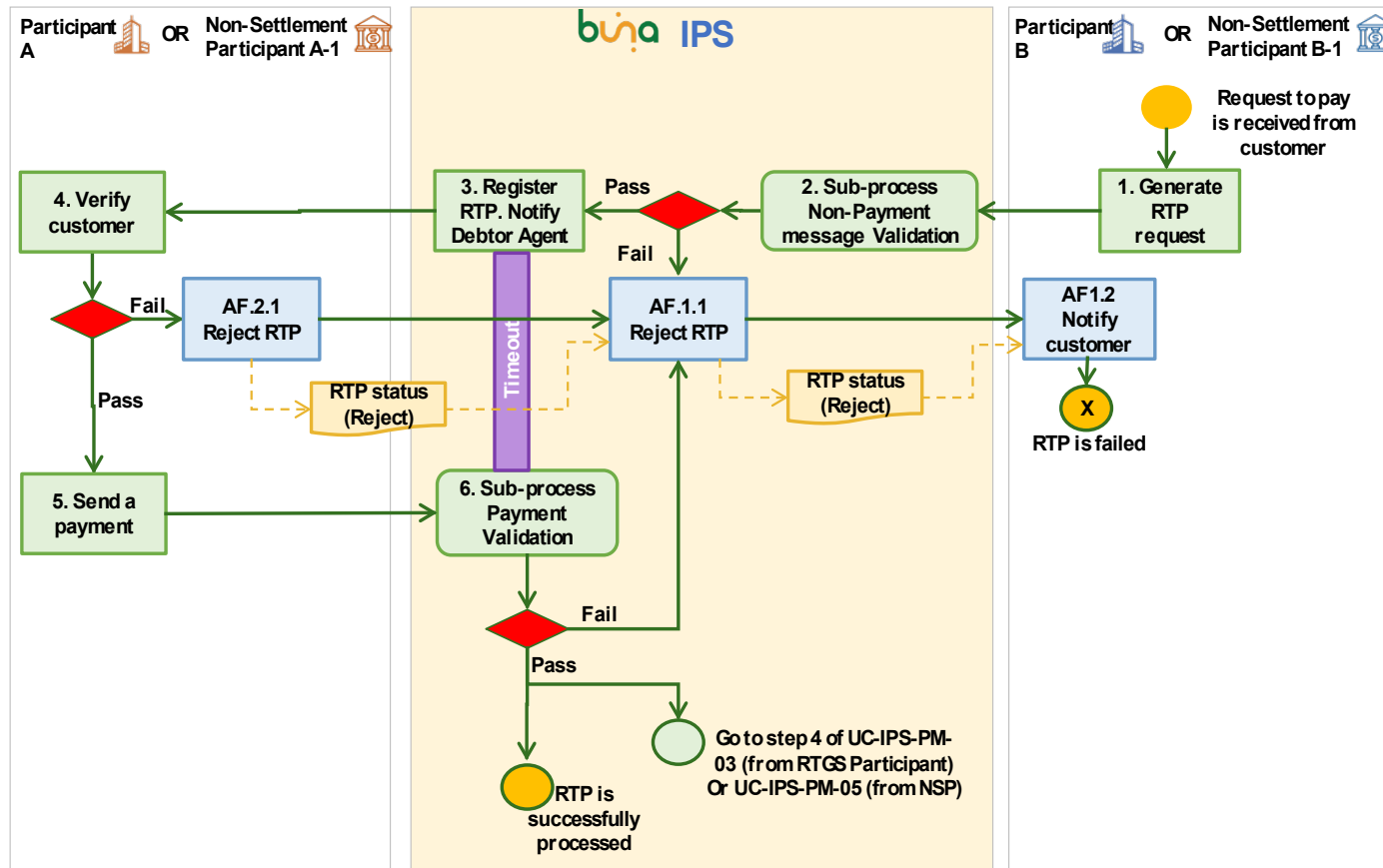


Figure 13: Request to Pay from Creditor to Debtor

<b>Use Case ID</b>	<b>IPS-PM-08</b>
<b>Use Case Name</b>	RTP from Creditor to Debtor
<b>Use Case Description</b>	Request to Pay from Creditor to Debtor
<b>Primary Actors</b>	Master Participant, Non-Settlement Participants, Buna IPS
<b>Trigger Event</b>	Buna Master Participant B or Non-Settlement Participant B-1 (Instructing Agent) received Customer's IPS RTP via own channel
<b>Use Case Business Rules</b>	
The RtP option is mostly used for mobile commerce and e-commerce.	
<b>Pre-Conditions</b>	
Buna Master Participant A or Non-Settlement Participant A-1 (Instructing Agent) has at least a position account. Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least a position account.	
<b>Post Conditions</b>	
Payment is processed successfully	
<b>Basic Flow</b>	
<b>1</b>	Instructed Agent (Buna Master Participant B or Non-Settlement Participant B-1) accepts RTP from the customer. Activities for this step include necessary validations of customer entered data (in CBS). CBS sends RTP (pain.013) to Buna IPS.



2	Execute sub-process «Non-Payment message Validation» (Use Case IPS-PM-14: Non-payment message validation) Additional validation for this Use case is timeout between receiving RtP and Payment based on this RtP receiving. It couldn't be higher than System wide parameter. Passed - go to 3 Failed- go to AF1
3	Buna IPS registers RTP and notifies Instructing Agent (Buna Master Participant A or Non-Settlement Participant A-1) with pain.013
4	Instructing Agent verifies customer. Passed - start to create payment Use Case IPS-PM-03: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder and Use Case IPS-PM-05: Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant) Failed- go to AF2
5	CBS of Instructing Agent generates and sends payment message (pacs.008) to Buna IPS
6	Buna IPS validates the payment based on RTP. If validation is success – go to 7 If validation failed – go to AF1
7	Buna IPS processes the payment. Go to step 4 of Use Case IPS-PM-03: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder or Use Case IPS-PM-05: Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant
<b>Alternate Flows</b>	
<b>AF1</b>	<b>RTP validation is failed at Buna IPS or Payment based on RTP validation is failed at Buna IPS</b>
1	Buna IPS rejects RTP and creates rejection message (pain.014) to Instructed Agent
2	Rejection message is delivered to CBS of Instructed Agent, CBS sends notification to the customer
<b>AF2</b>	<b>RTP validation is failed at Instructing Agent's side</b>
1	Instructing Agent creates rejection message (pain.014) and sends it to Buna IPS. Go to AF1
<b>AF3</b>	<b>Timeout for payment based on RtP was exceeded</b>
1	Go to AF1

*Incoming messages*

Senders	MX ISO 20022	Description
<b>Buna Master Participant , Non-Settlement Participant</b>	pain.013	Request to pay
<b>Buna Master Participant , Non-Settlement Participant</b>	pain.014	RTP status

*Outgoing messages*

Receivers	MX ISO 20022	Description
<b>Buna Master Participant , Non-Settlement Participant</b>	pain.013	Request to pay
<b>Buna Master Participant , Non-Settlement Participant</b>	pain.014	RTP status

#### 4.2.7.1 Use Case IPS-PM-08-1: RTP from Creditor to Debtor with Linked Participant

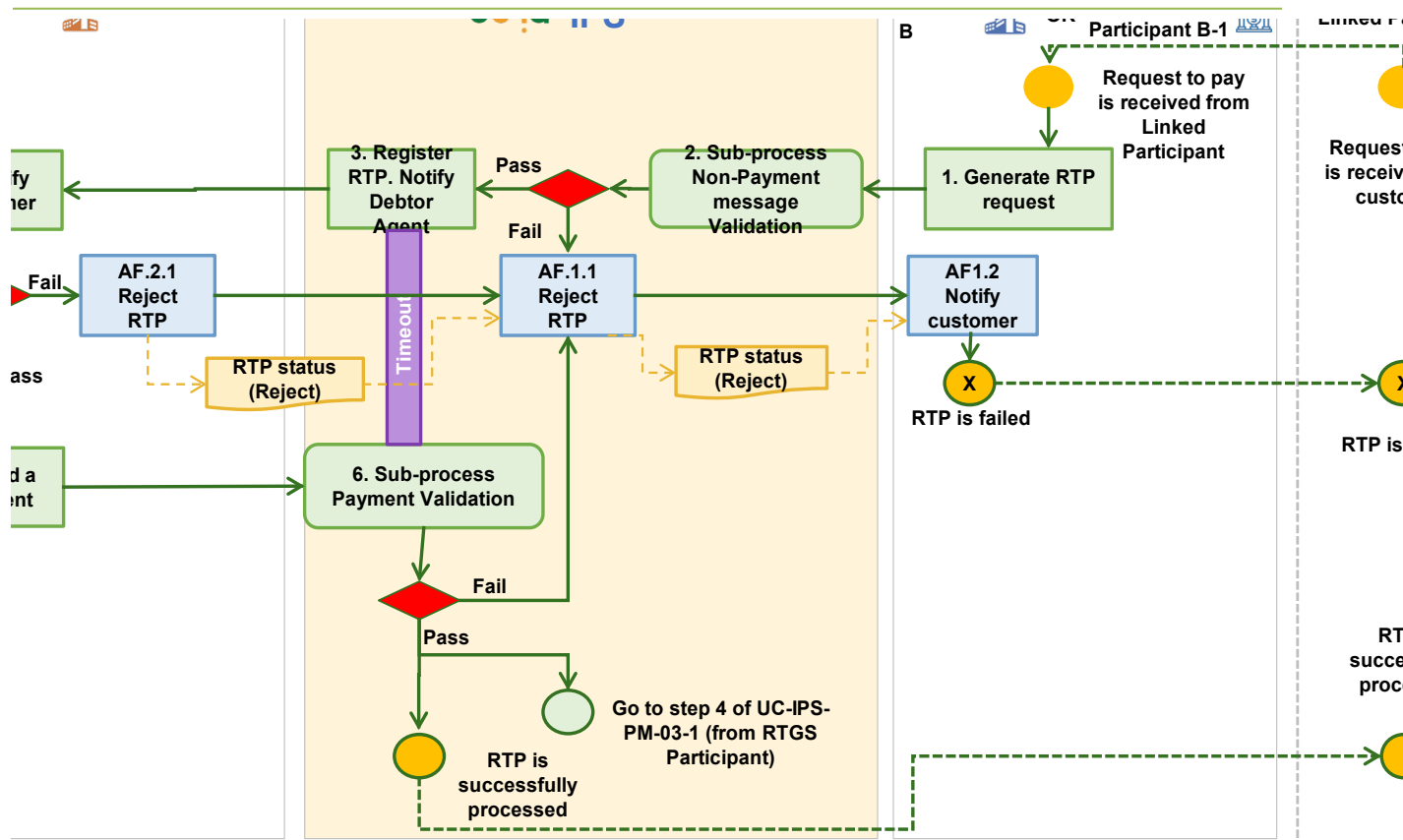


Figure 14-1: Request to Pay from Creditor to Debtor with Linked Participant

<b>Use Case ID</b>	<b>IPS-PM-08-01</b>
<b>Use Case Name</b>	RTP from Creditor to Debtor with Linked Participant
<b>Use Case Description</b>	Request to Pay from Creditor to Debtor with Linked Participant
<b>Primary Actors</b>	Master Participant, Linked Participant, Buna IPS
<b>Trigger Event</b>	Buna Master Participant B (Instructing Agent) received Linked Participant's RTP via own channel
<b>Use Case Business Rules</b>	
The RtP option is mostly used for mobile commerce and e-commerce.	
<b>Pre-Conditions</b>	
Buna Master Participant A (Instructing Agent) has at least a position account. Buna Master Participant B (Instructed Agent) has at least a position account.	
<b>Post Conditions</b>	
Payment is processed successfully	
<b>Basic Flow</b>	
1	Instructed Agent (Buna Master Participant B) accepts RTP from Linked Participant. Activities for this step include necessary validations of customer entered data (in CBS). CBS sends RTP (pain.013) to Buna IPS.
2	Execute sub-process «Non-Payment message Validation» (Use Case IPS-PM-14: Non-payment message validation)





	Additional validation for this Use case is timeout between receiving RtP and Payment based on this RtP receiving. It couldn't be higher than System wide parameter. Passed - go to 3 Failed- go to AF1
3	Buna IPS registers RTP and notifies Instructing Agent (Buna Master Participant A) with pain.013
4	Instructing Agent verifies customer. Passed - start to create paymentUse Case IPS-PM-03-01: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder. Failed- go to AF2
5	CBS of Instructing Agent generates and sends payment message (pacs.008) to Buna IPS
6	Buna IPS validates the payment based on RTP. If validation is success – go to 7 If validation failed – go to AF1
7	Buna IPS processes the payment. Go to step 4 of Use Case IPS-PM-03-01: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder.
<b>Alternate Flows</b>	
<b>AF1</b>	<b>RTP validation is failed at Buna IPS or Payment based on RTP validation is failed at Buna IPS</b>
1	Buna IPS rejects RTP and creates rejection message (pain.014) to Instructed Agent
2	Rejection message is delivered to CBS of Instructed Agent, CBS sends notification to the customer
<b>AF2</b>	<b>RTP validation is failed at Instructing Agent's side</b>
1	Instructing Agent creates rejection message (pain.014) and sends it to Buna IPS. Go to AF1
<b>AF3</b>	<b>Timeout for payment based on RtP was exceeded</b>
1	Go to AF1

*Incoming messages*

Senders	MX ISO 20022	Description
Buna Master Participant	pain.013	Request to pay
Buna Master Participant	pain.014	RTP status

*Outgoing messages*

Receivers	MX ISO 20022	Description
Buna Master Participant	pain.013	Request to pay
Buna Master Participant	pain.014	RTP status

#### 4.2.8 Use Case IPS-PM-09: Request for Return

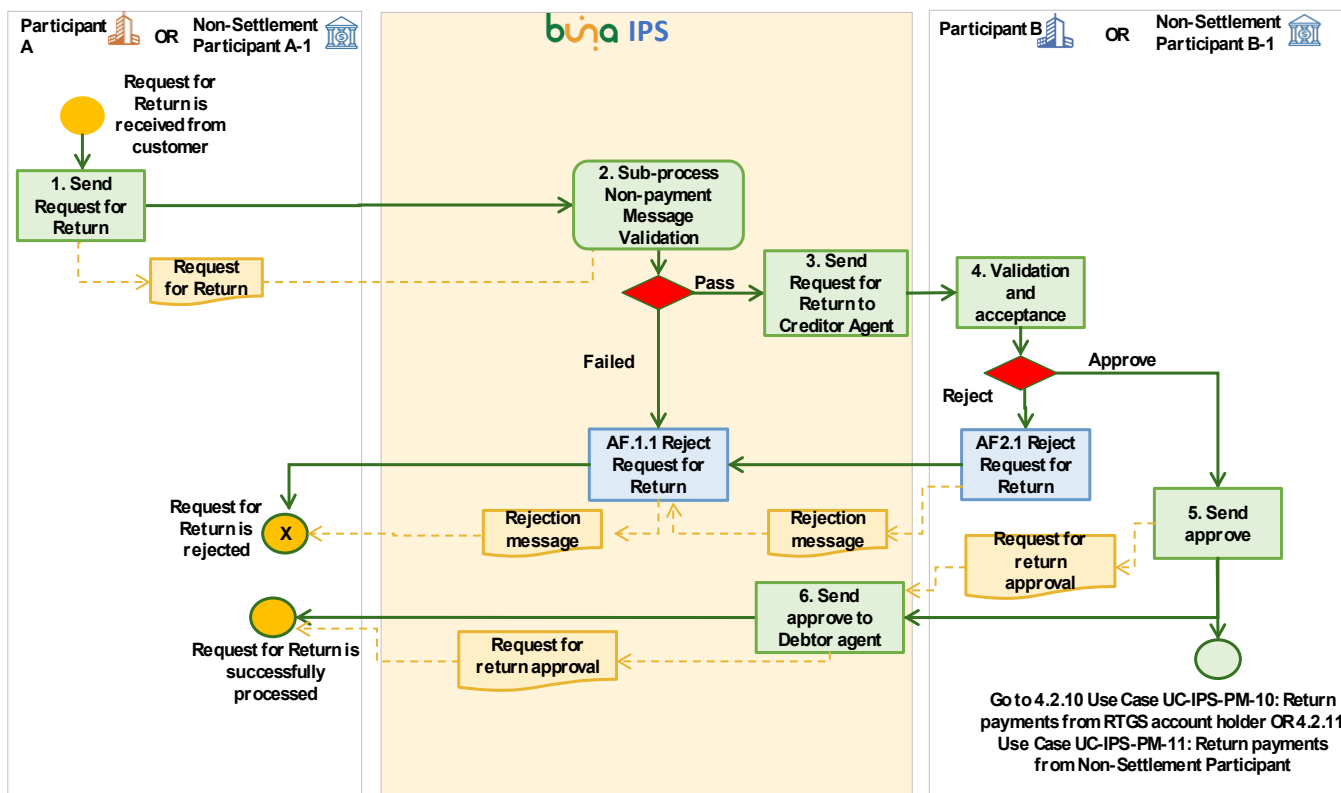


Figure 15: Request for Return

<b>Use Case ID</b>	<b>IPS-PM-09</b>
<b>Use Case Name</b>	Request for Return
<b>Use Case Description</b>	Request to Pay from Creditor to Debtor
<b>Primary Actors</b>	Master Participant, Non-Settlement Participants, Buna IPS
<b>Trigger Event</b>	Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) received Customer's IPS Request for Return via own channel
<b>Use Case Business Rules</b>	
<ul style="list-style-type: none"> <li>Original payment must be posted</li> <li>Request for Return should be send during predefined Retention Period (after that Return will be Rejected)</li> <li>Return Payments based on the Request for Return should be send during predefined Retention Period (after that Return will be Rejected)</li> <li>Also participants are able to request return via Communication and Inquiry module (in this case no messages will be sent, API of this module will be used for communication and after that counterparty will send Return payment)</li> </ul>	
<b>Pre-Conditions</b>	
<p>Buna Master Participant A or Non-Settlement Participant A-1 (Instructing Agent) has at least a position account.</p> <p>Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least a position account.</p>	
<b>Post Conditions</b>	
Request for Return is processed successfully	
<b>Basic Flow</b>	



1	Instructing Agent (Buna Master Participant A or Non-Settlement Participant A-1) accepts Request for Return. Activities for this step include necessary validations of customer entered data (in CBS). CBS sends Request for Return (camt.056) to Buna IPS.
2	Execute sub-process «Non-Payment message Validation» (Use Case IPS-PM-14: Non-payment message validation) and in addition check Original transaction status (it has to be settled). <ul style="list-style-type: none"> <li>Passed - go to 3</li> <li>Failed- go to AF1</li> </ul>
3	Buna IPS registers Request for Return and notifies Instructed Agent (Buna Master Participant B or Non-Settlement Participant B-1) with Request for Return (camt.056)
4	Instructed Agent verifies customer. Passed - go to 5 and start to create return payment (pacs.004) related to Request for Return: 4.2.9 Use Case IPS-PM-10: Return payments from RTGS account holder OR 4.2.10 Use Case IPS-PM-11: Return payments from Non-Settlement Participant Failed- go to AF2
5	CBS of Instructed Agent generates and sends Request for Return successful status (camt.029) to Buna IPS
6	Buna IPS sends Request for Return successful status (camt.029) to Instructing Agent
<b>Alternate Flows</b>	
<b>AF1</b>	<b>RTP validation is failed at Buna IPS</b>
1	Buna IPS rejects Request for Return and creates rejection message (camt.029) for Instructed Agent
<b>AF2</b>	<b>RTP validation is failed at Instructing Agent's side</b>
1	Instructing Agent creates rejection message (camt.029) and sends it to Buna IPS. Go to AF1

*Incoming messages*

Senders	MX ISO 20022	Description
<b>Buna Master Participant , Non-Settlement Participant</b>	camt.056	Request for return
<b>Buna Master Participant , Non-Settlement Participant</b>	camt.029	Request for return approval/ rejection message

*Outgoing messages*

Receivers	MX ISO 20022	Description
<b>Buna Master Participant , Non-Settlement Participant</b>	camt.056	Request for return
<b>Buna Master Participant , Non-Settlement Participant</b>	camt.029	Request for return approval/ rejection message

#### 4.2.8.1 Use Case IPS-PM-09-01: Request for Return with Linked Participant

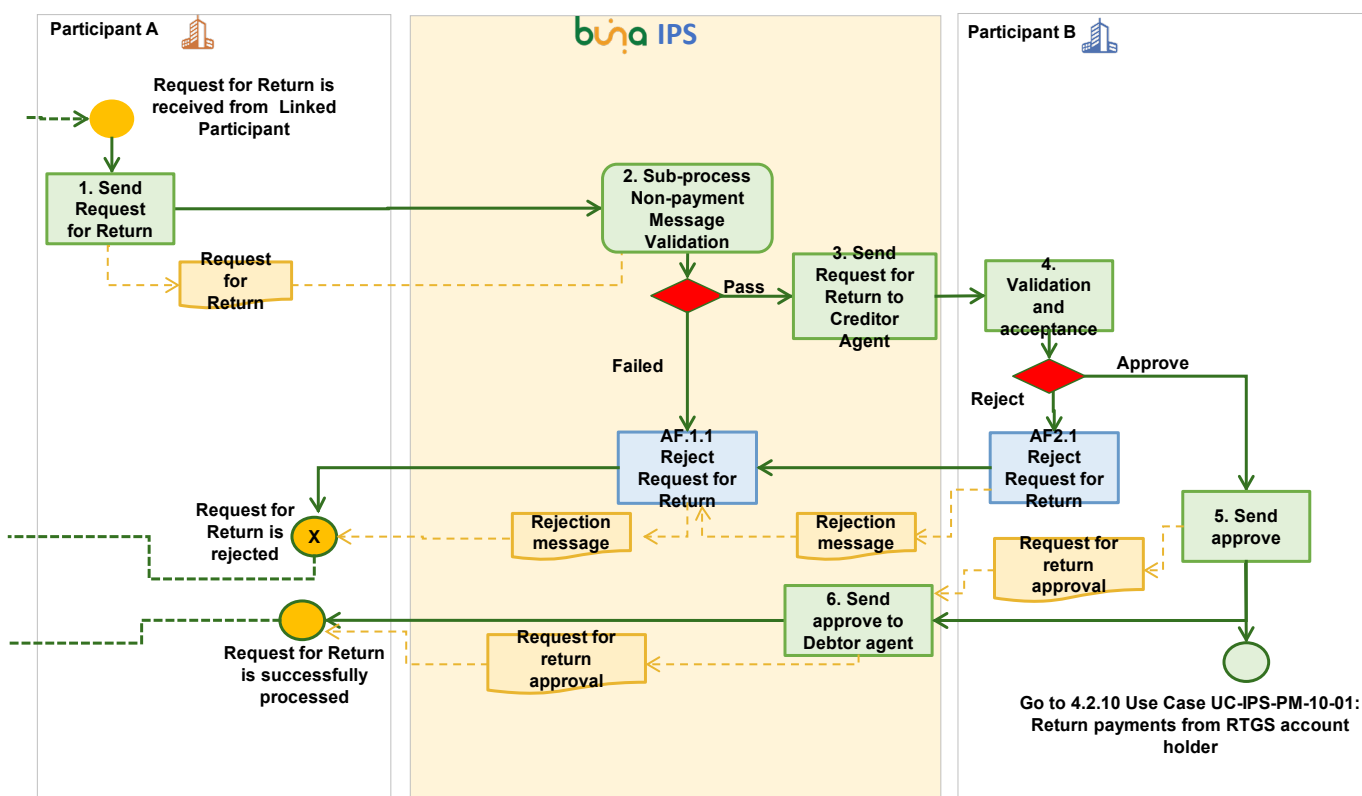


Figure 16-1: Request for Return with Linked Participant

<b>Use Case ID</b>	<b>IPS-PM-09-01</b>
<b>Use Case Name</b>	Request for Return with Linked Participant
<b>Use Case Description</b>	Request to Pay from Creditor to Debtor with Linked Participant
<b>Primary Actors</b>	Master Participant, Linked Participant, Buna IPS
<b>Trigger Event</b>	Buna Master Participant B (Instructed Agent) received Customer's IPS Request for Return via own channel
<b>Use Case Business Rules</b>	
<ul style="list-style-type: none"> <li>• Original payment must be posted</li> <li>• Request for Return should be send during predefined Retention Period (after that Return will be Rejected)</li> <li>• Return Payments based on the Request for Return should be send during predefined Retention Period (after that Return will be Rejected)</li> <li>• Also participants are able to request return via Communication and Inquiry module (in this case no messages will be sent, API of this module will be used for communication and after that counterparty will send Return payment)</li> </ul>	
<b>Pre-Conditions</b>	
<p>Buna Master Participant A (Instructing Agent) has at least a position account.          Buna Master Participant B (Instructed Agent) has at least a position account.</p>	
<b>Post Conditions</b>	
Request for Return is processed successfully	
<b>Basic Flow</b>	



1	Instructing Agent (Buna Master Participant A) accepts Request for Return. Activities for this step include necessary validations of customer entered data (in CBS). CBS sends Request for Return (camt.056) to Buna IPS.
2	Execute sub-process «Non-Payment message Validation» (Use Case IPS-PM-14: Non-payment message validation) and in addition check Original transaction status (it has to be settled). <ul style="list-style-type: none"> <li>Passed - go to 3</li> <li>Failed- go to AF1</li> </ul>
3	Buna IPS registers Request for Return and notifies Instructed Agent (Buna Master Participant B) with Request for Return (camt.056)
4	Instructed Agent verifies customer. Passed - go to 5 and start to create return payment (pacs.004) related to Request for Return: 4.2.9 Use Case IPS-PM-10: Return payments from RTGS account holder OR 4.2.10 Use Case IPS-PM-11: Return payments from Non-Settlement Participant Failed- go to AF2
5	CBS of Instructed Agent generates and sends Request for Return successful status (camt.029) to Buna IPS
6	Buna IPS sends Request for Return successful status (camt.029) to Instructing Agent
<b>Alternate Flows</b>	
<b>AF1</b>	<b>RTP validation is failed at Buna IPS</b>
1	Buna IPS rejects Request for Return and creates rejection message (camt.029) for Instructed Agent
<b>AF2</b>	<b>RTP validation is failed at Instructing Agent's side</b>
1	Instructing Agent creates rejection message (camt.029) and sends it to Buna IPS. Go to AF1

*Incoming messages*

Senders	MX ISO 20022	Description
Buna Master Participant	camt.056	Request for return
Buna Master Participant	camt.029	Request for return approval/ rejection message

*Outgoing messages*

Receivers	MX ISO 20022	Description
Buna Master Participant	camt.056	Request for return
Buna Master Participant	camt.029	Request for return approval/ rejection message

#### 4.2.9 Use Case IPS-PM-10: Return payments from RTGS account holder

Payment scheme is the same as described in Use Case IPS-PM-01: Single Credit Transfer (with authorization by Counterparty) from RTGS account holder

<b>Use Case ID</b>	<b>IPS-PM-10</b>
<b>Use Case Name</b>	Return payments from RTGS account holder
<b>Use Case Description</b>	Return payments from RTGS account holder to other Buna Master Participant or Non-Settlement Participant
<b>Primary Actors</b>	Master Participant, Non-Settlement Participant, Buna IPS
<b>Trigger Event</b>	Buna IPS (Instructing Agent) received Return payment via own channel



Use Case Business Rules	
<ul style="list-style-type: none"> <li>A participant cannot initiate a return payment unless the Original payment is settled or posted.</li> <li>There is a retention period for Return starting of the value date of Original payment. After this period Return payment will be rejected</li> </ul>	
Extends	
Use Case IPS-PM-03: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder	
Pre-Conditions	
Buna Master Participant A (Instructing Agent) has a position account at Buna IPS. Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least a position account.	
Post Conditions	
Payment is posted successfully	
Basic Flow	
1-6	The same as in Use Case IPS-PM-03: Single Credit Transfer (without authorization by Counterparty) from RTGS account holder. Difference is that pacs.004 will be generated instead of pacs.008
Alternate Flows	
AF	The same as in Extended Use Case

*Incoming messages*

Senders	MX ISO 20022	Description
Buna Master Participant	pacs.004	Return payment
Buna Master Participant , Non-Settlement Participant	pacs.002	Payment Authorization

*Outgoing messages*

Receivers	MX ISO 20022	Description
Buna Master Participant	camt.025	Processing error
Buna Master Participant , Non-Settlement Participant	pacs.002	Status of transfer
Buna Master Participant	admi.002	Message rejection
Buna Master Participant , Non-Settlement Participant	pacs.004	Return payment

#### 4.2.10 Use Case IPS-PM-11: Return payments from Non-Settlement Participant

Payment scheme is the same as described in Use Case IPS-PM-05: Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant

<b>Use Case ID</b>	<b>IPS-PM-11</b>
<b>Use Case Name</b>	Return payments from Non-Settlement Participant
<b>Use Case Description</b>	Return payments from Non-Settlement Participant to other Buna Master Participant or Non-Settlement Participant
<b>Primary Actors</b>	Master Participant, Non-Settlement Participant, Buna IPS



<b>Trigger Event</b>	Non-Settlement Participant (Instructing Agent) received Customer's IPS Return payment via own channel
<b>Use Case Business Rules</b>	
<ul style="list-style-type: none"> <li>Original payment should be posted</li> </ul>	
<b>Extends</b>	
<b>Use Case IPS-PM-05: Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant</b>	
<b>Pre-Conditions</b>	
<b>Buna Master Participant A (Instructing Agent) has a position account at Buna IPS. Buna Master Participant B or Non-Settlement Participant B-1 (Instructed Agent) has at least a position account.</b>	
<b>Post Conditions</b>	
<b>Payment is posted successfully</b>	
<b>Basic Flow</b>	
<b>1-6</b>	The same as in Use Case IPS-PM-05: Single Credit Transfer (without authorization by Counterparty) from Non-Settlement Participant. Difference is that pacs.004 will be generated instead of pacs.008
<b>Alternate Flows</b>	
<b>AF</b>	The same as in Extended Use Case

*Incoming messages*

<b>Senders</b>	<b>MX ISO 20022</b>	<b>Description</b>
<b>Buna Master Participant</b>	pacs.004	Return payment
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.002	Payment Authorization

*Outgoing messages*

<b>Receivers</b>	<b>MX ISO 20022</b>	<b>Description</b>
<b>Buna Master Participant</b>	camt.025	Processing error
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.002	Status of transfer
<b>Buna Master Participant</b>	admi.002	Message rejection
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.004	Return payment

#### 4.2.11 Use Case IPS-PM-12: Payment Validation

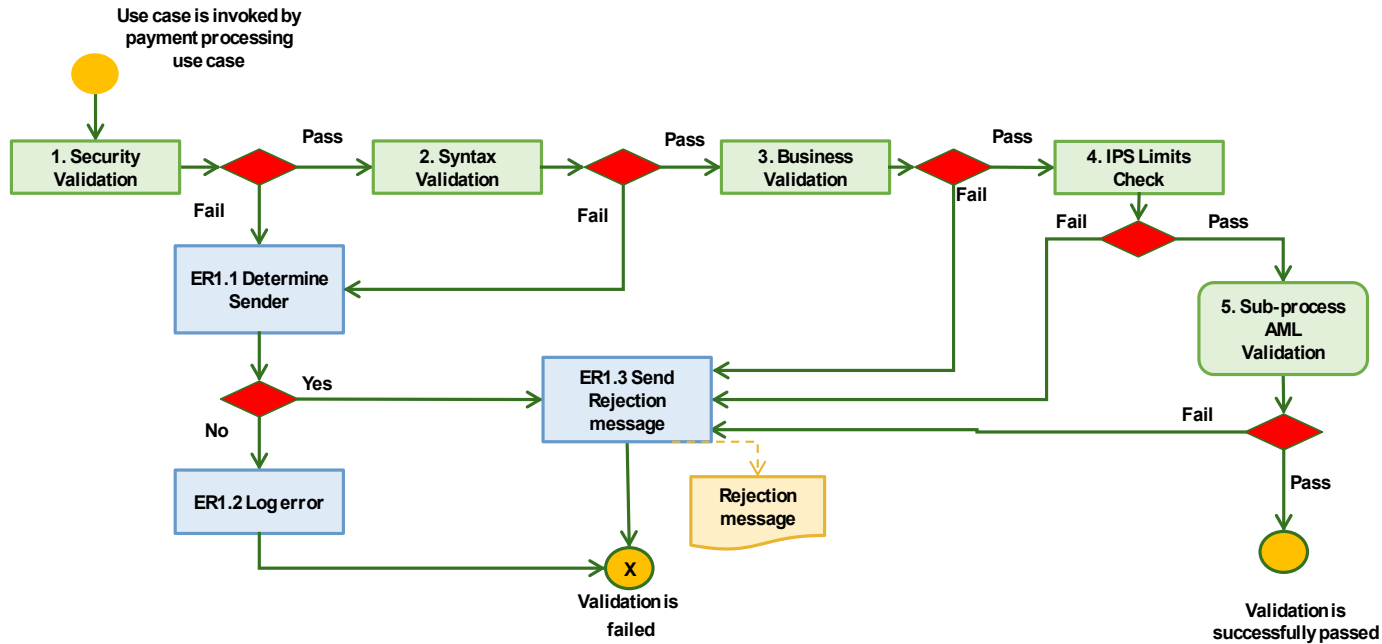


Figure 17: Payment Validation

Use Case ID	<b>IPS-PM-12</b>
Use Case Name	Payment Message validation
Use Case Description	General validation process for all incoming payment messages. Validation rules could be extended in other use cases for specific scenario's
Primary Actors	Validation is a sub process. It is invoked by primary use cases
Trigger Event	Incoming payment message.
<b>Use Case Business Rules</b>	
<b>Security Validation:</b>	
1. Incoming message signature is valid for the sender	
<b>Structural Validation:</b>	
1. Incoming message conforms to the XSD scheme	
<b>Business Validation:</b>	
1. Message type is allowed in current window	
2. Future value date is not allowed	
3. Sender is in state "Active".	
4. Incoming messages are not blocked for the sender.	
5. Access Rights: The following rules have to be met:	
a. The sender has permission for the message type for current business day window	
b. The sender has permission to act on behalf of the originator	
6. Currency of the payment is in a list of selected currencies	
7. Check timestamp of message creation on Participant A or Non-Settlement Participant side with allowed timeout for message delivery (old payments will be rejected)	
8. Buna IPS shall validate that the intended receiving participant of a payment transaction is reachable within Buna. Buna IPS shall validate that the receiving participant is also a participant in Buna.	





<p>9. Debited and credited accounts are not blocked for debit and credit.</p> <p>10. Buna IPS shall validate that the payment transaction currency matches the currency defined for both the account of the sender and that of the receiver.</p> <p>11. For returns – check if Retention period was not exceeded</p> <p><b>IPS Limits check:</b></p> <ol style="list-style-type: none"> <li>1. Check settlement limit amount</li> <li>2. Check position limit amount</li> </ol> <p>Settlement limit account or position account cannot be debited with the amount higher than current available position registered in Buna IPS for that account.</p> <ol style="list-style-type: none"> <li>3. Buna IPS shall validate that the amount of the payment transaction does not exceed the transaction limit threshold of the respective currency. Different currencies are expected to have different threshold.</li> </ol> <p><b>AML:</b></p> <ol style="list-style-type: none"> <li>1. AML list check (via integration with en.filtering)</li> </ol>	
<b>Pre-Conditions</b>	
Incoming message is received	
<b>Post Conditions</b>	
Incoming message is successfully validated or rejected.	
<b>Basic Flow</b>	
1	Security Validation: Check signature against the sender of the message. On failure, execute ER1.1
2	Syntax Validation: Perform XSD validation of the incoming message. On failure, execute ER1.1
3	Business validation: Check all business rules. On failure, execute ER1.3
4	Limits check: check limits. On failure, execute ER1.3
5	AML Validation: The solution shall undertake checks through AML list (standard BUNA functionality) of all transactions in agreed sanctions lists. On failure, execute ER1.3
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
ER1.1	Try to determine sender. If the sender of the message can be determined, then execute ER1.3. else execute ER1.2.
ER1.2	Log error. Manual handling and investigation by Buna Administrator.
ER1.3	Buna IPS creates a rejection message (pacs.002 or camt.025 or admi.002). Buna IPS Sends the rejection message to the sender of the incoming message. Transaction status becomes “Rejected”.

*Outgoing messages*

Receivers	MX ISO 20022	Description
<b>Buna Master Participant , Non-Settlement Participant</b>	camt.025	Processing error
<b>Buna Master Participant , Non-Settlement Participant</b>	pacs.002	Status of transfer
<b>Buna Master Participant , Non-Settlement Participant</b>	admi.002	Message rejection

#### 4.2.12 Use Case IPS-PM-13: Threshold check

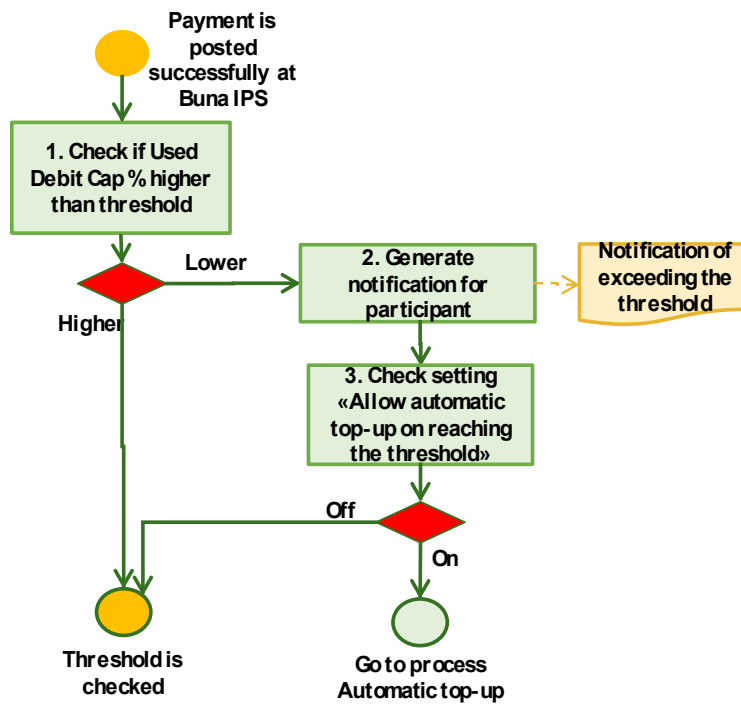


Figure 18: Threshold check

Use Case ID	<b>IPS-PM-13</b>
Use Case Name	Threshold check
Use Case Description	After each successful settlement Buna will check threshold on Settlement limit account
Primary Actors	Buna IPS
Trigger Event	IPS Payment successful posting
Use Case Business Rules	
N/A	
Pre-Conditions	
N/A	
Post Conditions	
Threshold is checked	
Basic Flow	
1	Check if used Debit Cap % higher than threshold parameter: <ul style="list-style-type: none"> <li>Higher – threshold is checked successfully</li> <li>Lower – go to 2</li> </ul>
2	Generate notification for Participant (camt.052)
3	Check setting «Allow automatic top-up on reaching the threshold» Off - threshold is checked, end of process On – Go to process «Automatic top-up (Use Case IPS-LIQ-02: Automatic top-up (increase) of Settlement limit account )
Alternate Flows	
N/A	
Exceptions	
N/A	

Outgoing messages

Receivers	MX ISO 20022	Description
Buna Master Participant	camt.052	Notification about top-up needed

#### 4.2.13 Use Case IPS-PM-14: Non-payment message validation

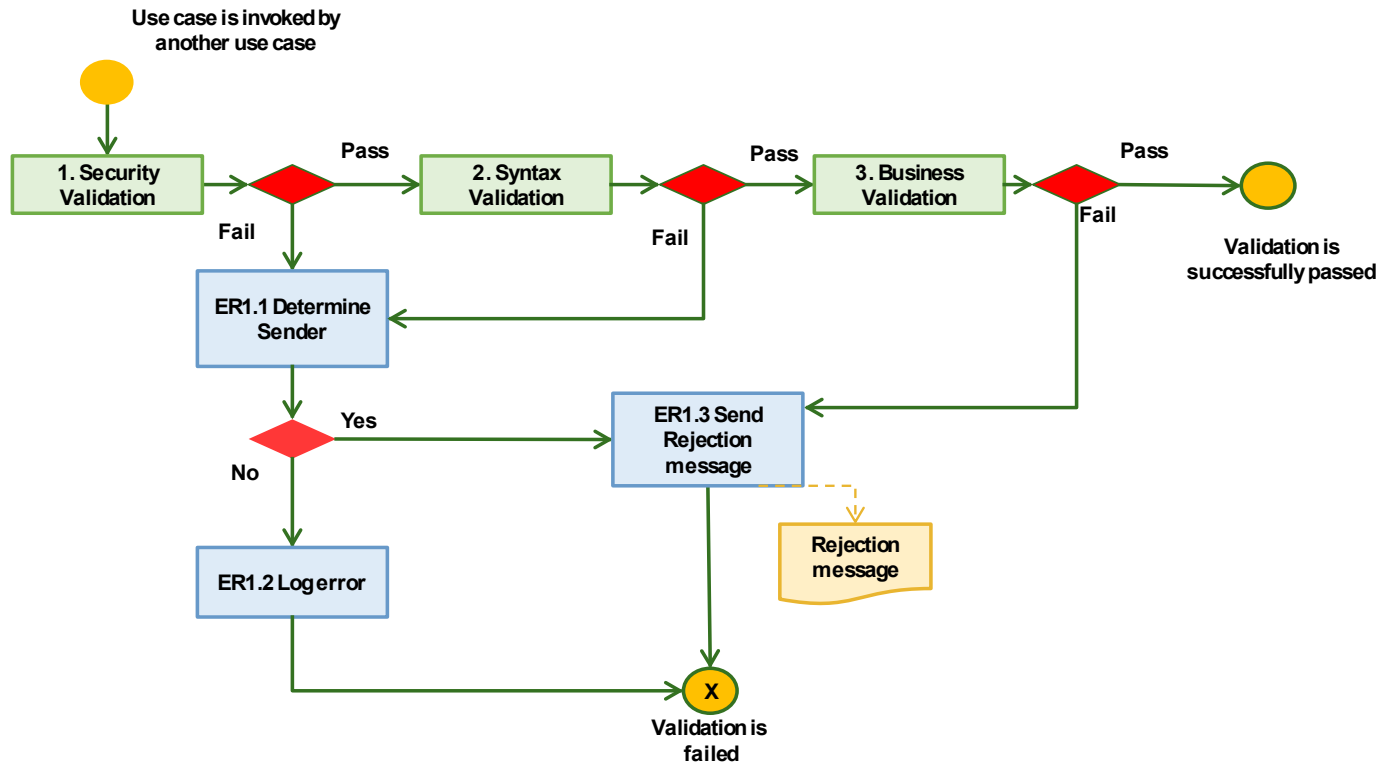


Figure 19: Non-payment message validation

Use Case ID	<b>IPS-PM-14</b>
Use Case Name	Non-payment Message validation
Use Case Description	General validation process for all incoming non-payment messages. Validation rules could be extended in other use cases for specific scenario's
Primary Actors	Validation is a sub process. It is invoked by primary use cases
Trigger Event	Incoming non-financial message including error messages
<b>Use Case Business Rules</b>	
<b>Security Validation:</b>	
1. Incoming message signature is valid for the sender	
<b>Structural Validation:</b>	
1. Incoming message conforms to the XSD scheme	
<b>Business Validation:</b>	
1. Message type is allowed in current window (business day period)	
2. Incoming messages are not blocked for the sender.	
3. Access Rights: The following rules have to be met:	

<ul style="list-style-type: none"> <li>a. The sender has permission for the message type for current business day window</li> <li>b. The sender has permission to act on behalf of the originator</li> </ul>	
Additional business validation rules can be defined in separate use cases	
Pre-Conditions	
Incoming message is received	
Post Conditions	
Incoming message is successfully validated or rejected.	
Basic Flow	
1	Security Validation: Check signature against the sender of the message. On failure execute ER1.1
2	Syntax Validation: Perform XSD validation of the incoming message. On failure execute ER1.1
3	Business validation: Check all business rules. In case of failure execute ER1.4
Alternate Flows	
N/A	
Exceptions	
ER1.1	Try to determine sender. If the sender of the message can be determined, then execute ER1.4. else execute ER1.2.
ER1.2	Log error. Manual handling and investigation by Buna Administrator.
ER1.3	Send rejection message to the sender of the incoming message: camt.025 or admi.002.

#### 4.2.14 Use Case IPS-PM-15: IPS Final Settlement

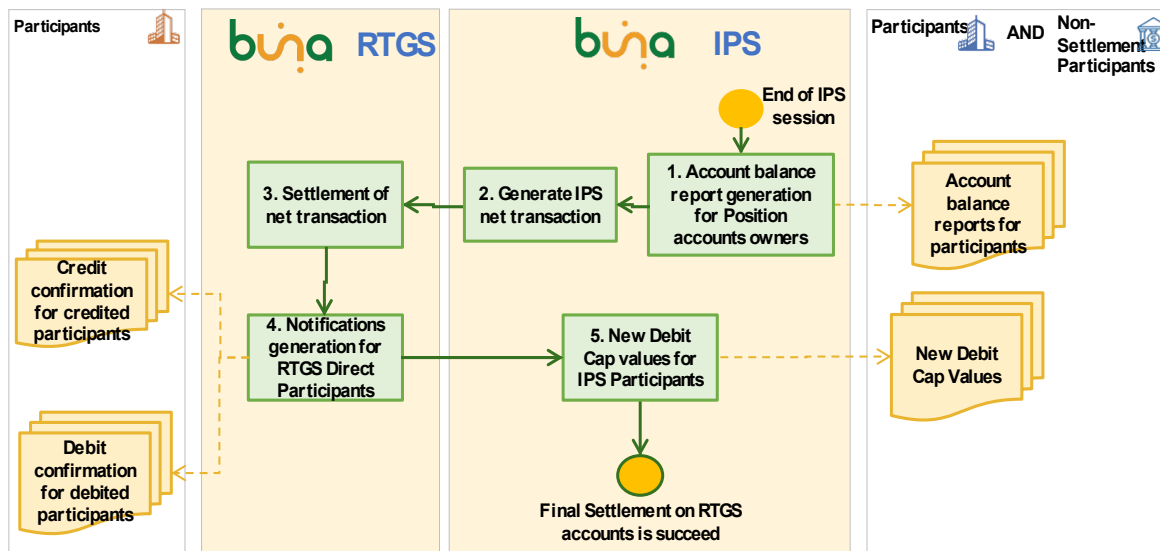


Figure 20: IPS Final Settlement

Use Case ID	<b>IPS-PM-15</b>
Use Case Name	IPS Final Settlement



Use Case Description	Final Settlement of obligations of participants on RTGS settlement accounts
Primary Actors	Buna Master Participant, Buna IPS, Buna RTGS
Trigger Event	Buna end of IPS session action is activated
<b>Use Case Business Rules</b>	
Buna IPS calculates final positions for Buna Master Participant posted since previous final settlement and sends it to Buna RTGS, where final settlement on RTGS accounts of Master Participant will be done.	
<b>Pre-Conditions</b>	
There were posted transactions since previous final settlement	
<b>Post Conditions</b>	
IPS net transaction generated by Buna IPS is successfully settled at Buna RTGS.	
<b>Basic Flow</b>	
1	Buna IPS generates and sends account balance reports (camt.052) for Position Accounts' owners and SLA account owners.
2	Buna IPS calculates final positions for Buna Master Participant posted since previous final settlement, generates IPS net transaction and transmits it to Buna RTGS.
3	Settlement of Net transaction at Buna RTGS. RTGS accounts of Buna Master Participant (Sponsor accounts) are Debited in case of Debit Positions and Credited in case of Credit Positions.
4	Buna RTGS generates and sends notifications: 1) Credit confirmation (camt.054) to credited Participants 2) Debit confirmation (camt.054) to debited Participants
5	Buna IPS generates and sends new Debit Cap values (camt.010) to IPS Participants which Debit Cap values were changed.
<b>Alternate Flows</b>	

*Outgoing messages*

Receivers	MX ISO 20022	Description
<b>Buna Master Participant</b>	camt.054	Credit confirmation
<b>Buna Master Participant</b>	camt.054	Debit confirmation
<b>Buna Master Participant /Non-Settlement Participant</b>	camt.052	Account Balance Report
<b>Buna Master Participant /Non-Settlement Participant</b>	camt.010	New Debit Cap Value

## 4.3 LIQUIDITY MANAGEMENT USE CASES

### 4.3.1 Use Case IPS-LIQ-01: Manual top-up (increase) of Settlement limit account Debit cap

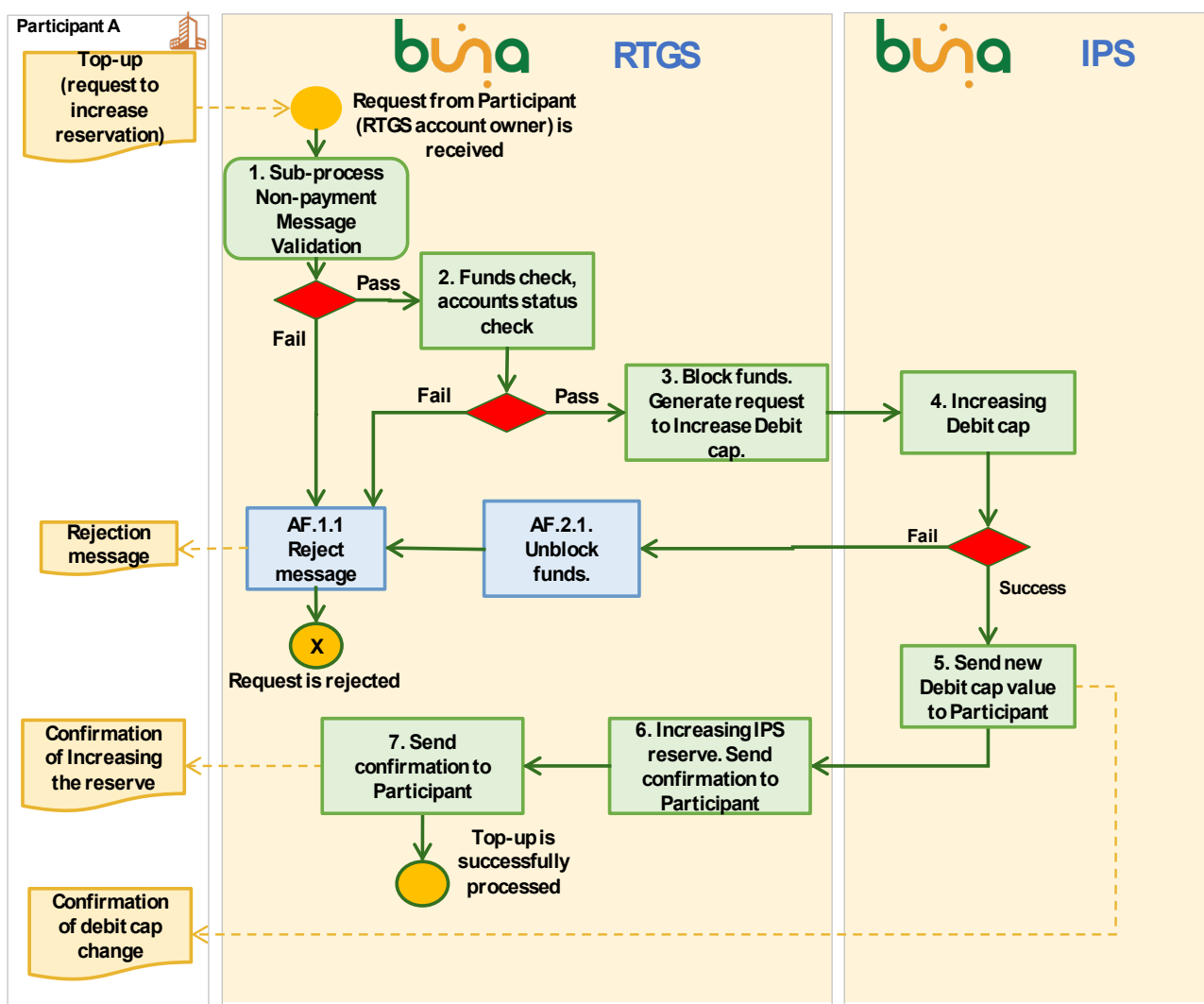


Figure 21: Manual top-up of Settlement limit account limit

<b>Use Case ID</b>	<b>IPS-LIQ-01</b>
<b>Use Case Name</b>	Manual top-up (increase) of Settlement limit account Debit cap
<b>Use Case Description</b>	Manual top-up (increase) of Settlement limit account Debit cap via request to change limit
<b>Primary Actors</b>	Master Participant, Buna IPS, Buna RTGS
<b>Trigger Event</b>	Request to increase reserve (camt.050) is received from RTGS account holder
<b>Use Case Business Rules</b>	
Participants should maintain sufficient funds in their respective accounts in order not to interrupt the settlement of transactions, accounting for all non-operating hours (including weekends and holidays).	
If debiting account is locked for debit then Top-up will be Rejected.	
<b>Pre-Conditions</b>	
Settlement limit account is active.	
<b>Post Conditions</b>	
Debit cap of Settlement limit account is increased, Reserve is Increased	
<b>Basic Flow</b>	



1	Execute sub-process «Non-Payment message Validation» (Use Case IPS-PM-14: Non-payment message validation). In addition, Funds availability check is processed. Passed - go to 2 Failed- go to AF1
2	Funds check and account status check Passed - go to 2 Failed- go to AF1
3	Block funds. Generate request to increase Debit cap
4	Increasing the Debit cap. Success – go to 4 Failed – go to AF2
5	Send confirmation of debit cap change (camt.010) to Participant.
6	Increasing IPS reserve.
7	Send confirmation of IPS reserve increase (pacs.002) to Participant.
<b>Alternate Flows</b>	
<b>AF1</b>	<b>Request validation is failed at Buna</b>
1	Buna RTGS rejects Request and sends reject notification (pacs.002) to Settlement limit account holder
<b>AF2</b>	<b>Attempt to Increase IPS reserve was unsuccessful</b> (for example, account was locked for credit or some other reasons)
1	Buna RTGS unblocks funds. Go to AF1

*Incoming messages*

Senders	MX ISO 20022	Description
Buna Master Participant	camt.050	Request to increase reserve*

*Outgoing messages*

Receivers	MX ISO 20022	Description
Buna Master Participant	camt.010	Confirmation of Debit Cap Change
Buna Master Participant	pacs.002	Status/ Rejection message

\*Formats for the RTGS messages will be described at RTGS message formats handbook

#### 4.3.2 Use Case IPS-LIQ-02: Automatic top-up (increase) of Settlement limit account Debit cap

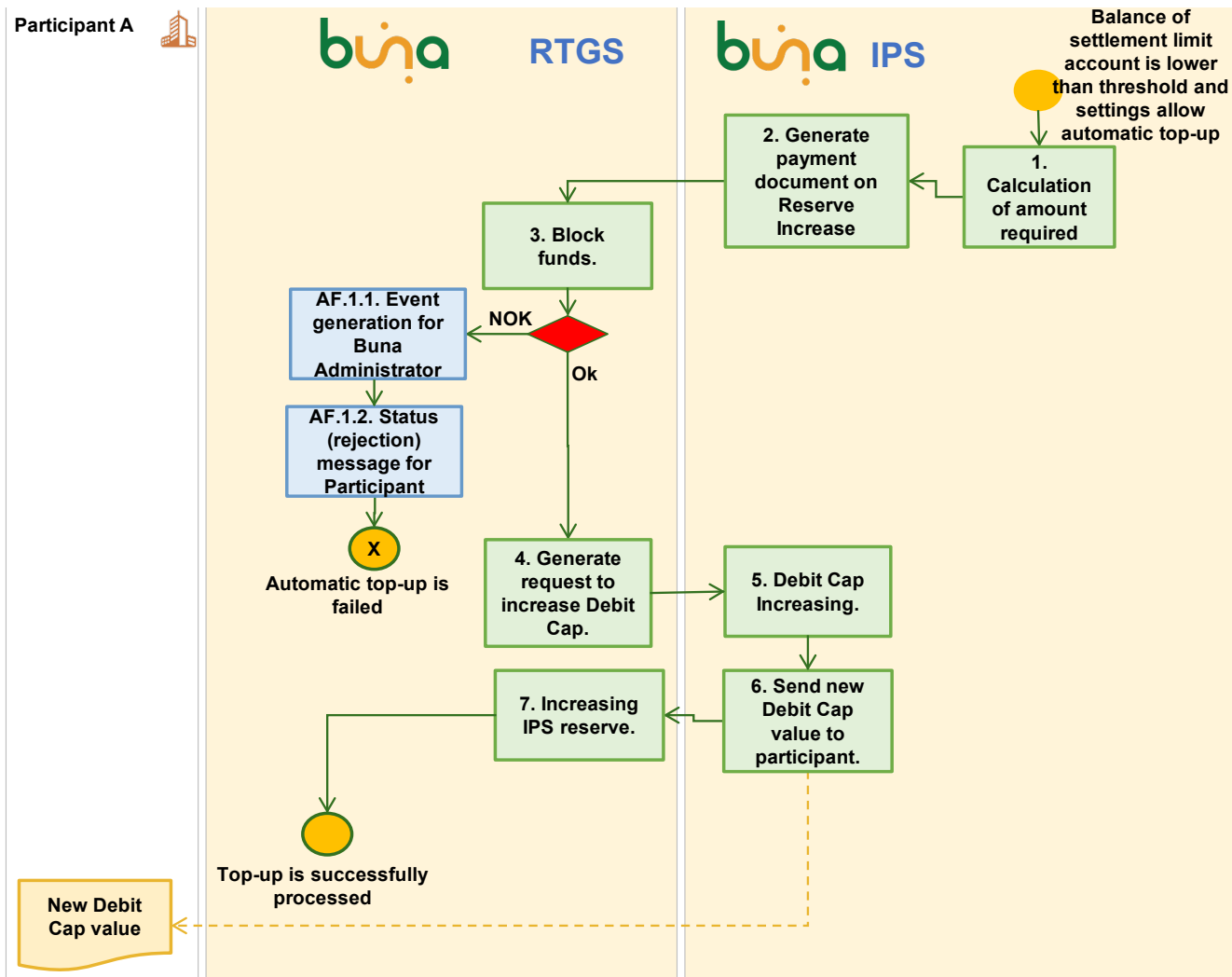


Figure 22: Automatic top-up of Settlement limit account limit

<b>Use Case ID</b>	<b>IPS-LIQ-02</b>
<b>Use Case Name</b>	Automatic top-up (increase) of Settlement limit account Debit cap
<b>Use Case Description</b>	Automatic top-up (increase) of Settlement limit account Debit cap on reaching the threshold
<b>Primary Actors</b>	Master Participant, Buna IPS, Buna RTGS
<b>Trigger Event</b>	Invoked by Use case threshold check
<b>Use Case Business Rules</b>	
<p>There will be settings:</p> <ul style="list-style-type: none"> <li>to allow or NOT allow automatic top-up of Settlement limit account</li> <li>System wide % of automatic top-up (from Debit Cap value)</li> <li>Base watermark to which level automatic top-up will add money for each participant's Settlement limit account (this setting is of higher priority than system wide one, but when watermark is empty system settings will be used)</li> <li>Watermark % - percent from base watermark, after exceeding this level automatic top-up will be done.</li> </ul> <p>This settings are managed by Buna DBO Administrators.</p>	
<b>Pre-Conditions</b>	





<b>Settlement limit account is open</b>	
<b>Post Conditions</b>	
<b>Debit cap of Settlement limit account is increased, Reserve is Increased</b>	
<b>Basic Flow</b>	
<b>1</b>	Buna IPS calculates required amount for automatic top-up
<b>2</b>	Buna IPS generates payment document on Reserve Increase.
<b>3</b>	Buna RTGS tries to execute Block of funds. Ok – go to 4 NOK – go to AF1
<b>4</b>	Buna RTGS generates the request to increase Debit cap.
<b>5</b>	Buna IPS Increases Debit cap of Settlement limit account
<b>6</b>	Generation of new Debit Cap value to participant (camt.010)
<b>7</b>	Buna RTGS Increases IPS reserve.
<b>Alternate Flows</b>	
<b>AF1</b>	<b>Block of funds was failed</b>
<b>1</b>	Event generation for Buna Administrator

*Outgoing messages*

<b>Receivers</b>	<b>MX ISO 20022</b>	<b>Description</b>
<b>Buna Master Participant</b>	camt.010	New Debit cap value

**4.3.3 Use Case IPS-LIQ-03: IPS Settlement limit account withdrawal (decrease).**

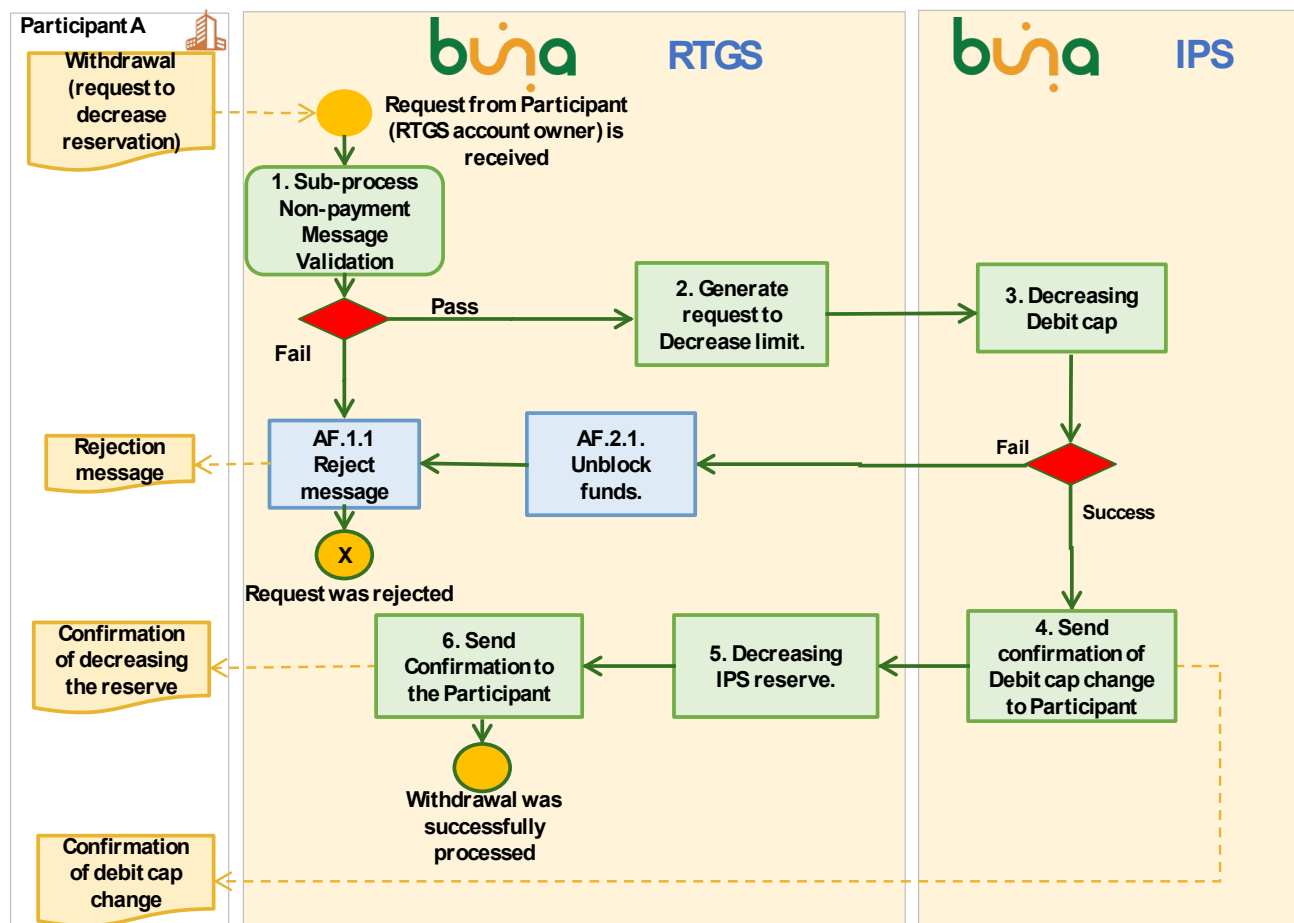


Figure 23: Settlement limit account withdrawal

<b>Use Case ID</b>	<b>IPS-LIQ-03</b>
<b>Use Case Name</b>	Settlement limit account withdrawal (decrease).
<b>Use Case Description</b>	Reducing Debit cap of Settlement limit account via request to reduce reserve
<b>Primary Actors</b>	Master Participant, Buna IPS, Buna RTGS
<b>Trigger Event</b>	Request to decrease reserve (camt.051) is received from RTGS account holder
<b>Use Case Business Rules</b>	
<p>The automatic defunding process will be disabled for funds reserved under the IPS position and participants can top-up or withdraw from their accounts at any point of time during the operating window of a given currency.</p> <p>IPS Reserve = IPS Account Debit Cap</p> <p>In case Participant is in a debit position in IPS it means that some part of his Debit Cap is already used, and this part cannot be taken already from IPS reserve to RTGS settlement</p>	
<b>Pre-Conditions</b>	
Settlement limit account is open	
<b>Post Conditions</b>	
Debit cap of Settlement limit account is decreased, Reserve is decreased	
<b>Basic Flow</b>	
<b>1</b>	Execute sub-process «Non-Payment message Validation» (Use Case IPS-PM-14: Non-payment message validation). Additional validation of accounts status.



	Passed - go to 2 Failed- go to AF1
<b>2</b>	Generate request to decrease Debit cap
<b>3</b>	Attempt to decrease Debit cap (Check whether new limit value is less then negative aggregated position) Success - go to 4 Fail- go to AF1
<b>4</b>	Send confirmation of Debit Cap change (camt.010) to Participant
<b>5</b>	Decreasing IPS reserve.
<b>6</b>	Send status (pacs.002) to Participant.
<b>Alternate Flows</b>	
<b>AF1</b>	<b>Request validation is failed at Buna</b>
<b>1</b>	Buna IPS rejects Request and sends reject notification (pacs.002) to Settlement limit account holder
<b>AF2</b>	<b>Limit increase is failed at Buna</b>
<b>1</b>	Buna RTGS unblocks funds. Go to AF1.1

*Incoming messages*

Senders	MX ISO 20022	Description
<b>Buna Master Participant</b>	camt.051	Request to decrease reserve*

*Outgoing messages*

Receivers	MX ISO 20022	Description
<b>Buna Master Participant</b>	pacs.002	Status/Rejection message
<b>Buna Master Participant</b>	camt.010	New Debit cap value

\*Formats for the RTGS messages will be described at RTGS message formats handbook

#### 4.3.4 Use Case IPS-LIQ-04: Position IPS account Debit cap change

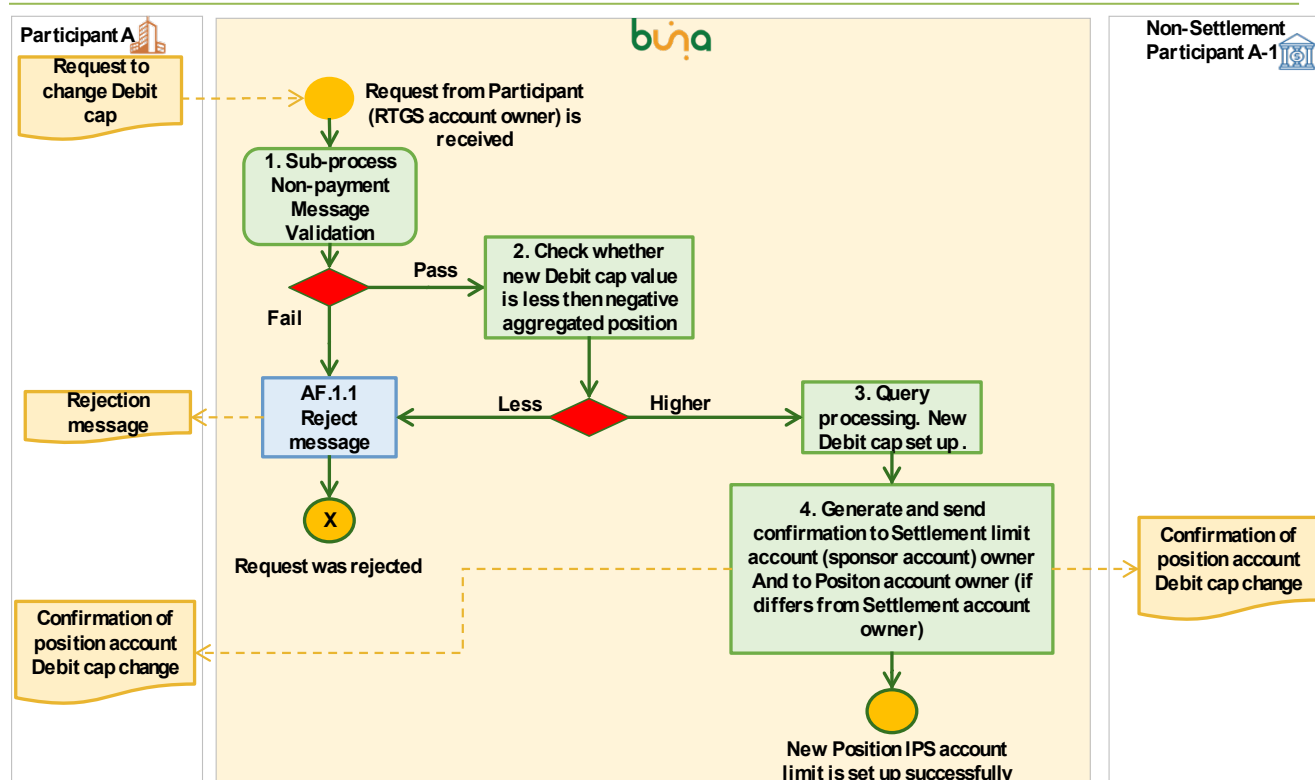


Figure 24: Position IPS account limit set up

<b>Use Case ID</b>	<b>IPS-LIQ-04</b>
<b>Use Case Name</b>	Position IPS account Debit cap change
<b>Use Case Description</b>	Position IPS account Debit cap change
<b>Primary Actors</b>	Master Participant, Non-Settlement Participants, Buna IPS, Buna RTGS
<b>Trigger Event</b>	Request to change Debit cap (camt.011) on Position account of Master Participant itself or Non-Settlement Participant is received from RTGS account holder
<b>Use Case Business Rules</b>	
<b>Limit of the Position account could be changed only by Settlement limit account owner (Sponsor account)</b>	
<b>Pre-Conditions</b>	
<b>Position account is open</b>	
<b>Post Conditions</b>	
<b>Limit of Position account is changed</b>	
<b>Basic Flow</b>	
<b>1</b>	Execute sub-process «Non-Payment message Validation» (Use Case IPS-PM-14: Non-payment message validation). Passed - go to 2 Failed- go to AF1
<b>2</b>	Check whether new Debit cap value is less then negative aggregated position Higher - go to 3 Less- go to AF1
<b>3</b>	Buna IPS set up new Debit cap on Position account
<b>4</b>	Buna IPS generates and sends confirmation (camt.010) to Participant (RTGS account owner) and Non-Settlement Participant



Alternate Flows	
<b>AF1</b>	<b>Request validation is failed at Buna IPS</b>
<b>1</b>	Buna IPS rejects Request and sends reject notification (camt.025) to RTGS account holder

*Incoming messages*

Senders	MX ISO 20022	Description
<b>Buna Master Participant</b>	camt.011	Request to change Debit cap

*Outgoing messages*

Receivers	MX ISO 20022	Description
<b>Buna Master Participant , Non-Settlement Participant</b>	camt.010	Confirmation of position account Debit cap change
<b>Buna Master Participant</b>	camt.025	Status/Rejection message

**4.3.5 Use Case IPS-LIQ-05: Request the Position IPS account Debit cap value**

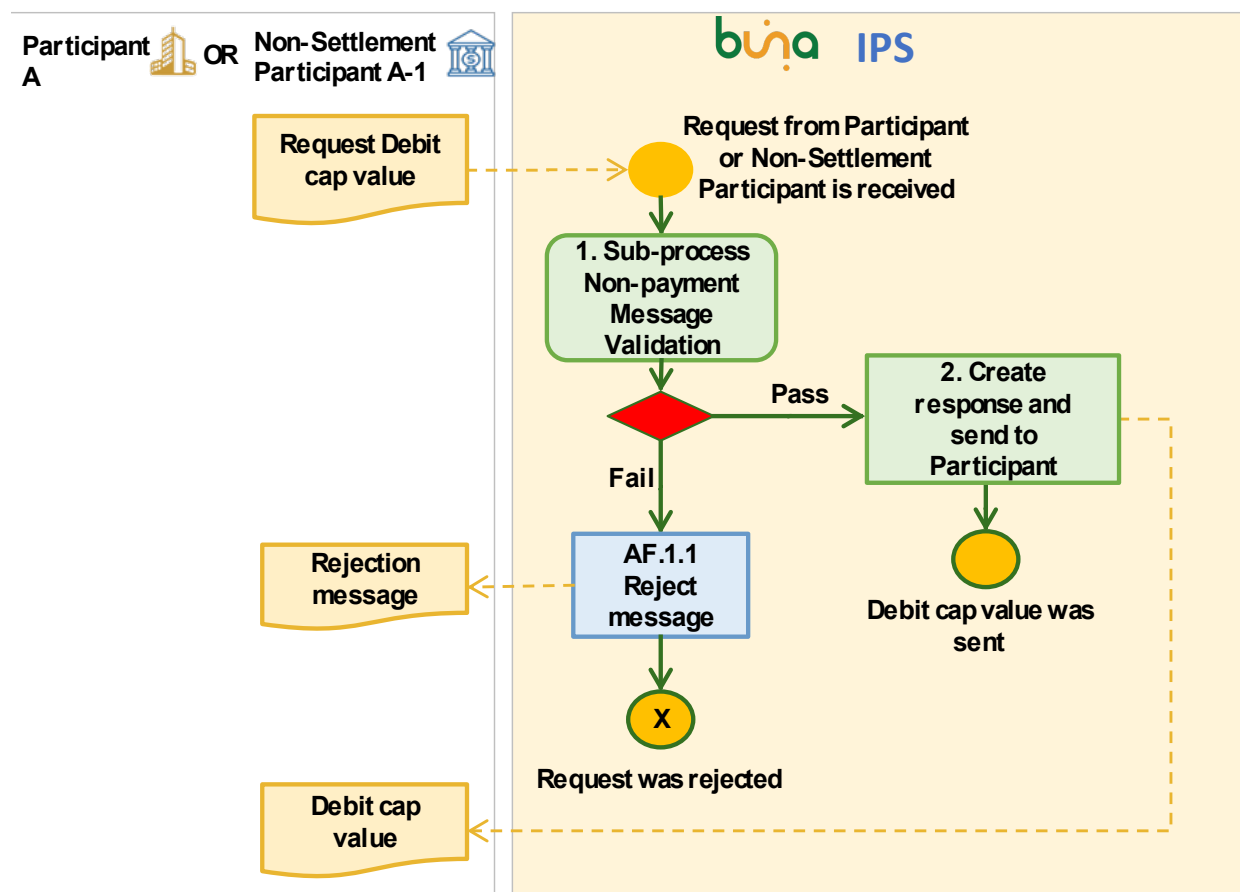


Figure 25: Position IPS account limit set up

<b>Use Case ID</b>	<b>IPS-LIQ-05</b>
<b>Use Case Name</b>	Request the Position IPS account Debit cap value



<b>Use Case Description</b>	Request the Position IPS account Debit cap value
<b>Primary Actors</b>	Master Participant, Non-Settlement Participants, Buna IPS, Buna RTGS
<b>Trigger Event</b>	Request to receive Debit cap value (camt.009) of Position account of Master Participant or Non-Settlement Participant is received
<b>Use Case Business Rules</b>	
<b>Buna Master Participant can request Debit cap value for its own and sponsored accounts</b>	
<b>Non-Settlement Participant can request Debit cap value only for its own Position accounts</b>	
<b>Pre-Conditions</b>	
<b>Position account is open</b>	
<b>Post Conditions</b>	
<b>Debit cap value was sent to the request's sender</b>	
<b>Basic Flow</b>	
<b>1</b>	Execute sub-process «Non-Payment message Validation» (Use Case IPS-PM-14: Non-payment message validation). Passed - go to 2 Failed- go to AF1
<b>2</b>	Buna IPS generates and sends Debit cap value (camt.010) to the request's sender
<b>Alternate Flows</b>	
<b>AF1</b>	<b>Request validation is failed at Buna IPS</b>
<b>1</b>	Buna IPS rejects Request and sends reject notification (camt.025) to the request's sender

*Incoming messages*

<b>Senders</b>	<b>MX ISO 20022</b>	<b>Description</b>
<b>Buna Master Participant</b>	camt.009	Request of Position account Debit cap

*Outgoing messages*

<b>Receivers</b>	<b>MX ISO 20022</b>	<b>Description</b>
<b>Buna Master Participant , Non-Settlement Participant</b>	camt.010	Debit cap value
<b>Buna Master Participant</b>	camt.025	Rejection message

## 4.4 CENTRAL ADDRESSING SCHEME USE CASES

### 4.4.1 Central Addressing Scheme. Customer, Aliases and Accounts registration Use cases.

#### 4.4.1.1 Use Case CAS-REG-01: Register customer information

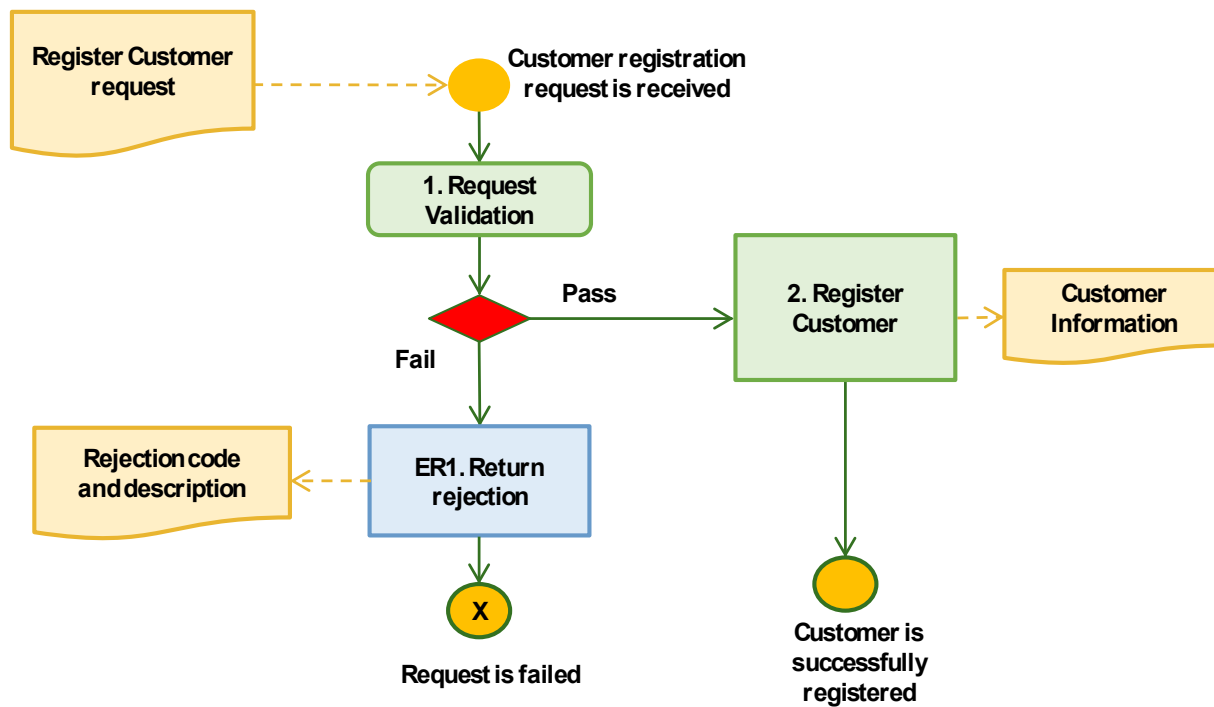


Figure 26: Register customer (individual person) information

<b>Use Case ID</b>	<b>CAS-REG-01</b>
<b>Use Case Name</b>	Register customer information
<b>Use Case Description</b>	Request to Register own customer (individual person or legal entity) information in CAS.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Register customer" method is called by the participant's application
<b>Use Case Business Rules</b>	
<b>Participant can register information on its own customer only.</b>	
<b>Pre-Conditions</b>	
<b>Participant must be registered in IPS database</b>	
<b>Post Conditions</b>	
<b>The Participant's customer's information (without aliases and accounts) is registered.</b>	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Participant's BIC/Pseudo-BIC must be registered in the system; 2. Body fields values corresponds to required formats and value ranges; 3. Whether customer is already registered – in this case existing customer's data is just updated. If validation fails, go to ER1
<b>2</b>	Customer information is successfully registered and a notification with customer information is returned to the participant
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.1.2 Use Case CAS-REG-02: Account registration

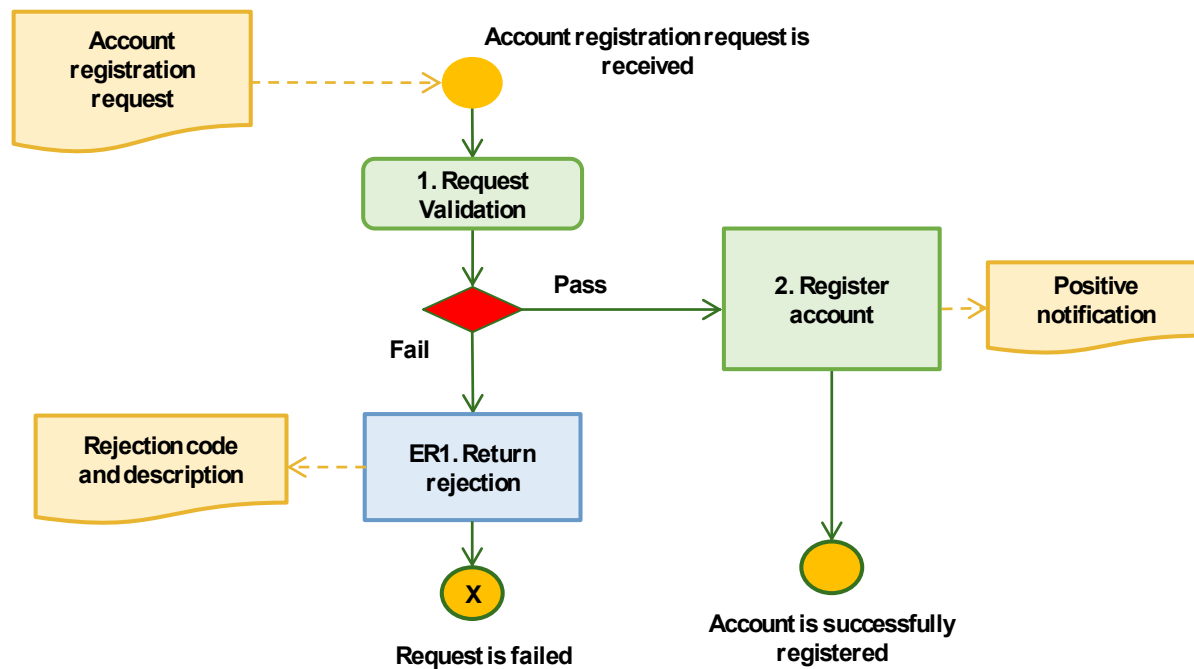


Figure 27: Account registration

<b>Use Case ID</b>	<b>CAS-REG-02</b>
<b>Use Case Name</b>	Account registration
<b>Use Case Description</b>	Request to add a customer account
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Create account" method is called by the participant's application.
<b>Use Case Business Rules</b>	
<b>A participant that initiates the request can register account of its customer only.</b>	
<b>Pre-Conditions</b>	
<b>Customer (individual person or legal entity) must be registered in CAS</b>	
<b>Post Conditions</b>	
<b>Account of individual person or legal entity is registered in CAS</b>	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Participant BIC/Pseudo-BIC must be registered in the system; 2. Customer must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges; 4. Whether customer's account is already registered with the same information. If validation fails, go to ER1
<b>2</b>	Account of customer is registered in CAS.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.1.3 Use Case CAS-REG-03: Alias registration



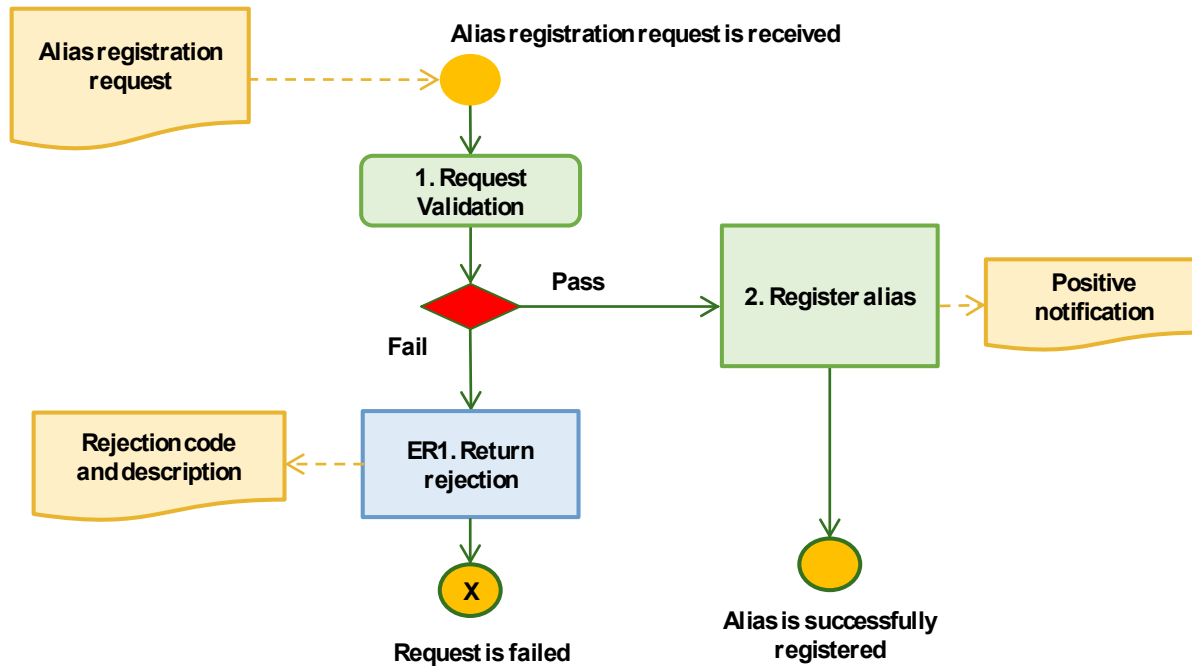


Figure 28: Alias registration

<b>Use Case ID</b>	<b>CAS-REG-03</b>
<b>Use Case Name</b>	Alias registration
<b>Use Case Description</b>	Request to add customer's alias
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Create alias" method is called by the participant's application
<b>Use Case Business Rules</b>	
<b>A participant that initiates the request can register alias of its own customer only.</b>	
<b>Pre-Conditions</b>	
<b>Customer (individual person or legal entity) must be registered in CAS</b>	
<b>Post Conditions</b>	
<b>Alias of customer (individual person or legal entity) is registered in CAS</b>	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Participant BIC/Pseudo-BIC must be registered in the system; 2. Customer must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges; 4. Whether customer's alias is already registered. If validation fails, go to ER1
<b>2</b>	Alias of customer is registered in CAS.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.1.4 Use Case CAS-REG-04: One-step Customer registration

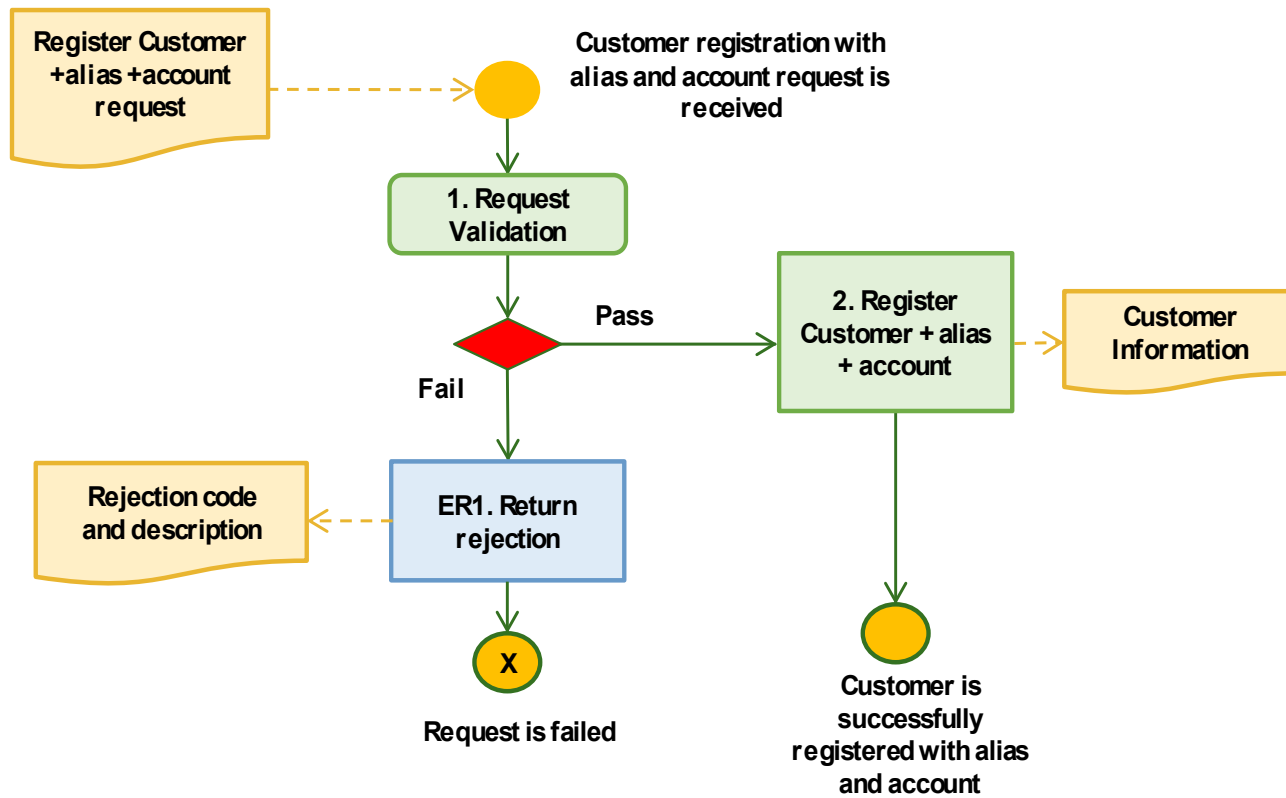


Figure 29: One-step Customer registration

<b>Use Case ID</b>	<b>CAS-REG-04</b>
<b>Use Case Name</b>	One-step Customer registration
<b>Use Case Description</b>	One-step registration of the Customer details, Alias details and Account details in one-step procedure via a single API call
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"One-step Customer registration" method is called by the participant's application
<b>Use Case Business Rules</b>	
To ease registration process system allows registration of Customer details, Alias details and Account details in one-step procedure via a single API call	
<b>Pre-Conditions</b>	
Participant must be registered in IPS database	
<b>Post Conditions</b>	
The Participant's customer's information with alias and account is registered.	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Participant BIC/Pseudo-BIC must be registered in the system; 2. Body fields values corresponds to required formats and value ranges; 3. Whether customer and/or customer's alias and/or customer's account is already registered – in this case existing customer's data is just updated. If validation fails, go to ER1
<b>2</b>	Customer information is successfully registered.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	

**ER1** Participant's application receives an error code with description.

#### 4.4.1.5 Use Case CAS-REG-05: One-step Alias and Account registration

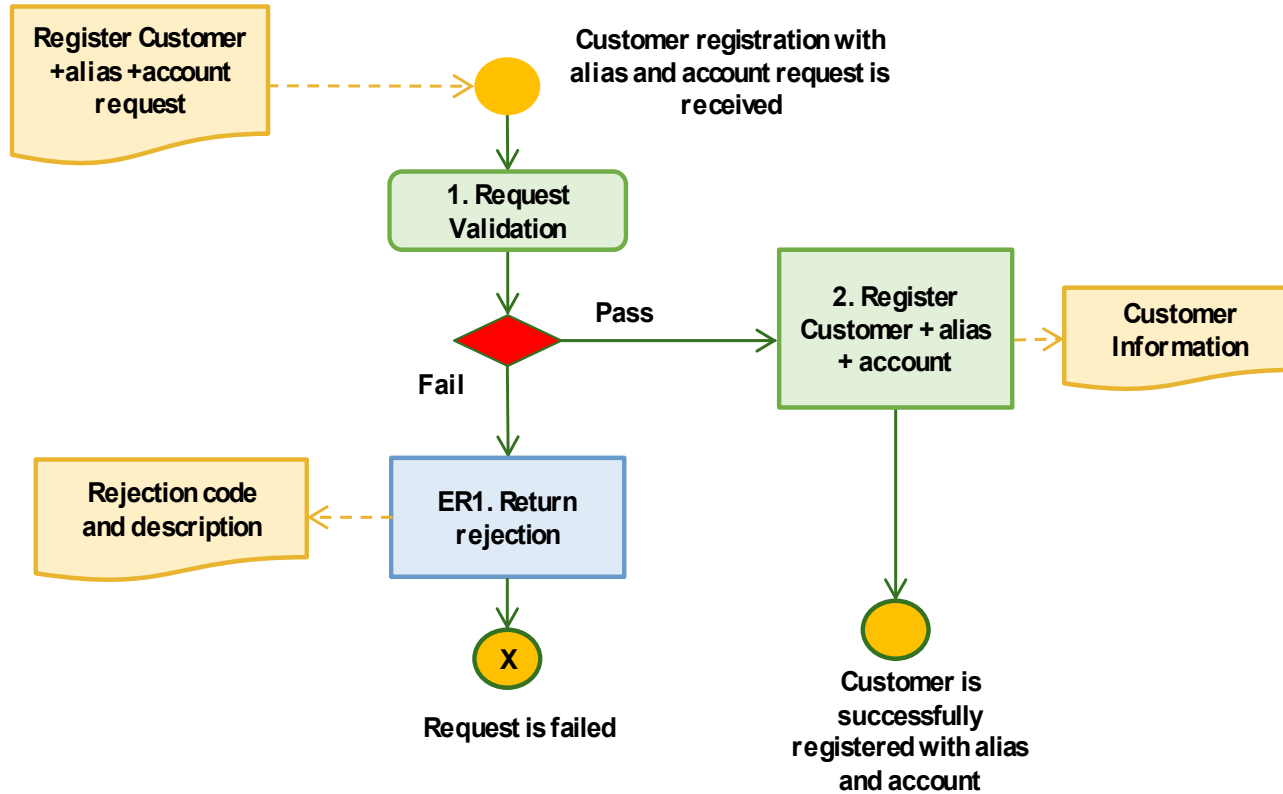


Figure 30: One-step Alias and Account registration

<b>Use Case ID</b>	<b>CAS-REG-05</b>
<b>Use Case Name</b>	One-step Alias and Account registration
<b>Use Case Description</b>	One-step registration of the Alias details and Account details in one-step procedure via a single API call
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"One-step Customer registration" method is called by the participant's application
<b>Use Case Business Rules</b>	
If Customer has been onboarded already by a particular institution, then this institution can register additional aliases and links them to accounts in one step. This one-step alias and account registration request contains alias and account details as a single API call. If specified Alias already exists, then it is not created but existing Alias record is used. The system validates that all alias details (if present in the call) and account details (if present in the call) are the matched with details already if appropriate (alias or account) records exists.	
<b>Pre-Conditions</b>	
Participant must be registered in IPS database. Customer must be registered in CAS.	
<b>Post Conditions</b>	
Customer's alias and account are registered and linked.	
<b>Basic Flow</b>	



<b>1</b>	Validations for the request: <ol style="list-style-type: none"> <li>Participant BIC/Pseudo-BIC must be registered in the system;</li> <li>Body fields values corresponds to required formats and value ranges;</li> <li>Whether customer and/or customer's alias and/or customer's account is already registered – in this case existing customer's data is just updated.</li> <li></li> </ol> If validation fails, go to ER1
<b>2</b>	Customer information is successfully registered.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.1.6 Use Case CAS-REG-06: Bulk upload of CAS information to DBO

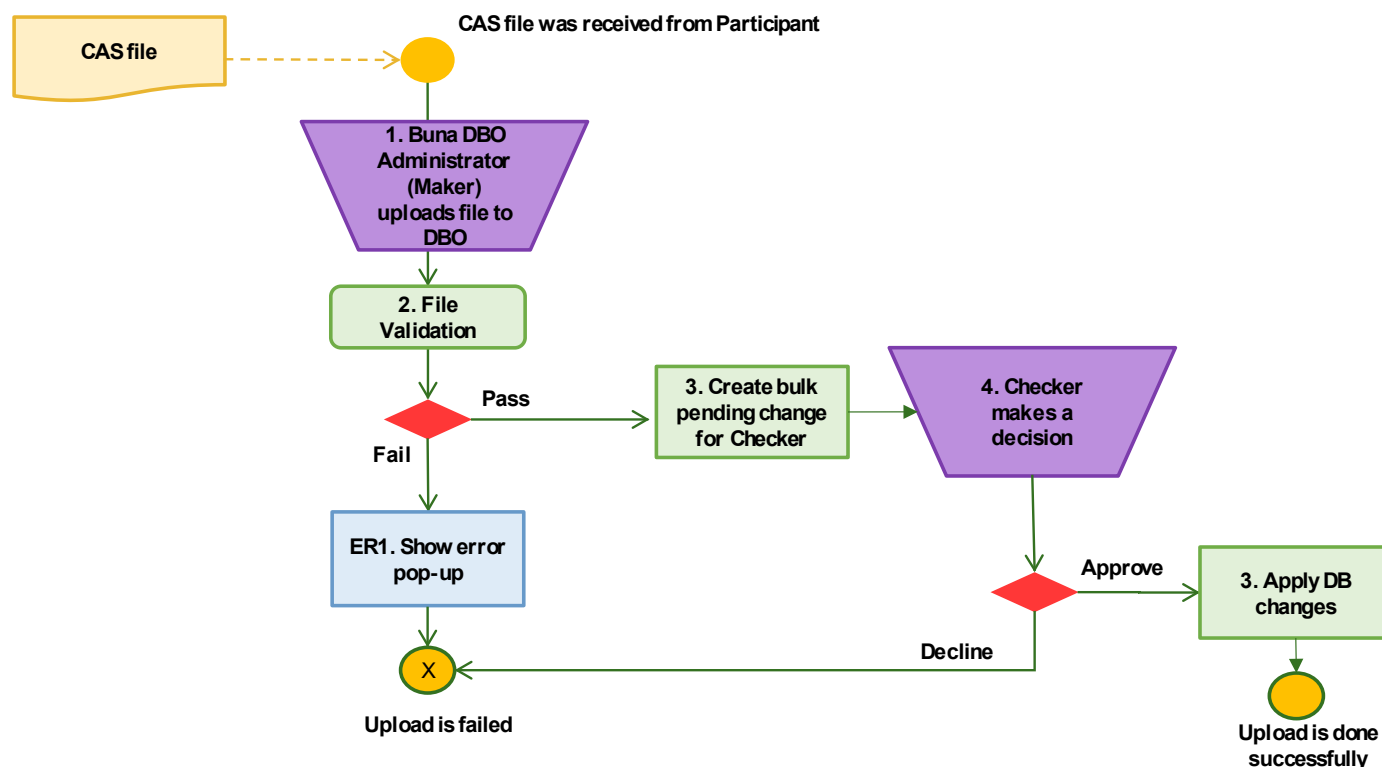


Figure 31: Bulk upload of CAS information to DBO

<b>Use Case ID</b>	<b>CAS-REG-06</b>
<b>Use Case Name</b>	Bulk upload of CAS information to DBO
<b>Use Case Description</b>	Bulk upload of CAS information to DBO
<b>Primary Actors</b>	Buna DBO Administrators
<b>Trigger Event</b>	CAS file was received from the Participant
<b>Use Case Business Rules</b>	
<b>CAS Information can be uploaded to DBO in Maker/Checker mode</b>	
<b>Pre-Conditions</b>	
N/A	
<b>Post Conditions</b>	

<b>CAS information was successfully uploaded.</b>	
<b>Basic Flow</b>	
<b>1</b>	Buna DBO Administrator(Maker) uploads file to DBO
<b>2</b>	DBO validates the file: <ol style="list-style-type: none"> <li>1. File structure;</li> <li>2. Data formats.</li> <li>3. If validation fails, go to ER1.</li> </ol>
<b>2</b>	System creates a Bulk Pending change for the Buna DBO Administrator (Checker)
<b>3</b>	Buna DBO Administrator (Checker) approves upload, after that changes will finally update Database. (It can also decline according to the standard Maker/Checker mechanism in DBO).
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	System shows error pop-up for Buna DBO Administrator.

#### 4.4.2 Central addressing scheme. Management and control of customer data, aliases and accounts use cases.

##### 4.4.2.1 Use Case CAS-MAN-01: Suspend customer

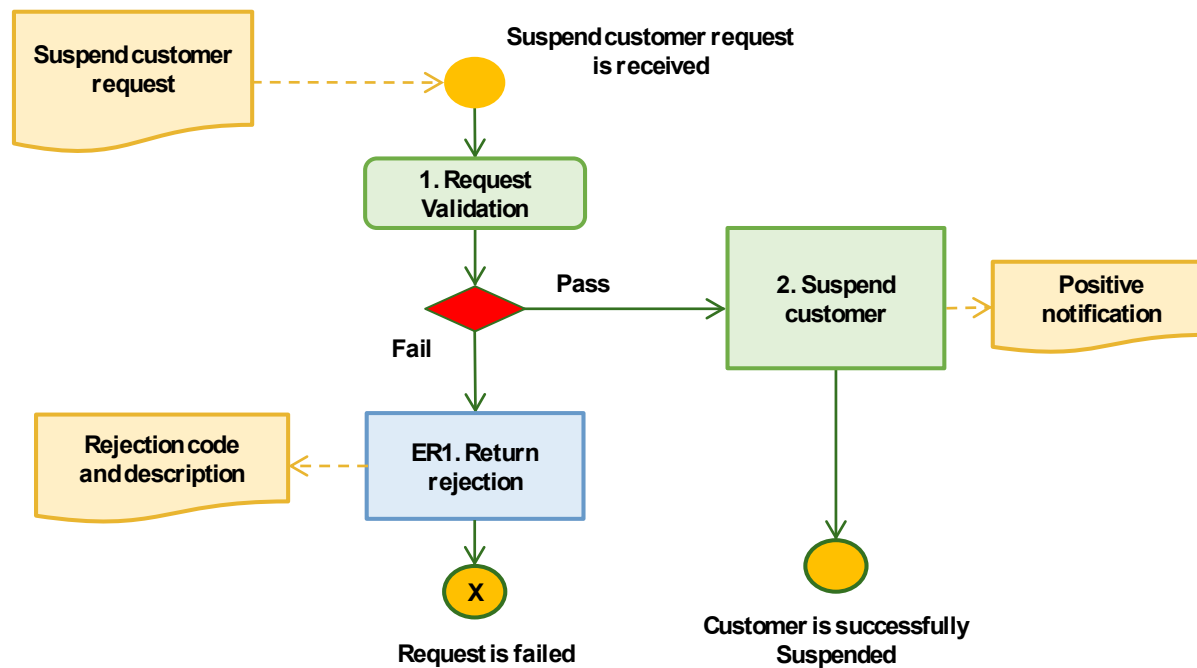


Figure 32: Suspend customer

<b>Use Case ID</b>	<b>CAS-MAN-01</b>
<b>Use Case Name</b>	Suspend customer
<b>Use Case Description</b>	Suspend own customer.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Suspend customer" method is called by the participant's application
<b>Use Case Business Rules</b>	
<b>Participant can suspend customer of its own customer only.</b>	

Pre-Conditions	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02).	
Post Conditions	
The Participant's application receives positive response on the request.	
Basic Flow	
1	Validations for the request: 1. Customer must be registered in CAS; 2. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
2	Customer is successfully suspended.
Alternate Flows	
	N/A
Exceptions	
ER1	Participant's application receives an error code with description.

#### 4.4.2.2 Use Case CAS-MAN-02 : Activate customer

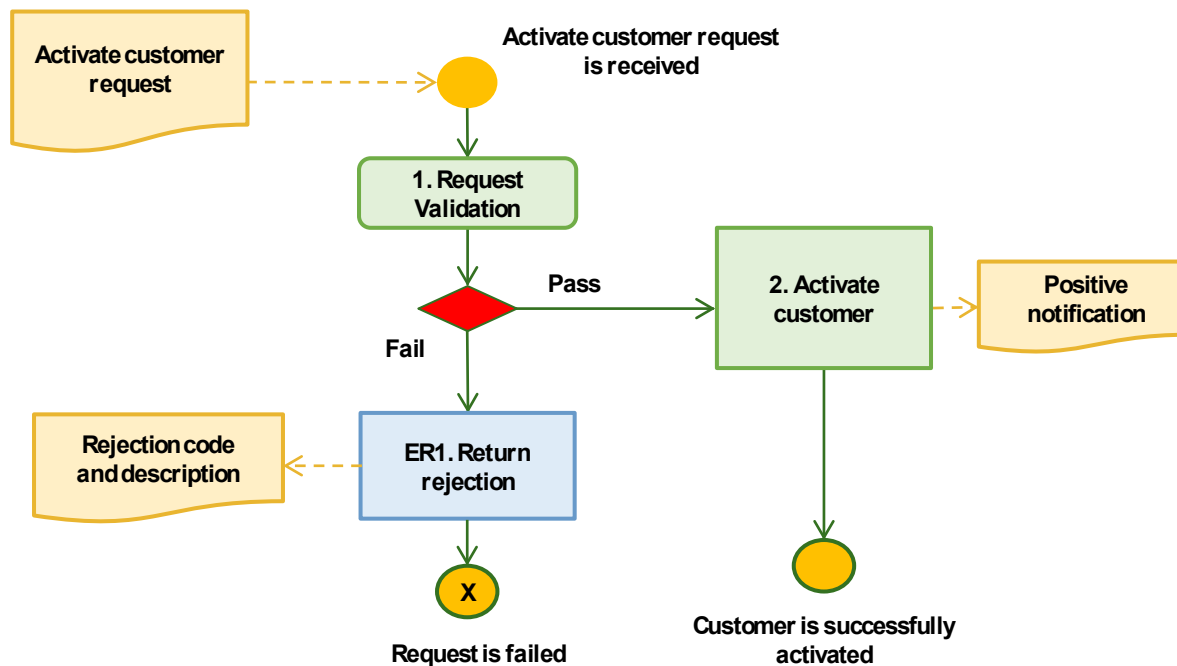


Figure 33: Activate customer

<b>Use Case ID</b>	<b>CAS-MAN-02</b>
<b>Use Case Name</b>	Activate customer
<b>Use Case Description</b>	Activating own customer.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Activate customer" method is called by the participant's application
Use Case Business Rules	
Participant can activate customer of its own customer only.	
Pre-Conditions	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02).	
Post Conditions	
The Participant's application receives positive response on the request.	

Basic Flow	
1	Validations for the request: 1. Customer must be registered in CAS; 2. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
2	Customer is successfully activated.
Alternate Flows	
	N/A
Exceptions	
ER1	Participant's application receives an error code with description.

#### 4.4.2.3 Use Case CAS-MAN -03: Delete customer

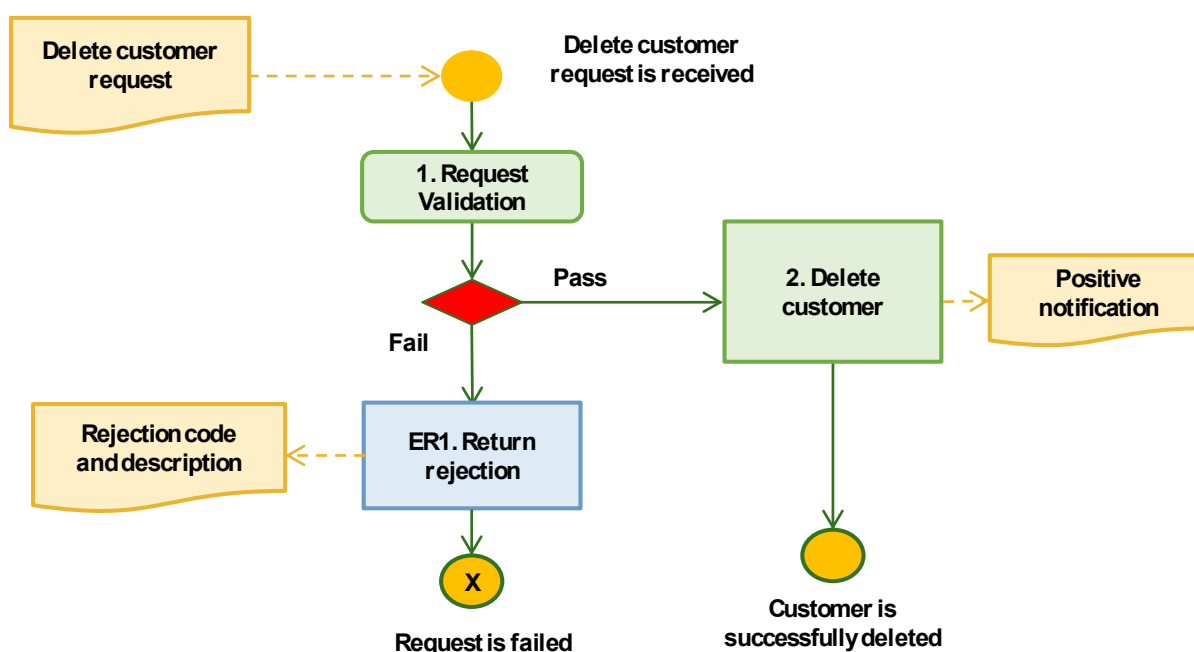


Figure 34: Delete customer

<b>Use Case ID</b>	<b>CAS-MAN-03</b>
<b>Use Case Name</b>	Delete customer
<b>Use Case Description</b>	Deleting own customer.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Delete customer" method is called by the participant's application
Use Case Business Rules	
<b>Participant can delete customer of its own customer only.</b>	
Pre-Conditions	
<b>A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02).</b>	
Post Conditions	
<b>The Participant's application receives positive response on the request.</b>	
Basic Flow	
1	Validations for the request: 1. Customer must be registered in CAS;

	2. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1.
2	Customer is successfully marked as deleted (logically and not physically deleted) as well as the aliases and accounts linked to it.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.2.4 Use Case CAS-MAN -04: Update customer information

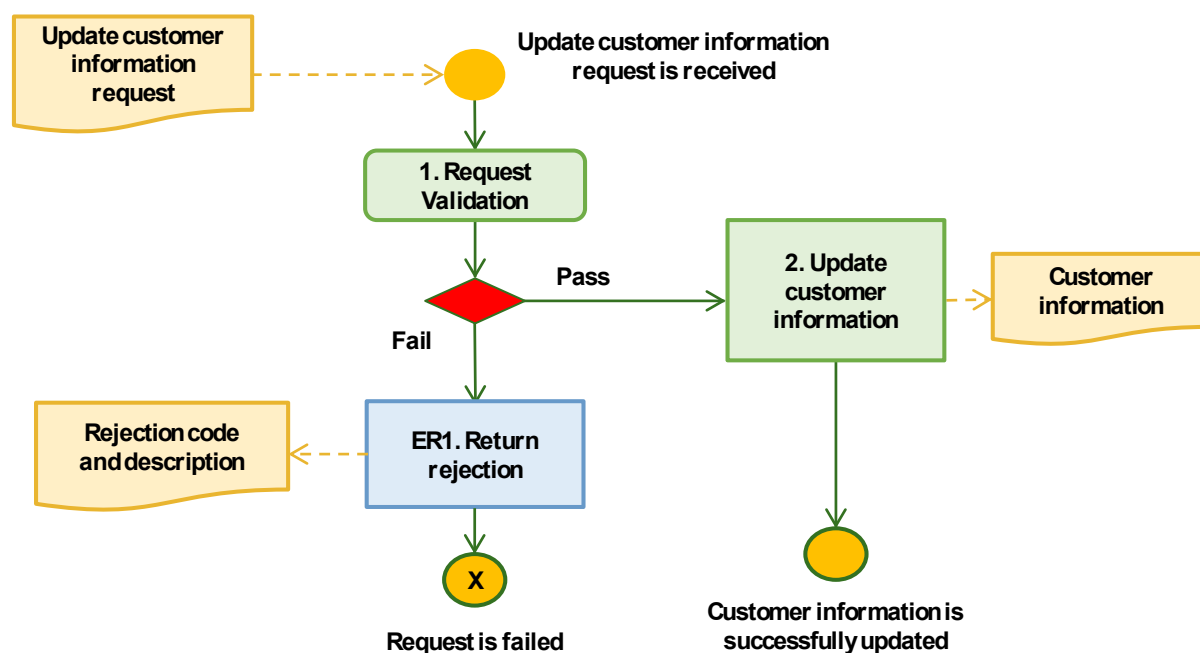


Figure 35: Update customer (individual person) information

<b>Use Case ID</b>	<b>CAS-MAN-04</b>
<b>Use Case Name</b>	Update customer information
<b>Use Case Description</b>	Updating own customer information
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Update customer information" method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can update information on its own customer only.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01). Customer information can be requested (use case IPS-CAS-05) before update.	
<b>Post Conditions</b>	
The Participant's customer's information (without aliases and accounts) is updated	
<b>Basic Flow</b>	
1	Validations for the request: 1. Customer must be registered in CAS; 2. Body fields values corresponds to required formats and value ranges.





	If validation fails, go to ER1
<b>2</b>	Customer information is successfully updated.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.2.5 Use Case CAS-MAN -05: Update alias

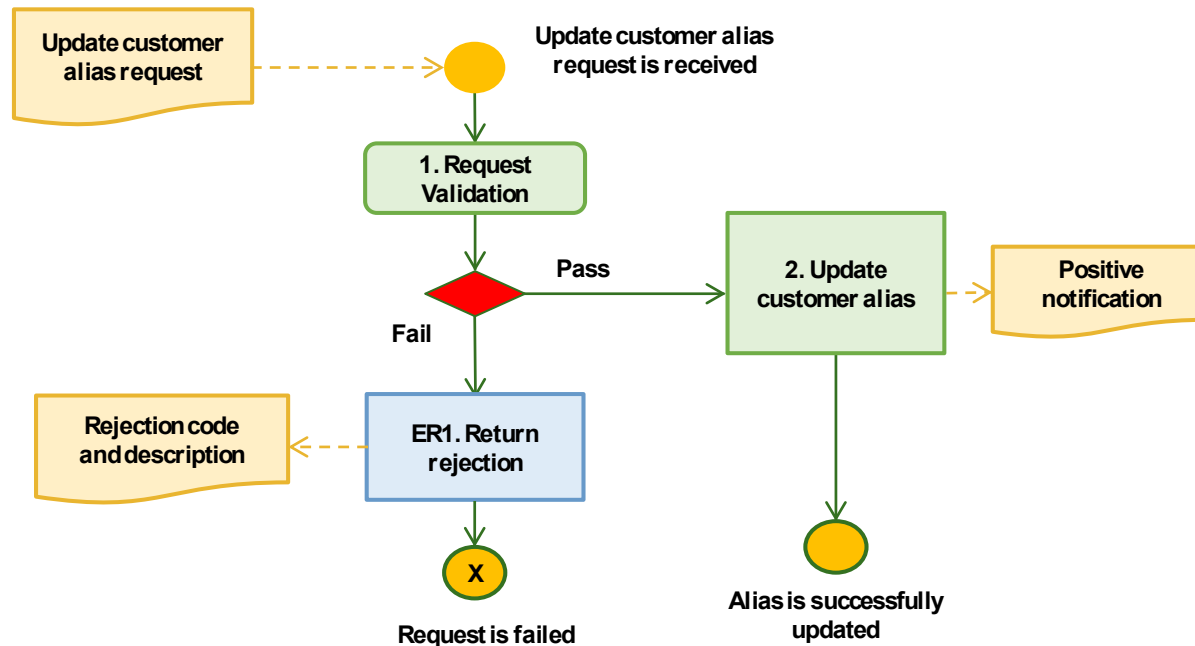


Figure 36: Update alias

<b>Use Case ID</b>	<b>CAS-MAN-05</b>
<b>Use Case Name</b>	Update alias
<b>Use Case Description</b>	Updating own customer's alias.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Update alias" method is called by the participant's application
<b>Use Case Business Rules</b>	
<b>Participant can update alias of its own customer only.</b>	
<b>Pre-Conditions</b>	
<b>A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). Alias must be registered in CAS (use case IPS-CAS-04)</b>	
<b>Post Conditions</b>	
<b>The Participant's application receives positive response on the request.</b>	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Alias must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Alias is successfully updated.

Alternate Flows	
	N/A
Exceptions	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.2.6 Use Case CAS-MAN -06: Delete alias

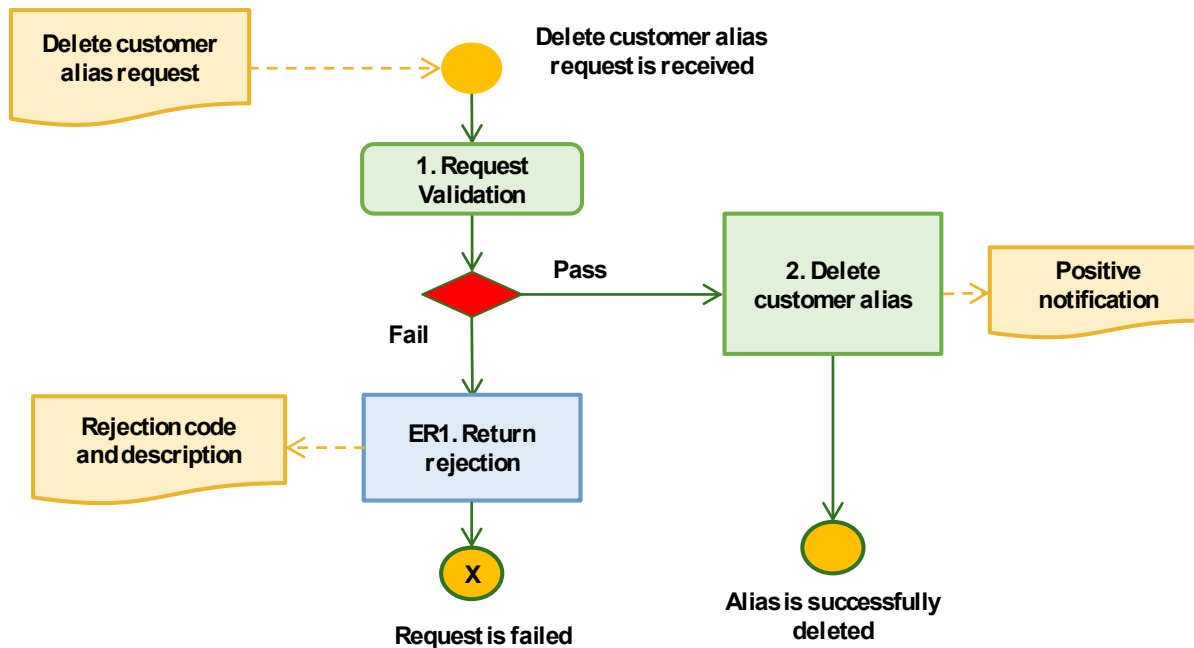


Figure 37: Delete alias

<b>Use Case ID</b>	<b>CAS-MAN-06</b>
<b>Use Case Name</b>	Delete alias
<b>Use Case Description</b>	Deleting own customer's alias.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Delete alias" method is called by the participant's application
Use Case Business Rules	
<b>Participant can delete alias of its own customer only.</b>	
Pre-Conditions	
<b>A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). Alias must be registered in CAS (use case IPS-CAS-04)</b>	
Post Conditions	
<b>The Participant's application receives positive response on the request.</b>	
Basic Flow	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Alias must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Alias is successfully deleted.
Alternate Flows	
	N/A

### Exceptions

**ER1** Participant's application receives an error code with description.

#### 4.4.2.7 Use Case CAS-MAN -07: Suspend alias

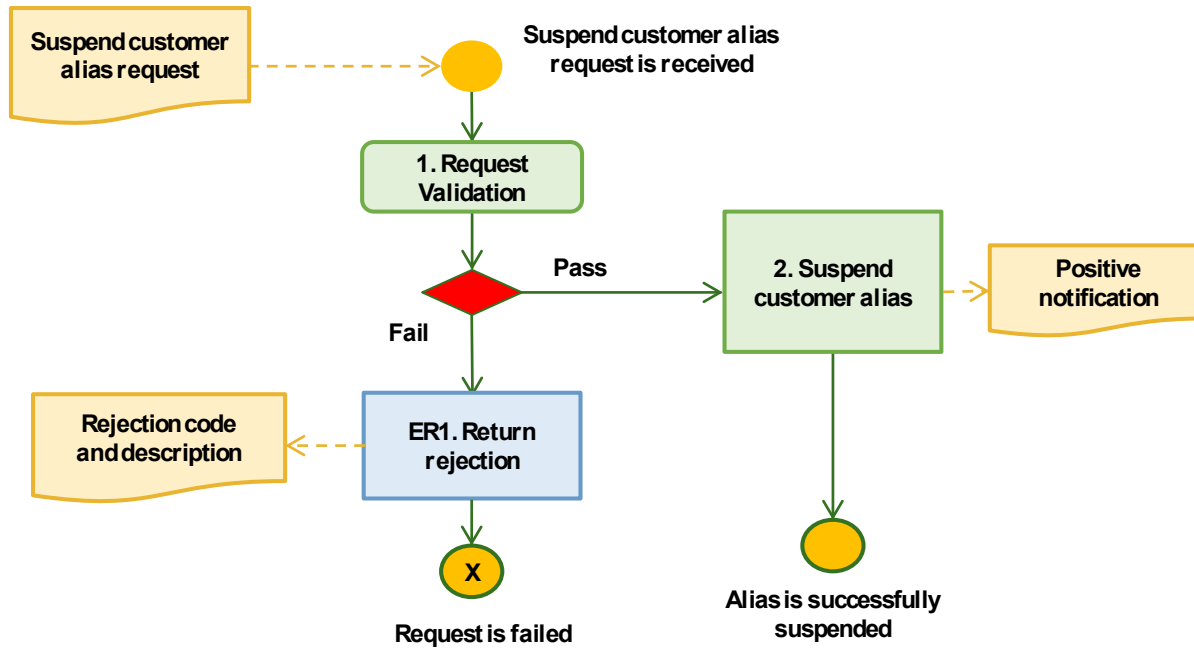


Figure 38: Suspend alias

<b>Use Case ID</b>	<b>CAS-MAN-07</b>
<b>Use Case Name</b>	Suspend alias
<b>Use Case Description</b>	Suspending own customer's alias.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Suspend alias" method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can suspend alias of its own customer only.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). Alias must be registered in CAS (use case IPS-CAS-04)	
<b>Post Conditions</b>	
The Participant's application receives positive response on the request.	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Alias must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Alias is successfully suspended.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.2.8 Use Case CAS-MAN -08: Activate alias

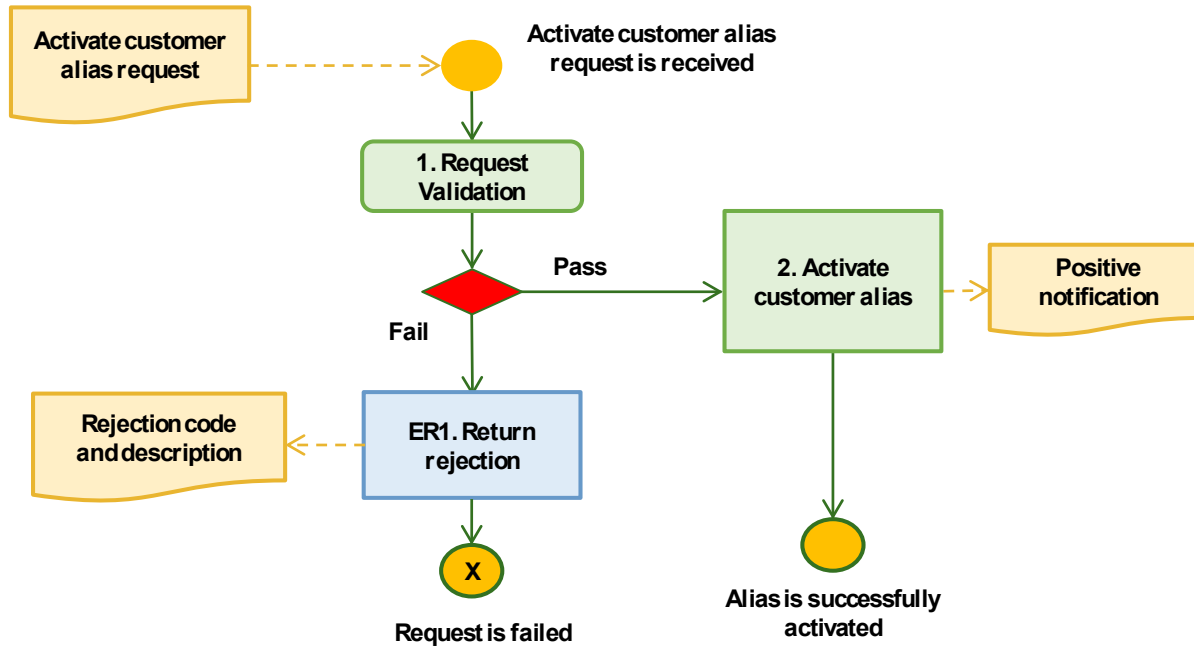


Figure 39: Activate alias

<b>Use Case ID</b>	<b>CAS-MAN-08</b>
<b>Use Case Name</b>	Activate alias
<b>Use Case Description</b>	Activating own customer's alias.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Activate alias" method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can activate alias of its own customer only.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). Alias must be registered in CAS (use case IPS-CAS-04)	
<b>Post Conditions</b>	
The Participant's application receives positive response on the request.	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Alias must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Alias is successfully activated.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.2.9 Use Case CAS-MAN-09: Link alias and account

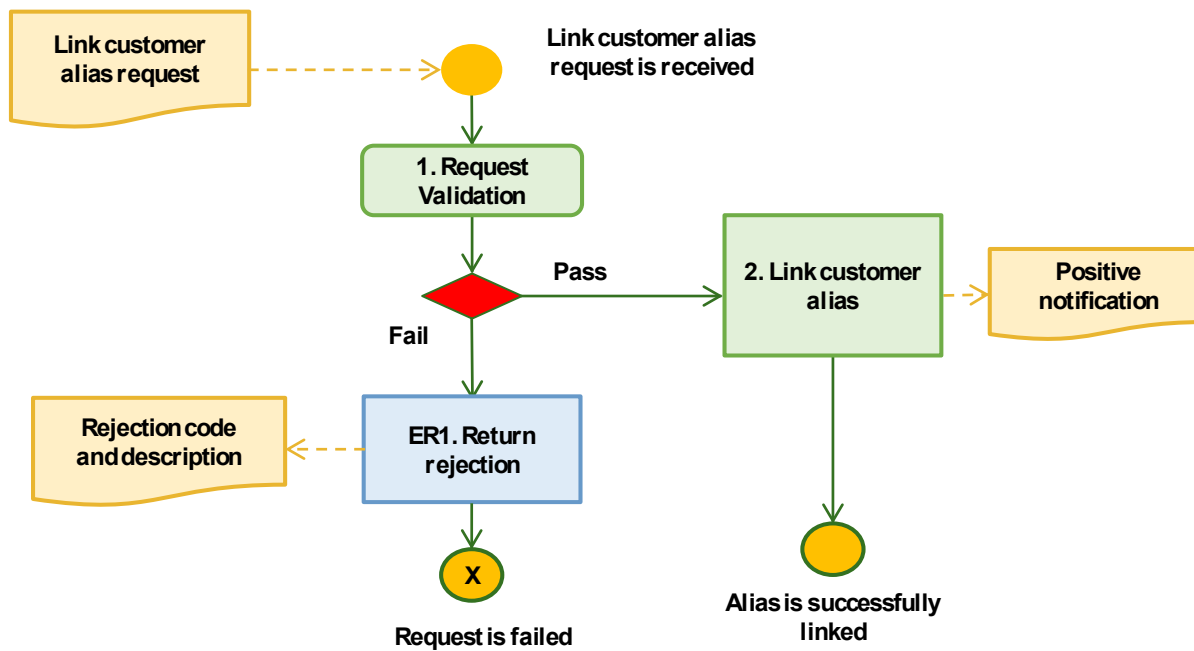


Figure 40: Link alias to account

<b>Use Case ID</b>	<b>CAS-MAN-09</b>
<b>Use Case Name</b>	Link alias to account
<b>Use Case Description</b>	Linking own customer's alias and customer's account.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Link alias to account" or «Link account to alias» method is called by the participant's application
<b>Use Case Business Rules</b>	
<b>Participant can link alias of its own customer only.</b>	
<b>Pre-Conditions</b>	
<b>A customer must be registered in CAS.</b>	
<b>Account must be registered in CAS.</b>	
<b>Alias must be registered in CAS.</b>	
<b>Post Conditions</b>	
<b>The Participant's application receives positive response on the request.</b>	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Account must be registered in CAS; 3. Alias must be registered in CAS; 4. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Alias is successfully linked.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.2.10 Use Case CAS-MAN-10: Unlink alias and account

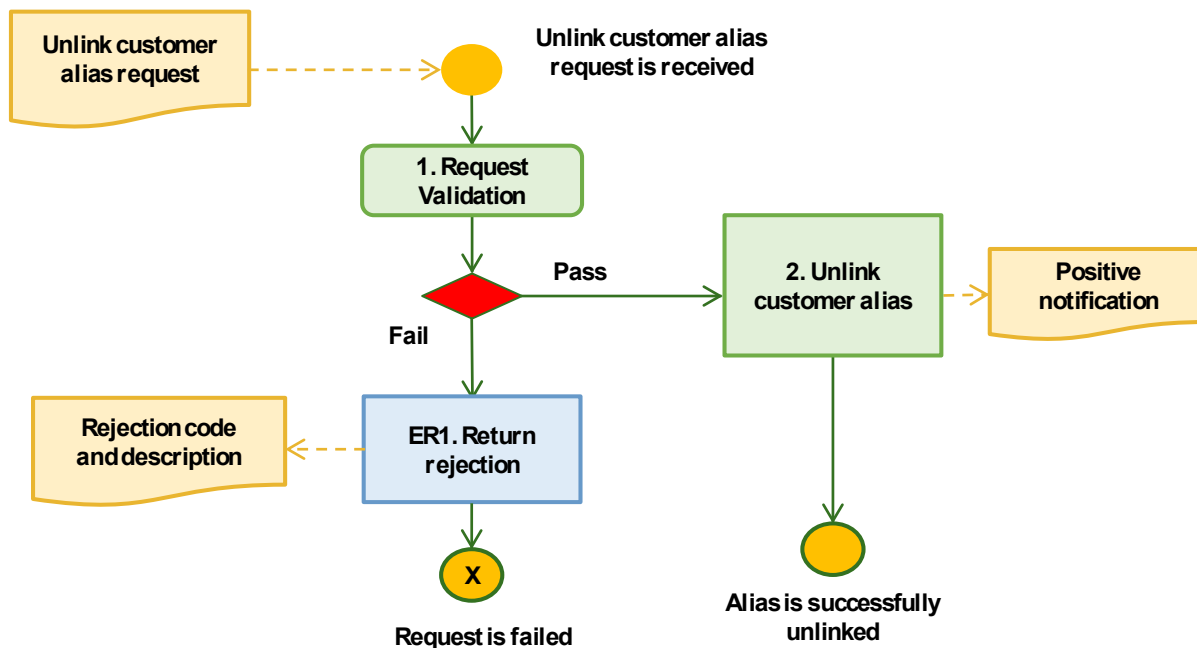


Figure 41: Unlink alias from account

<b>Use Case ID</b>	<b>CAS-MAN-10</b>
<b>Use Case Name</b>	Unlink alias from account
<b>Use Case Description</b>	Unlinking own customer's alias from the customer's account.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Unlink alias from account" or «Unlink account from alias» method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can unlink alias of its own customer only.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). Account must be registered in CAS (use case IPS-CAS-03). Alias must be registered in CAS (use case IPS-CAS-04).	
<b>Post Conditions</b>	
The Participant's application receives positive response on the request.	
<b>Basic Flow</b>	
1	Validations for the request: 1. Customer must be registered in CAS; 2. Account must be registered in CAS; 3. Alias must be registered in CAS; 4. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
2	Alias is successfully unlinked.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.2.11 Use Case CAS-MAN-11: Update account

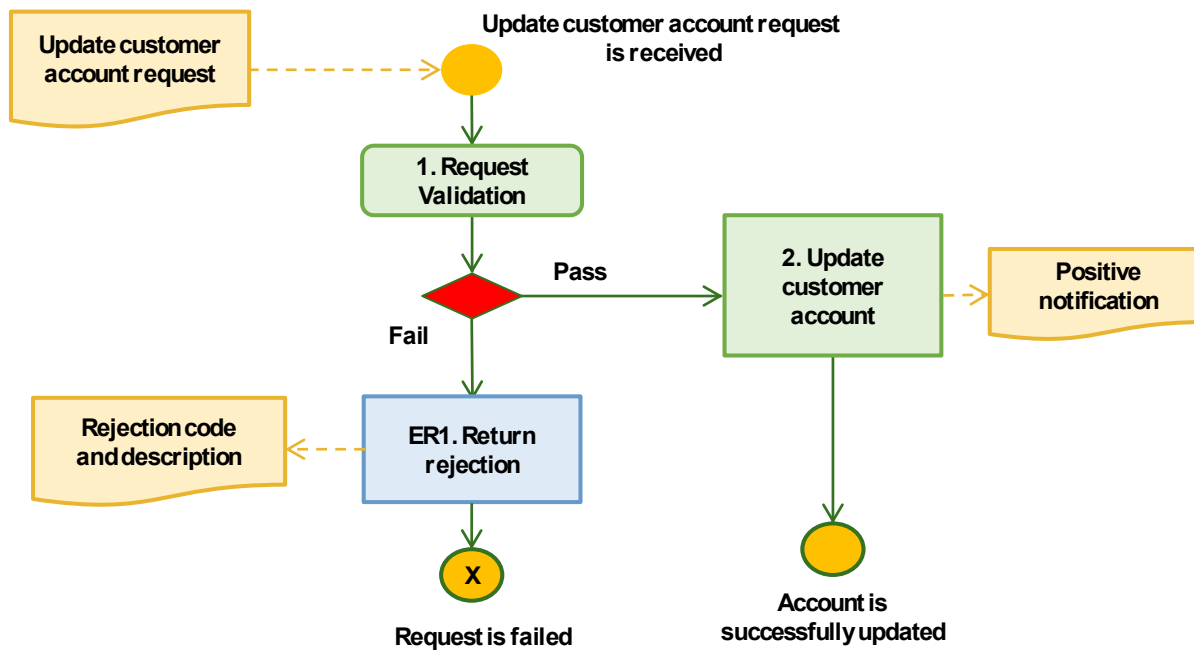


Figure 42: Update account

<b>Use Case ID</b>	<b>CAS-MAN-11</b>
<b>Use Case Name</b>	Update account
<b>Use Case Description</b>	Updating own customer's account.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Update account" method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can update account of its own customer only.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). Account must be registered in CAS (use case IPS-CAS-03)	
<b>Post Conditions</b>	
The Participant's application receives positive response on the request.	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Account must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Account is successfully updated.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.2.12 Use Case CAS-MAN-12: Define "To be used by default" Account for Alias

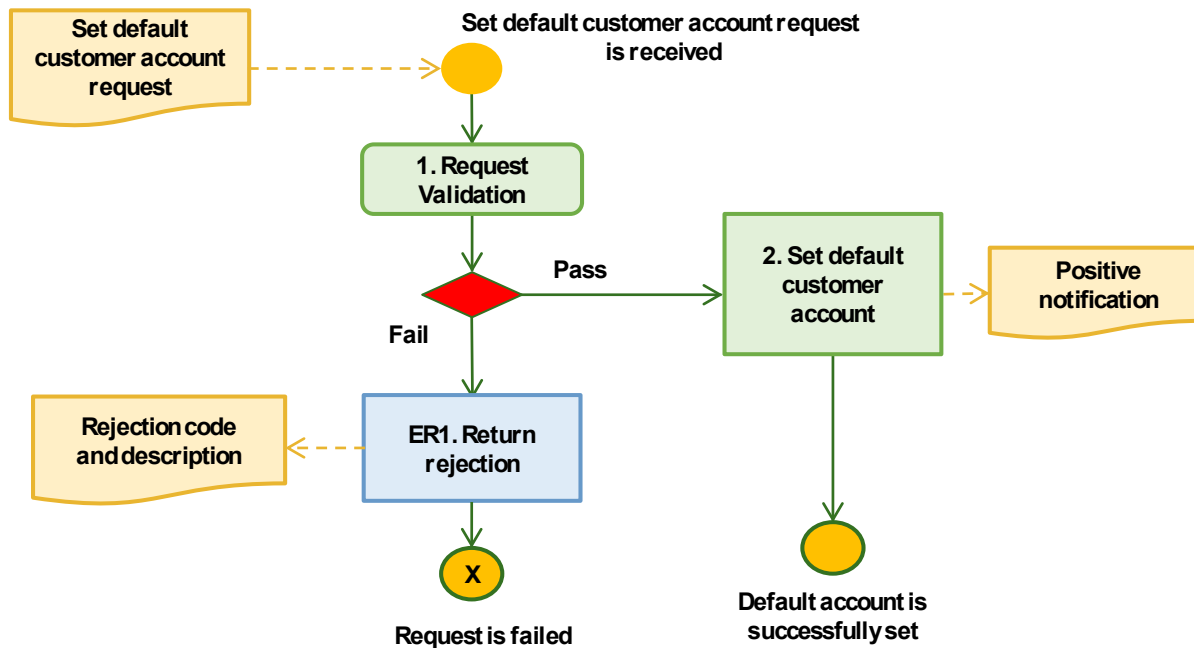


Figure 43: Define “To be used by default” Account for Alias

<b>Use Case ID</b>	<b>CAS-MAN-12</b>
<b>Use Case Name</b>	Define “To be used by default” Account for Alias
<b>Use Case Description</b>	Define “To be used by default” Account for Alias. When customer will have several accounts, default one will be used for the response on Get default account by alias request.
<b>Primary Actors</b>	Participant’s application
<b>Trigger Event</b>	“Set account as default for alias” method is called by the participant’s application
<b>Use Case Business Rules</b>	
Participant can set account as default for its own customer only.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS. Account must be registered in CAS. Alias must be registered in CAS.	
<b>Post Conditions</b>	
The Participant’s application receives positive response on the request.	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Account must be registered in CAS; 3. Alias must be registered in CAS; 4. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Default account is successfully set.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant’s application receives an error code with description.



#### 4.4.2.13 Use Case CAS-MAN-13: Delete account

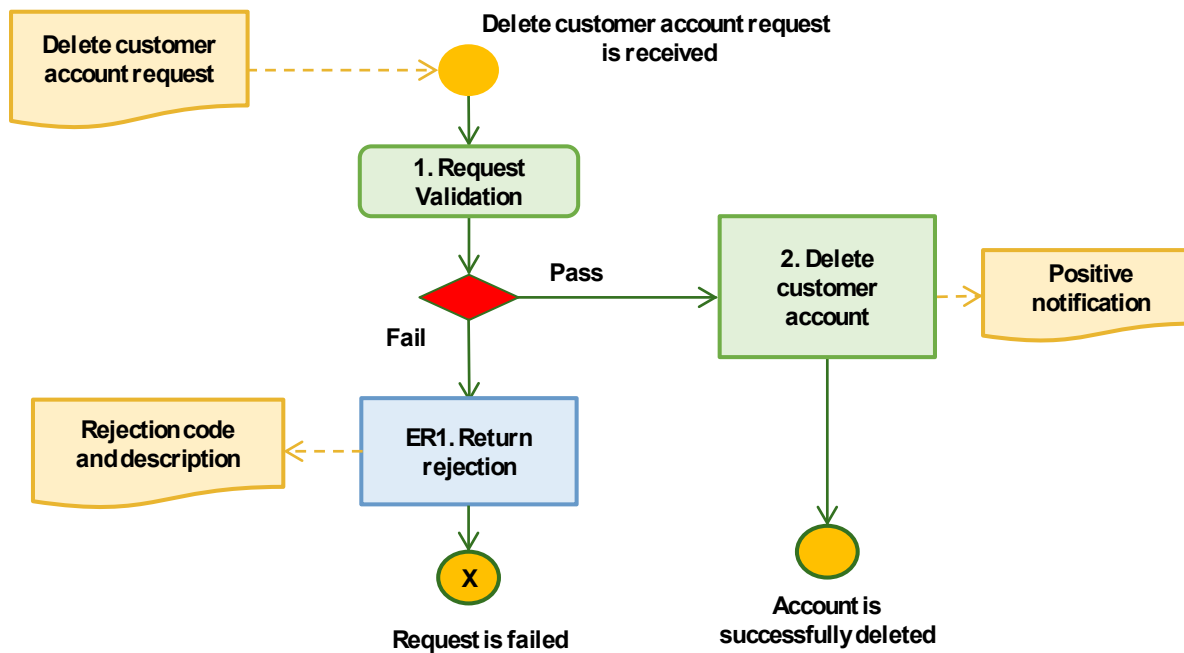


Figure 44: Delete account

<b>Use Case ID</b>	<b>CAS-MAN-13</b>
<b>Use Case Name</b>	Delete account
<b>Use Case Description</b>	Deleting own customer's account.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Delete account" method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can delete account of its own customer only.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). Account must be registered in CAS (use case IPS-CAS-03).	
<b>Post Conditions</b>	
The Participant's application receives positive response on the request.	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Account must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Account is successfully deleted.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.3 Central addressing scheme. Payment and RTP initiation use cases.

#### 4.4.3.1 Use Case CAS-PMT-01: Get default account by alias

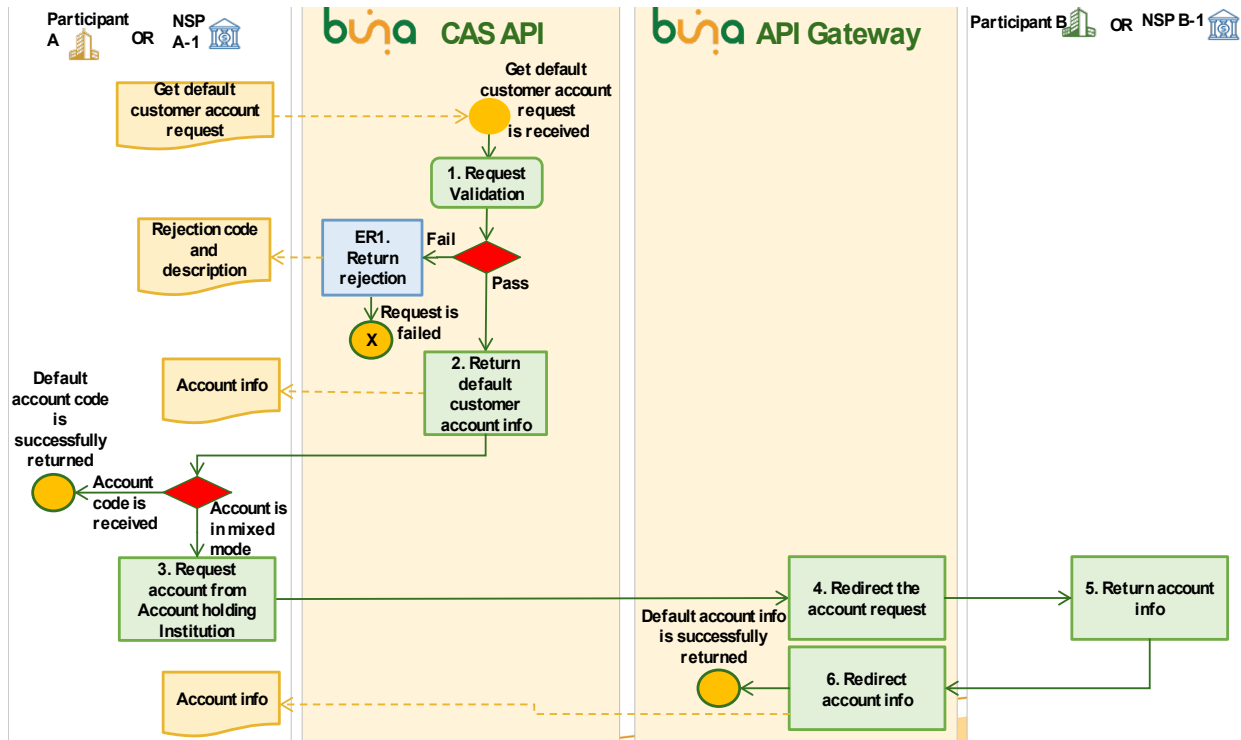


Figure 45: Get default account by alias

<b>Use Case ID</b>	<b>CAS-PMT-01</b>
<b>Use Case Name</b>	Get default account by alias
<b>Use Case Description</b>	Requesting customers' default account info and customer's info by specifying a customer's alias.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Get account by alias" method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can receive default account info and customer short info.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). Alias must be registered in CAS (use case IPS-CAS-04)	
<b>Post Conditions</b>	
The Participant's application receives default account and customer short info.	
<b>Basic Flow</b>	
<b>1</b>	CAS module validates for the request: <ul style="list-style-type: none"> <li>1. Customer must be registered in CAS;</li> <li>2. Alias must be registered in CAS;</li> <li>3. Body fields values corresponds to required formats and value ranges.</li> </ul> If validation fails, go to ER1 If validation is passed and account is registered in CAS Database, go to 2 If validation is passed and account is in Mixed mode (account is registered without account code with special type), go to 3
<b>2</b>	CAS module returns default customer account information to the Participant (request sender)
<b>3</b>	If Participant A (or NSP A-1) received information that account is in mixed mode then it requests account information from the Participant B (or NSP B-1) via Buna API Gateway.



4	Buna API Gateway redirects the request to the Participant B (or NSP B-1)
5	Participant B (or NSP B-1) returns account information to the API Gateway
6	API Gateway redirects account information to the Participant A (or NSP A-1)
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.3.2 Use Case CAS-PMT-02: Get the list of accounts by alias

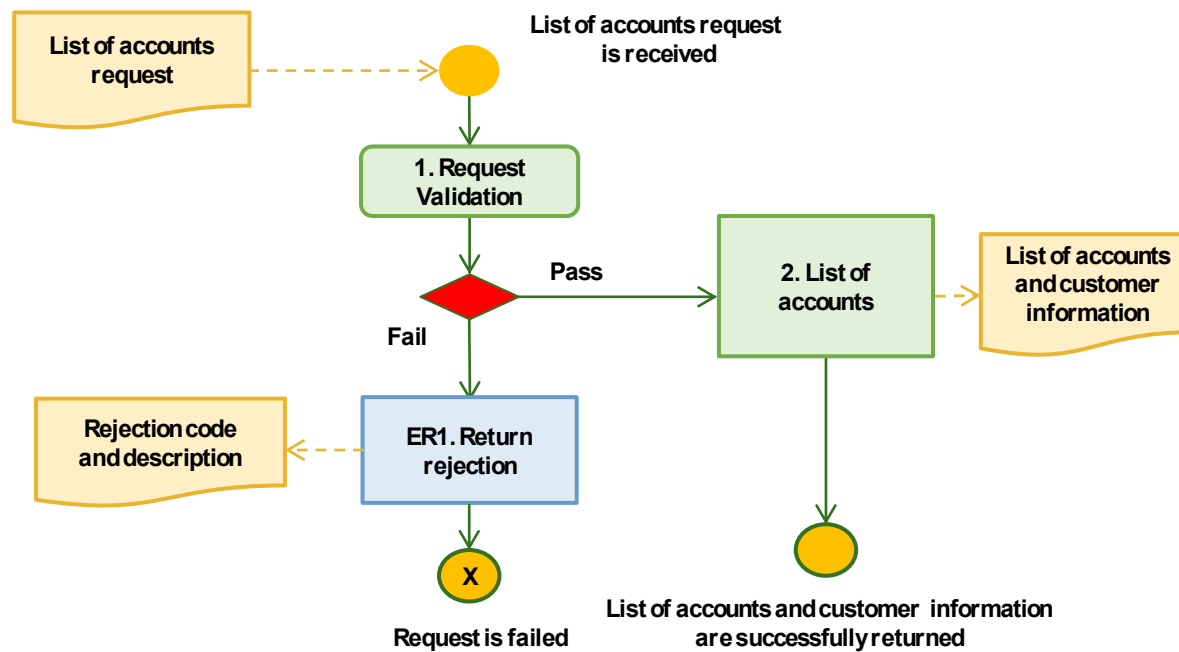


Figure 46: Get the list of accounts by alias

<b>Use Case ID</b>	<b>CAS-PMT-02</b>
<b>Use Case Name</b>	Get the list of accounts by alias
<b>Use Case Description</b>	Requesting customers' active accounts short info and customer's short info by specifying a customer's alias
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Get list of accounts by alias" method is called by the participant's application
<b>Use Case Business Rules</b>	
<b>Participant can request accounts linked an alias. Account can services by any participant.</b>	
<b>Pre-Conditions</b>	
<b>A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). Alias must be registered in CAS (use case IPS-CAS-04)</b>	
<b>Post Conditions</b>	
<b>The Participant's application receives list of accounts linked to the alias and customer short info.</b>	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: <ol style="list-style-type: none"> <li>1. Customer must be registered in CAS;</li> <li>2. Alias must be registered in CAS;</li> <li>3. Body fields values corresponds to required formats and value ranges.</li> </ol>



	If validation fails, go to ER1
2	Accounts are successfully updated.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.4 Central addressing scheme. Access to customer data use cases.

##### 4.4.4.1 Use Case CAS-MON-01: Get customer information

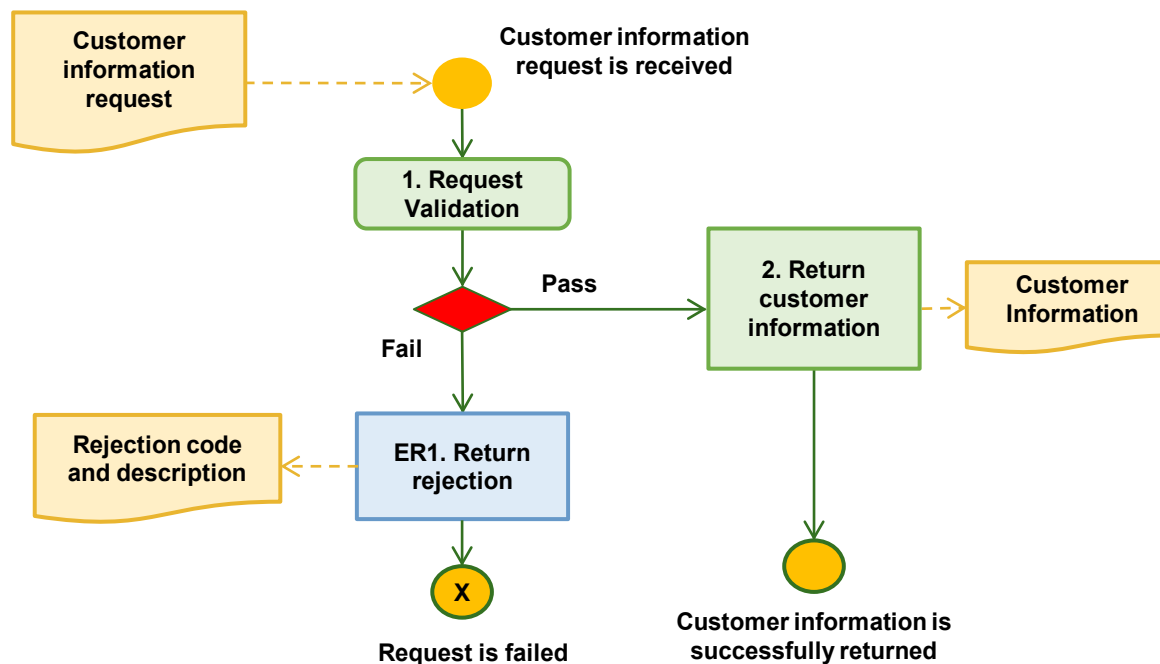


Figure 47: Get customer (individual person) information

<b>Use Case ID</b>	<b>CAS-MON-01</b>
<b>Use Case Name</b>	Get customer information
<b>Use Case Description</b>	Requesting own customer's information
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Get customer information" method is called by the participant's application
<b>Use Case Business Rules</b>	
<b>Participant can request information on its own customer only.</b>	
<b>Pre-Conditions</b>	
<b>A customer must be registered in CAS (use case IPS-CAS-01).</b>	
<b>Post Conditions</b>	
<b>Participant's application receives the customer's information (without aliases and accounts)</b>	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1



2	Customer information is successfully returned. In case customer does not have any of the requested data, the response will contain an error code and description.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
ER1	Participant's application receives an error code with description.

#### 4.4.4.2 Use Case CAS-MON-02: Get customer aliases

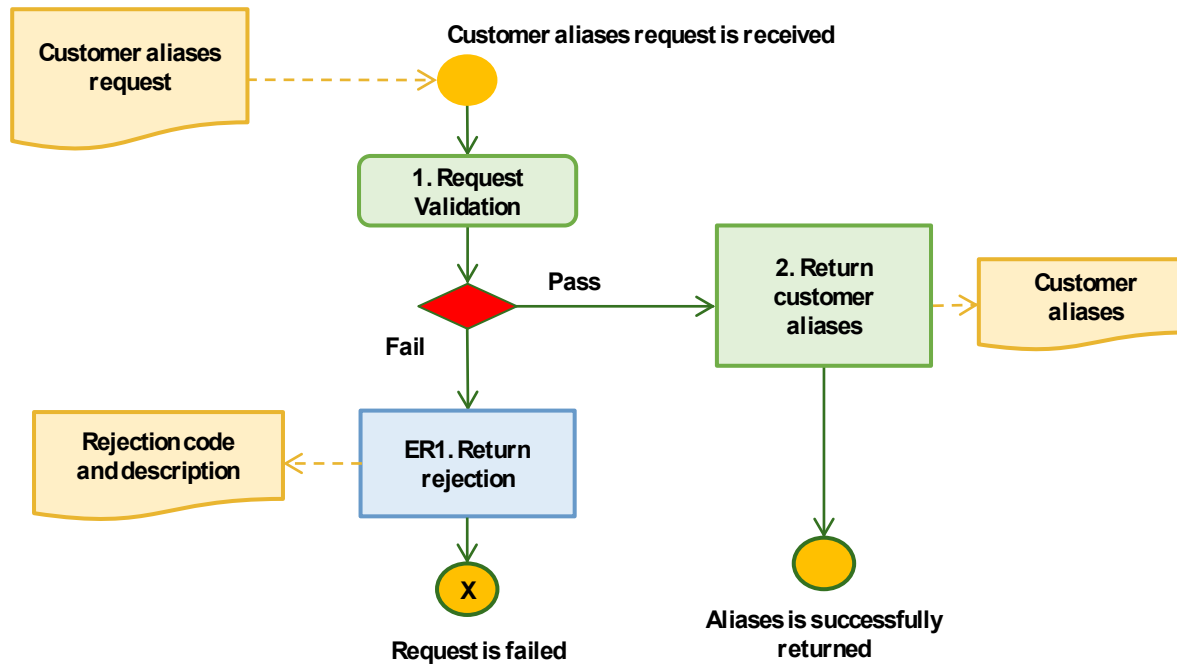


Figure 48: Get customer aliases

<b>Use Case ID</b>	<b>CAS-MON-02</b>
<b>Use Case Name</b>	Get customer aliases
<b>Use Case Description</b>	Requesting own customers' aliases.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Get aliases" method is called by the participant's application
<b>Use Case Business Rules</b>	
<b>Participant can request aliases of its own customer only.</b>	
<b>Pre-Conditions</b>	
<b>A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02).</b>	
<b>Post Conditions</b>	
<b>The Participant's application receives the customer's aliases and accounts linked to them</b>	
<b>Basic Flow</b>	
1	Validations for the request: 1. Customer must be registered in CAS; 2. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
2	Customer information (aliases and accounts linked to them) is successfully returned. In case customer does not have any of the requested data, the response is empty.
<b>Alternate Flows</b>	

	N/A
Exceptions	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.4.3 Use Case CAS-MON-03: Get customer accounts

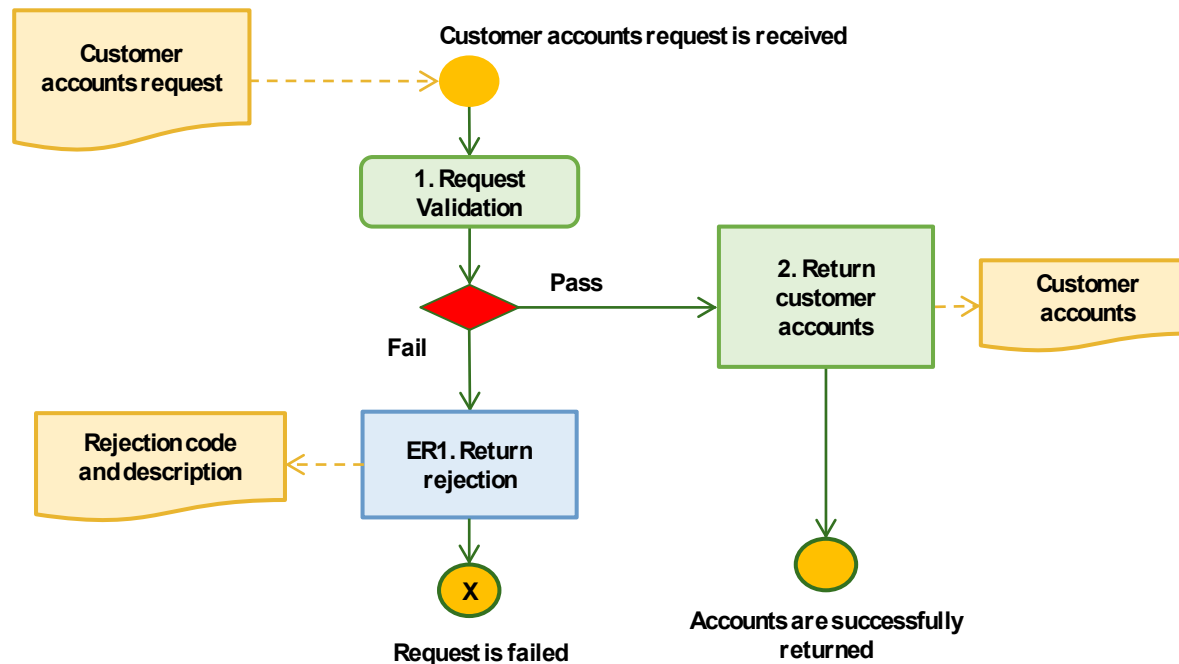


Figure 49: Get customer accounts

<b>Use Case ID</b>	<b>CAS-MON-03</b>
<b>Use Case Name</b>	Get customer accounts
<b>Use Case Description</b>	Request own customers' accounts.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Get Accounts" method is called by the participant's application
Use Case Business Rules	
Participant can request own accounts for customer.	
Pre-Conditions	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02).	
Post Conditions	
The Participant's application receives the customer's accounts	
Basic Flow	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Customer information is successfully returned. In case customer does not have any of the requested data, the response is empty.
Alternate Flows	
	N/A
Exceptions	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.4.4 Use Case CAS-MON-04: Get account and customer info

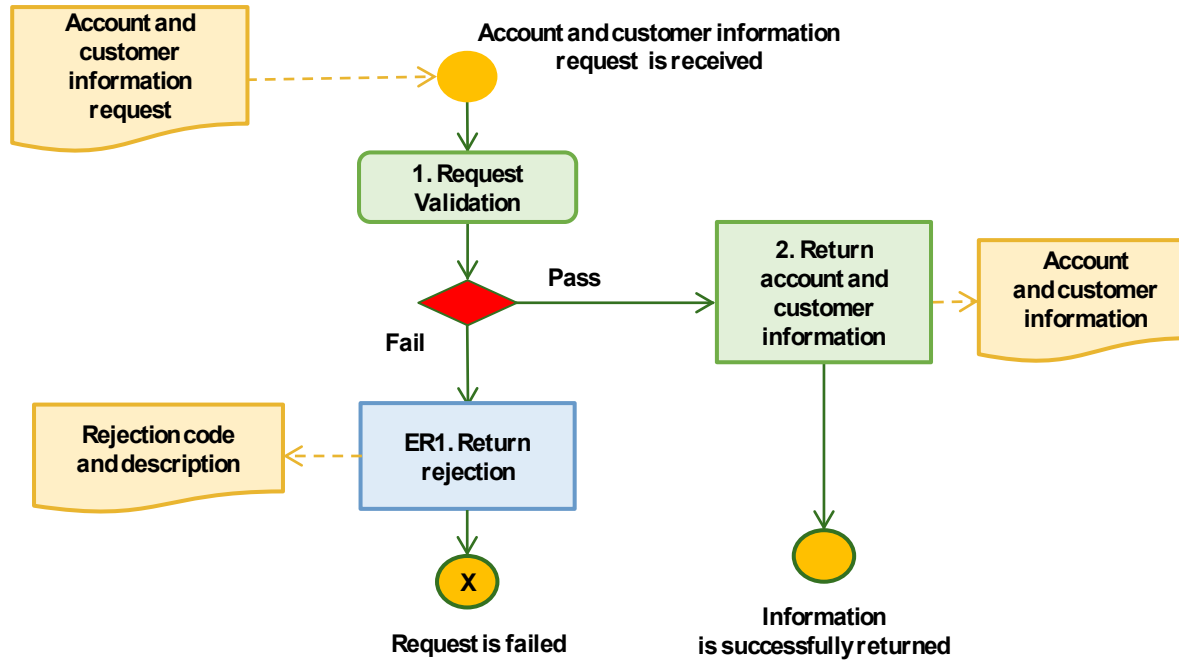


Figure 50: Get account and customer info

<b>Use Case ID</b>	<b>CAS-MON-04</b>
<b>Use Case Name</b>	Get account and customer information
<b>Use Case Description</b>	Requesting own customer's information and account information.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Get account and customer info" method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can request information on its own customer only.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). A customer account must be registered in CAS (use case IPS-CAS-03).	
<b>Post Conditions</b>	
The Participant's application receives the customer's information (without aliases and accounts)	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Account must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Customer and account information is successfully returned.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.4.5 Use Case CAS-MON-05: Get account information

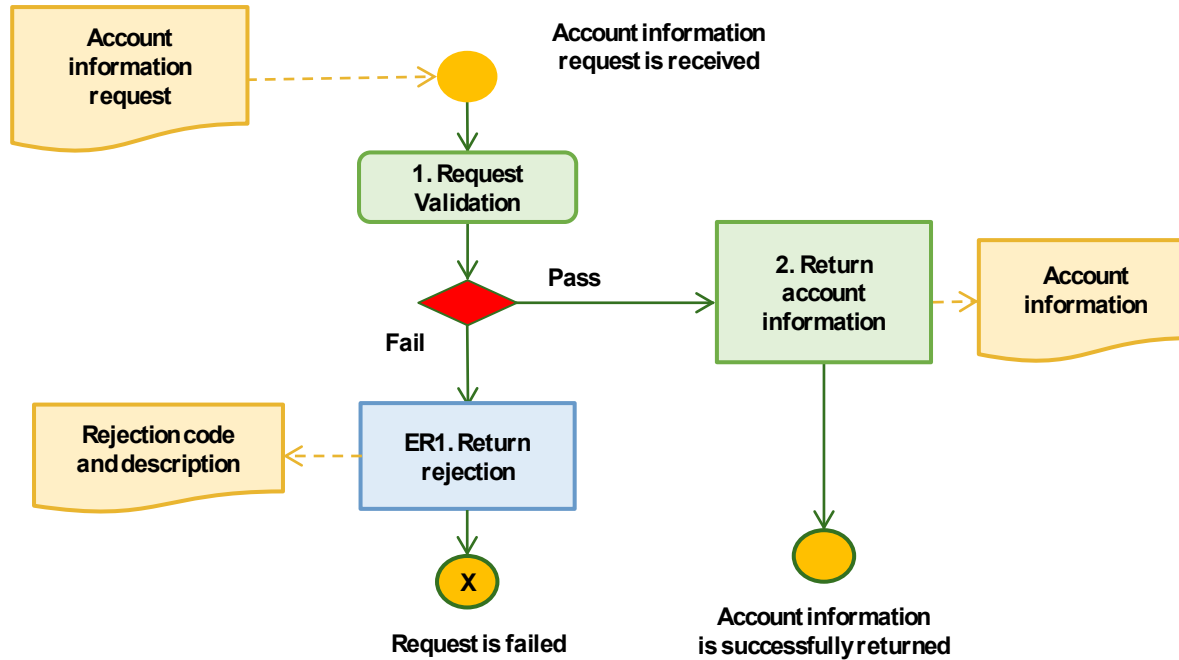


Figure 51: Get account information

<b>Use Case ID</b>	<b>CAS-MON-05</b>
<b>Use Case Name</b>	Get account information
<b>Use Case Description</b>	Requesting own customers' account information.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Get account info" method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can request information on its own customer account only.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). A customer account must be registered in CAS (use case IPS-CAS-03).	
<b>Post Conditions</b>	
The Participant's application receives the customer's account information	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Account must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Account information is successfully returned.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.



#### 4.4.4.6 Use Case CAS-MON-06: Get alias information

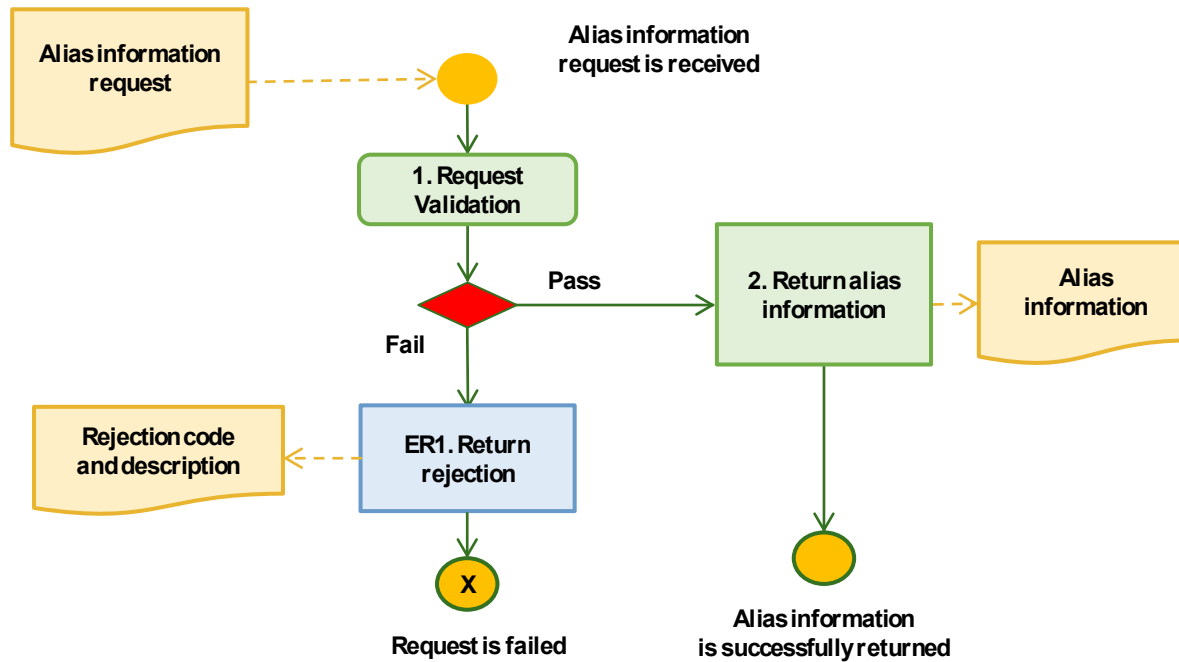


Figure 52: Get alias information

<b>Use Case ID</b>	<b>CAS-MON-06</b>
<b>Use Case Name</b>	Get alias information
<b>Use Case Description</b>	Requesting own customers' alias information.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Get Alias info" method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can request information on its own customer alias only.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). A customer alias must be registered in CAS (use case IPS-CAS-04).	
<b>Post Conditions</b>	
The Participant's application receives the customer's alias information	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Alias must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Alias information is successfully returned. In case customer does not have any of the requested data, the response is empty.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.4.7 Use Case CAS-MON-07: Get aliases linked to account

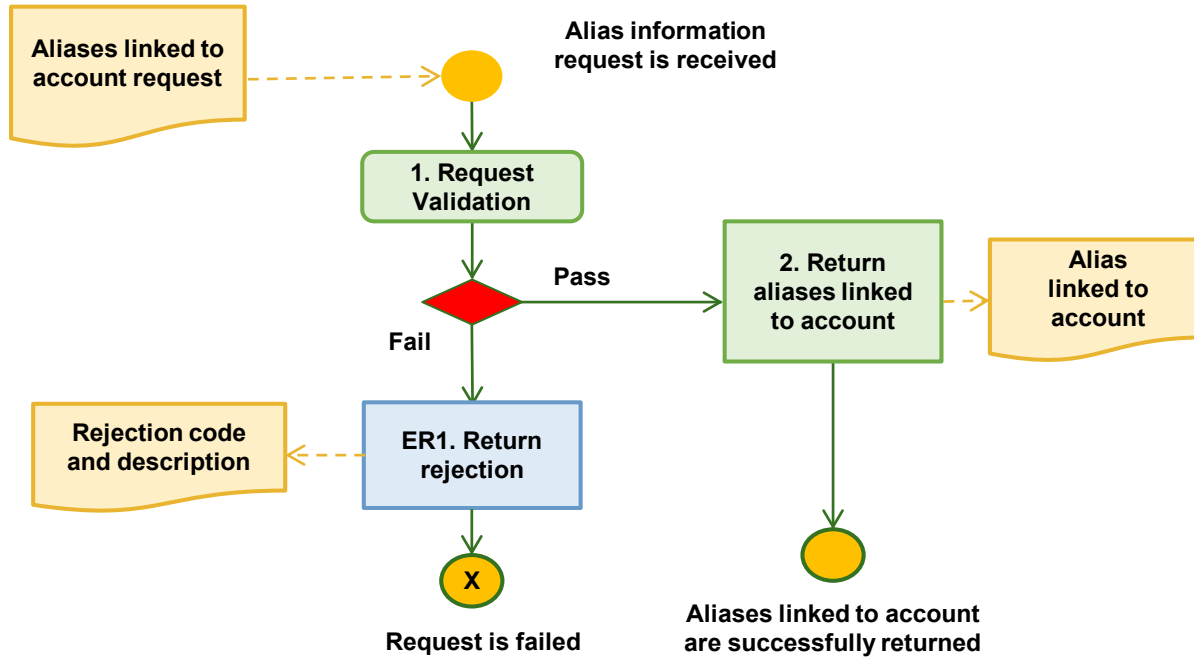


Figure 53: Get aliases linked to account

<b>Use Case ID</b>	<b>CAS-MON-07</b>
<b>Use Case Name</b>	Get aliases linked to account
<b>Use Case Description</b>	Request own customers' aliases linked to own customer's account.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Get aliases of account" method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can request aliases of its own accounts only.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). A customer account must be registered in CAS (use case IPS-CAS-03). Customer aliases must be registered in CAS (use case IPS-CAS-04).	
<b>Post Conditions</b>	
The Participant's application receives the customer's aliases linked to account	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Customer account must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1.
<b>2</b>	Aliases linked to account are successfully returned. In case no alias is linked to the account, the response is empty.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.4.4.8 Use Case CAS-MON-08: Get accounts linked to alias

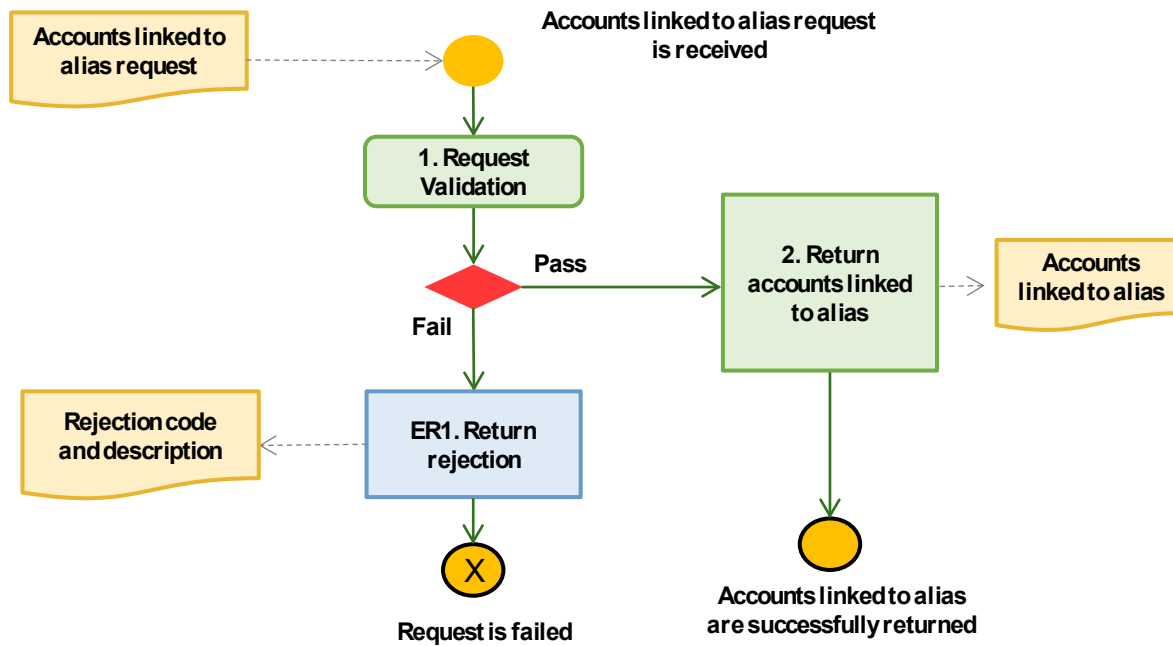


Figure 54: Get accounts linked to alias

<b>Use Case ID</b>	<b>CAS-MON-08</b>
<b>Use Case Name</b>	Get accounts linked to alias
<b>Use Case Description</b>	Requesting own customers' accounts linked to alias.
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Get accounts for alias" method is called by the participant's application
<b>Use Case Business Rules</b>	
Participant can request own accounts linked to an alias.	
<b>Pre-Conditions</b>	
A customer must be registered in CAS (use case IPS-CAS-01 or IPS-CAS-02). Customer accounts must be registered in CAS (use case IPS-CAS-03). A customer alias must be registered in CAS (use case IPS-CAS-04).	
<b>Post Conditions</b>	
The Participant's application receives the customer's accounts linked to alias	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Customer must be registered in CAS; 2. Customer alias must be registered in CAS; 3. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1.
<b>2</b>	Accounts linked to the alias are successfully returned. In case no account is linked to the alias, the response is empty.
<b>Alternate Flows</b>	
	N/A
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.

## 4.5 END-TO-END TRACKER USE CASES

### 4.5.1 Use Case IPS-ETRAC-01: Report on Payment Status to the End-to-End Tracker Service

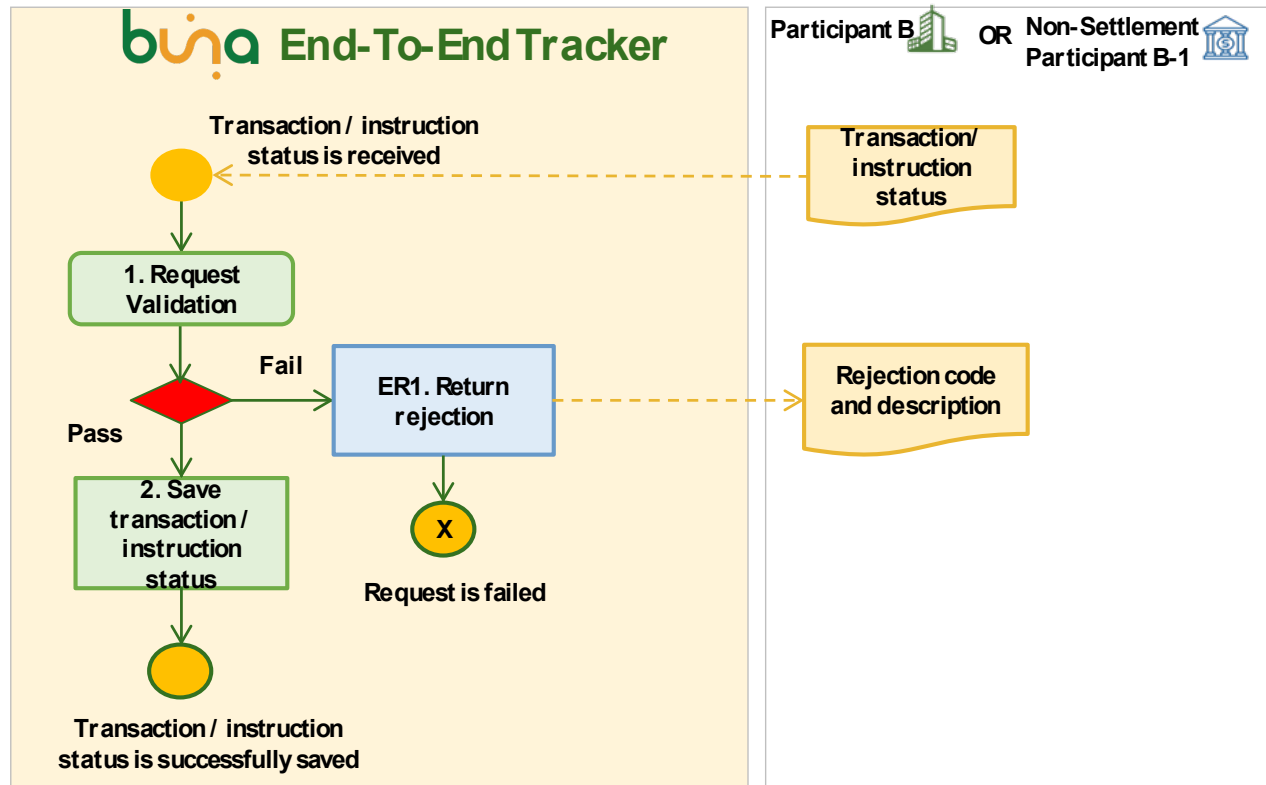


Figure 55: Report on Payment Status to the End-to-End tracker Service

<b>Use Case ID</b>	<b>IPS-ETRAC-01</b>
<b>Use Case Name</b>	Report on Payment Status to the End-to-End tracker Service
<b>Use Case Description</b>	Report on Payment Status to the End-to-End tracker Service
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Status reply" method is called by the participant's application
<b>Use Case Business Rules</b>	
<b>Instructed Agent has to reply to the End-to-End Tracker with the status changes. Status reply will be sent for individual transactions and for instructions inside the batch (for each instruction of the batch separately).</b>	
<b>Pre-Conditions</b>	
<b>Transaction was received by the Instructed Agent</b>	
<b>Post Conditions</b>	
<b>Transaction status was saved and in case of push mode was reported to Instructing Agent</b>	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: <ol style="list-style-type: none"> <li>1. Body fields values corresponds to required formats and value ranges.</li> <li>2. API call initiator is a Instructed Agent in current transaction</li> </ol> If validation fails, go to ER1
<b>2</b>	Buna End-to-End Tracker saves transaction status from Instructed Agent side.

Alternate Flows	
	N/A
Exceptions	
<b>ER1</b>	Participant's application receives an error code with description.

#### 4.5.2 Use Case IPS-ETRAC-02: Request a Payment Status from the End-to-End Tracker Service

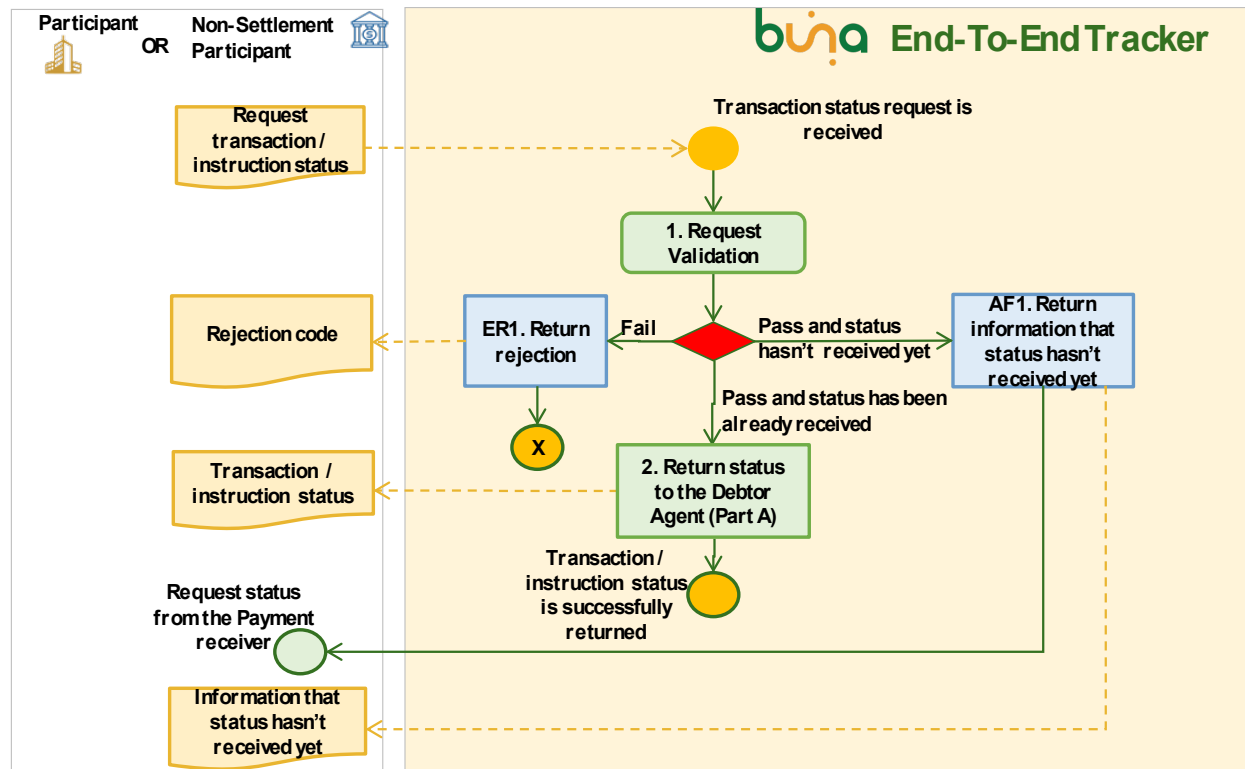


Figure 56: Request a Payment Status from the End-to-End tracker Service

<b>Use Case ID</b>	<b>IPS-ETRAC-02</b>
<b>Use Case Name</b>	Request a Payment Status from the End-to-End tracker Service
<b>Use Case Description</b>	Request a Payment Status from the End-to-End tracker Service via API
<b>Primary Actors</b>	Participant's application, End-To-End Tracker
<b>Trigger Event</b>	"Get instruction status" method is called by the participant's application
<b>Use Case Business Rules</b>	
Instructing Agent or Instructed Agent can request transaction status from the End-to-End tracker Service	
<b>Pre-Conditions</b>	
N/A	
<b>Post Conditions</b>	
Request Initiator received status response	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Body fields values corresponds to required formats and value ranges.



	2. Request initiator is a Instructing Agent or Instructed Agent regarding the requested transaction/instruction 3. Check if Status was received from the Payment Receiver If validation fails, go to ER1 If Status hasn't received yet – go to AF1
2	Transaction status is successfully returned.
<b>Alternate Flows</b>	
AF1	If Status hasn't received yet End-To-End Tracker sends information about this situation to the Request Initiator. Request Initiator can request the status from the Instructed Agent via Buna API Gateway (Use Case IPS-ETRAC-03: )
<b>Exceptions</b>	
ER1	Participant's application receives an error code with description.

#### 4.5.3 Use Case IPS-ETRAC-03: End-To-End Tracker in Proxy mode

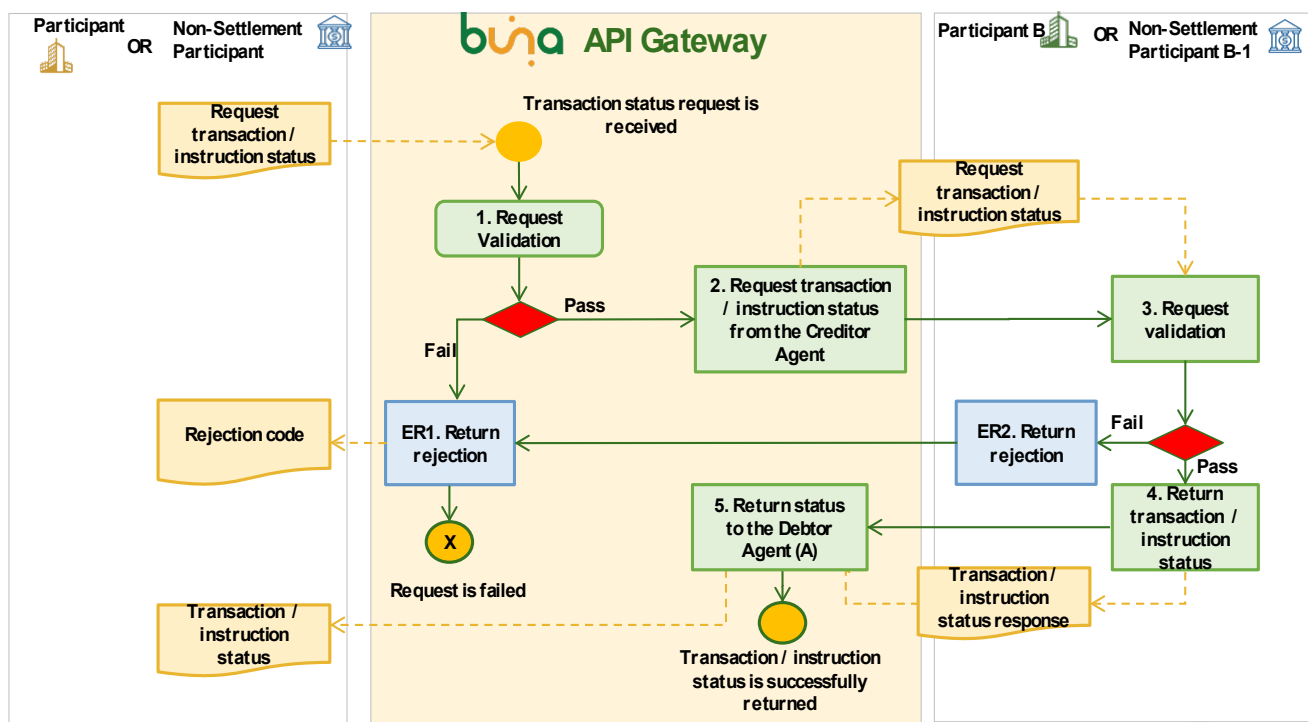


Figure 57: Request a Payment Status from the End-to-End tracker Service

<b>Use Case ID</b>	<b>IPS-ETRAC-03</b>
<b>Use Case Name</b>	End-To-End Tracker in Proxy mode
<b>Use Case Description</b>	Request a Payment Status from the Instructed Agent Service via API Gateway
<b>Primary Actors</b>	Participant's application, End-To-End Tracker
<b>Trigger Event</b>	"Get instruction status, direct request" method is called by the participant's application
<b>Use Case Business Rules</b>	
Instructing Agent can request transaction status from the Instructed Agent via Buna API Gateway	
<b>Pre-Conditions</b>	
N/A	

Post Conditions	
Request Initiator received status response	
Basic Flow	
1	Validations for the request: 1. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
2	Buna API Gateway requests transaction status from the Instructed Agent
3	The Instructed Agent validates the request If validation fails, go to ER2
4	The Instructed Agent returns transaction status
5	Buna API Gateway returns transaction status to the Instructing Agent
Alternate Flows	
	N/A
Exceptions	
ER1	Participant's application receives an error code with description.
ER2	Instructed Agent application returns Reject to Buna API Gateway. Go to ER1

## 4.6 PRE-VALIDATION AND CONSULTATION SERVICE USE CASES

### 4.6.1 Use Case IPS-CONS-01: Request pre-validation and information from Counterparty for a single transfer

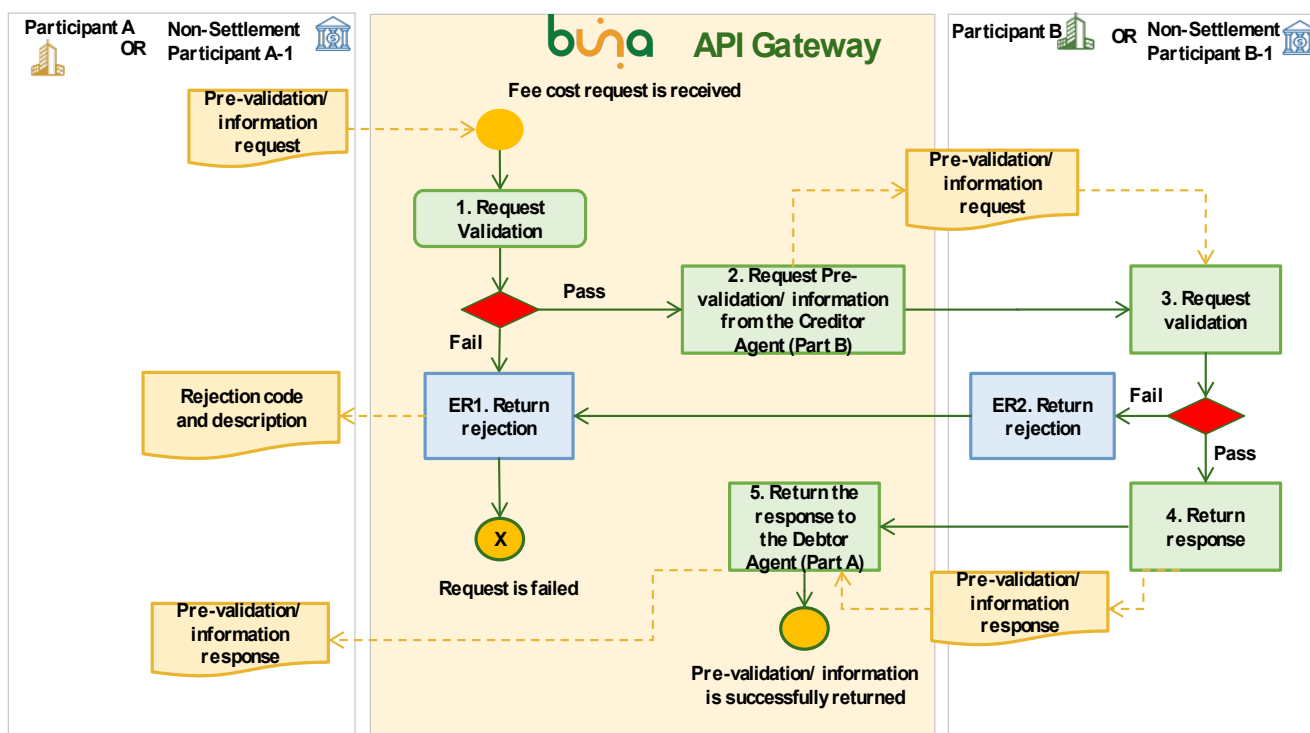


Figure 58: Request fee cost from Instructed Agent

Use Case ID	IPS-CONS-01
Use Case Name	Request pre-validation from Counterparty for a single transfer



<b>Use Case Description</b>	Requesting pre-validation from Instructed Agent (Participant B or Non-Settlement Participant B-1)
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	«Get pre-validation» method is called by the participant's application
<b>Use Case Business Rules</b>	
Instructing Agent can request pre-validation for the single transfer before sending it to the Instructed Agent. Instructed Agent has to provide a response with pre-validation results and fee cost if it is applicable to the payment (fee cost is optional in response)	
<b>Pre-Conditions</b>	
N/A	
<b>Post Conditions</b>	
Instructing Agent received information from API and provided it to the customer A (via its own communication channel outside the Buna).	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Buna API Gateway requests fee cost/pre-validation from the Instructed Agent
<b>3</b>	The Instructed Agent validates the request If validation fails, go to ER2
<b>4</b>	The Instructed Agent returns information to the Instructing Agent
<b>5</b>	Buna API Gateway returns pre-validation results with fee cost information to the Instructing Agent
<b>Alternate Flows</b>	
N/A	
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.
<b>ER2</b>	Instructed Agent application returns Reject to Buna API Gateway. Go to ER1

#### 4.6.2 Use Case IPS-CONS-03: Request exchange rate from the FX Provider



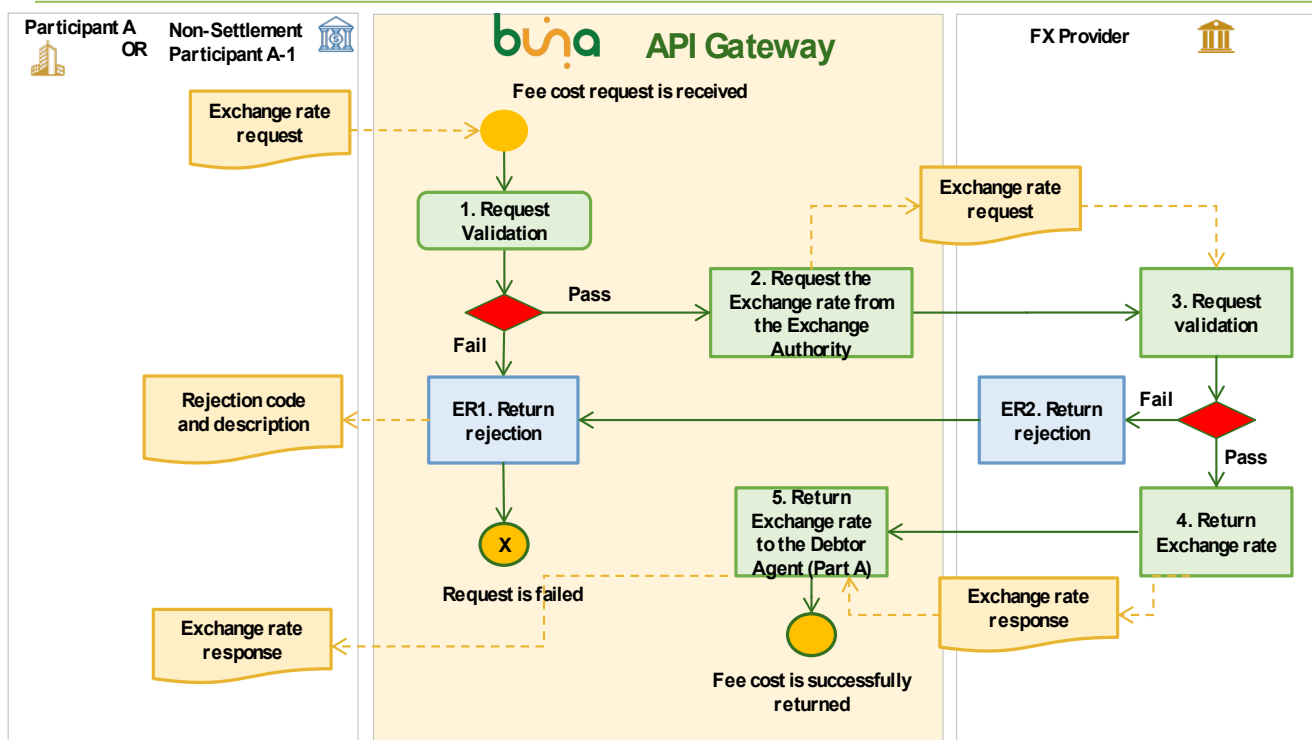


Figure 59: Request exchange rate from the FX Provider

<b>Use Case ID</b>	<b>IPS-CONS-03</b>
<b>Use Case Name</b>	Request exchange rate from the FX Provider
<b>Use Case Description</b>	Requesting exchange rate from the FX Provider
<b>Primary Actors</b>	Participant's application
<b>Trigger Event</b>	"Get exchange rate" method is called by the participant's application
<b>Use Case Business Rules</b>	
For the currency exchange (which will be done outside the Buna) Instructing Agent can ask for rates from different FX providers to provide competitive rate for its client	
<b>Pre-Conditions</b>	
N/A	
<b>Post Conditions</b>	
Instructing Agent received exchange rate information from API and provided it to the Client A (via its own communication channel outside the Buna).	
<b>Basic Flow</b>	
<b>1</b>	Validations for the request: 1. Body fields values corresponds to required formats and value ranges. If validation fails, go to ER1
<b>2</b>	Buna API Gateway requests exchange rate from the FX Provider
<b>3</b>	The FX Provider validates the request If validation fails, go to ER2
<b>4</b>	The FX Provider returns exchange rate information
<b>5</b>	Buna API Gateway returns exchange rate information to the Instructing Agent
<b>Alternate Flows</b>	
N/A	
<b>Exceptions</b>	
<b>ER1</b>	Participant's application receives an error code with description.
<b>ER2</b>	The FX Provider application returns Reject to Buna API Gateway. Go to ER1





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## 5 MONITORING

Dashboards and reports were moved to new document «IPS Dashboards and Reports».