

Cross Border Inward QR

[</>](#) See also API reference for DuitNow QR

[Check API](#) >

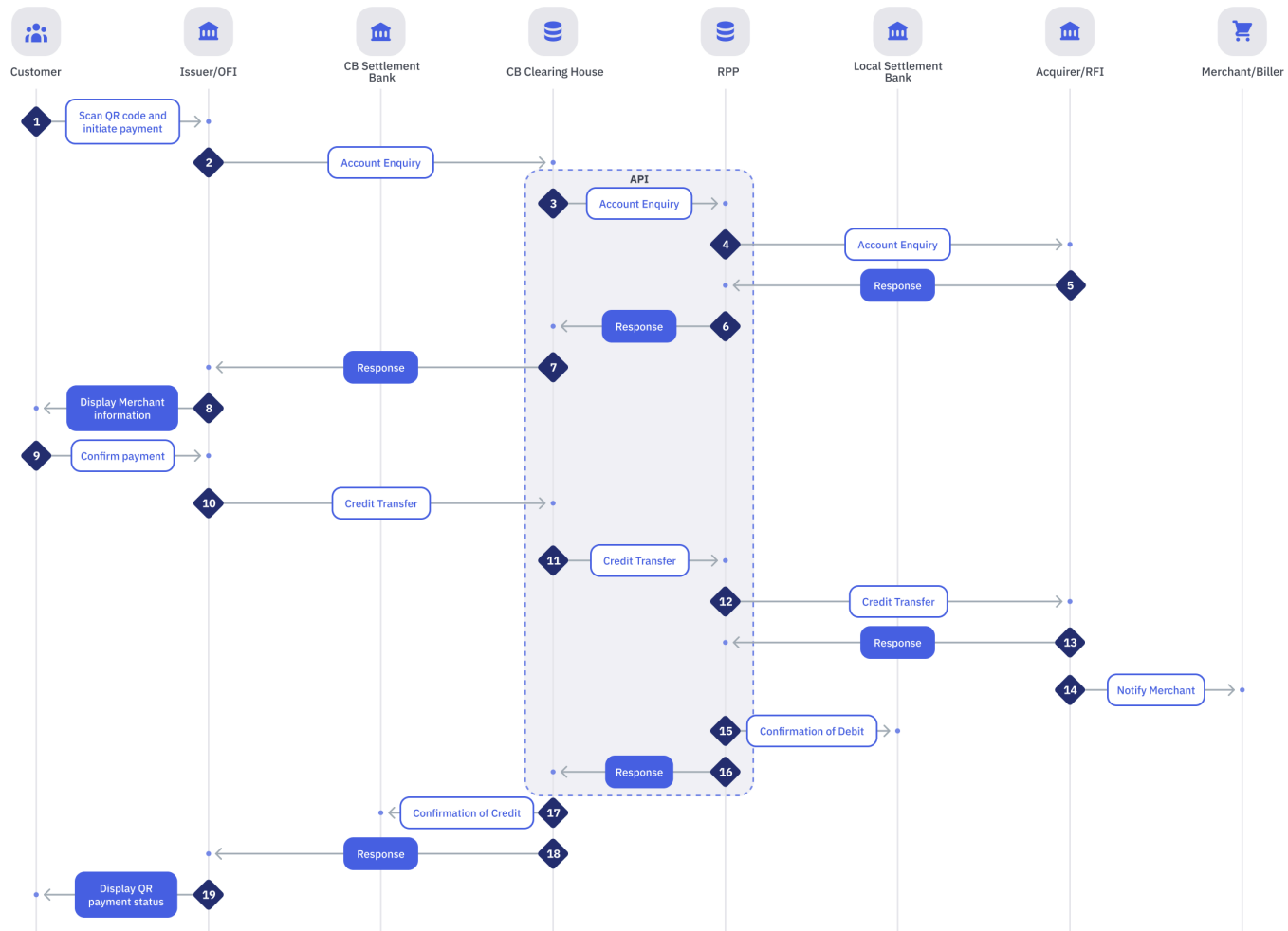
Introduction

Supported Regions

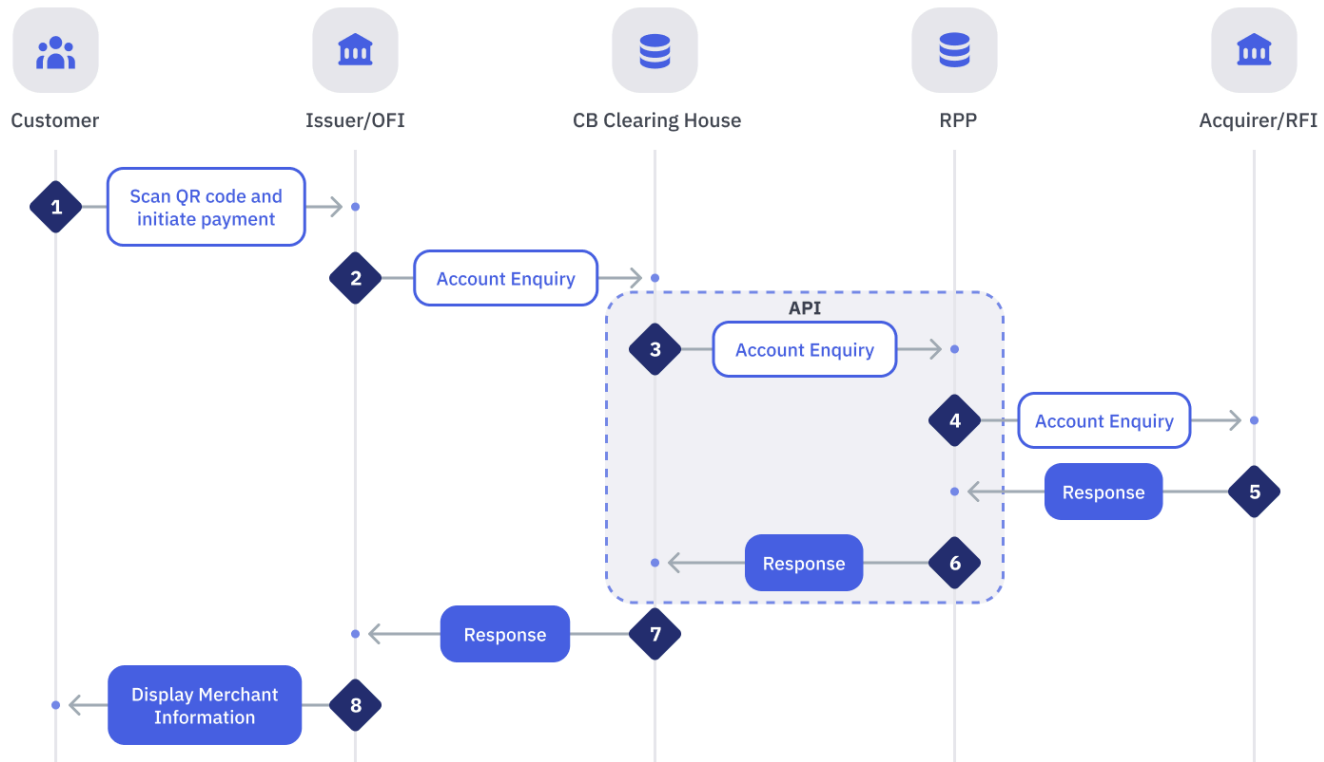
China	Indonesia	Korea	Philippines	Singapore	Thailand
✓	✓	Coming Soon	Coming Soon	✓	✓

KEY ✓ Available ✕ Not Available

The Inward Cross-Border QR enables customers with a foreign Bank Account to make payments via their chosen mobile banking application by scanning the QR code generated by local merchants in Malaysia.



Account Enquiry Flow (Steps 1-8)



Step	Sender	Receiver	Process
1	Customer	Issuer	Customer logs in to Mobile Banking App, scans a merchant's QR and initiates a QR Payment request.

Step	Sender	Receiver	Process
2	Issuer	CB Clearing House	<p>Issuer performs the following:</p> <ul style="list-style-type: none"> • Authorize and validate the QR Payment request • Parse the QR code to identify the Acquirer <p>If all validations are successful, Issuer will:</p> <ul style="list-style-type: none"> • Send Account Enquiry request to CB Clearing House
3	CB Clearing House	RPP	<p>CB Clearing House performs the following:</p> <ul style="list-style-type: none"> • Message Validations (includes digital signature verification) • Business Validations <p>If any Message Validation fails, CB Clearing House will send a REJECT response to Issuer.</p> <p>If any Business Validation fails, CB Clearing House will send a NEGATIVE response to Issuer.</p> <p>If all validations are successful, CB Clearing House will:</p> <ul style="list-style-type: none"> • Send the Account Enquiry request to RPP
4	RPP	Acquirer	<p>RPP performs the following:</p> <ul style="list-style-type: none"> • Message Validations (includes digital signature verification) • Business Validations • Forex rate validation and conversion

Step	Sender	Receiver	Process
			<p>If any Message Validation fails, RPP will send a REJECT response to RPP.</p> <p>If any Business Validation fails, RPP will send a NEGATIVE response to CB Clearing House.</p> <p>If all validations are successful, RPP will:</p> <ul style="list-style-type: none"> • Send the Account Enquiry request to Acquirer
5	Acquirer	RPP	<p>Acquirer performs the following:</p> <ul style="list-style-type: none"> • Message Validations (includes digital signature verification) • Beneficiary Account Validation <p>If any Message Validation fails, Acquirer will send a REJECT response to RPP.</p> <p>If any Beneficiary Account Validation fails, Acquirer will send a NEGATIVE response to RPP.</p> <p>If all validations are successful, Acquirer will:</p> <ul style="list-style-type: none"> • Send the Account Enquiry response to RPP
6	RPP	CB Clearing House	<p>RPP performs the following:</p> <ul style="list-style-type: none"> • Message Validations (includes digital signature verification) • Business Validations <p>If all validations are successful, RPP will:</p>

Step	Sender	Receiver	Process
			<ul style="list-style-type: none"> Send the Account Enquiry response to CB Clearing House
7	CB Clearing House	Issuer	<p>CB Clearing House performs the following:</p> <ul style="list-style-type: none"> Message Validations (includes digital signature verification) Business Validations <p>If all validations are successful, CB Clearing House will:</p> <ul style="list-style-type: none"> Send the Account Enquiry response to Issuer
8	Issuer	Customer	<p>Issuer performs the following:</p> <ul style="list-style-type: none"> Message Validations (includes digital signature verification) Business Validations <p>If all validations are successful, Issuer will:</p> <ul style="list-style-type: none"> If successful response: <ul style="list-style-type: none"> Display the Account Name on the Customer screen for confirmation If negative response: <ul style="list-style-type: none"> Display an error message on the customer screen

Exception Handling

Step(s)	Event	Action
2	Timeout - No response from CB Clearing House	<p>When no response is received from Clearing House after x period of time:</p> <p>Issuer will:</p> <ul style="list-style-type: none">• Stops timer• Display an error message on the customer screen

Step(s)	Event	Action
2	Rejection - Rejected by CB Clearing House	<p>CB Clearing House:</p> <ul style="list-style-type: none"> • If Message Validation fails, send a REJECT response to Issuer • If Business Validation fails, send a NEGATIVE response to Issuer • Include a copy of the original Request message in FULL in the AddtlData field of the Reject Response message for the Sender to investigate the issue <p>Issuer:</p> <ul style="list-style-type: none"> • Stop timer • Perform Message Validation: <ul style="list-style-type: none"> ◦ Message Format Validation ◦ Digital Signature Verification • If all validations are successful, Issuer will display an error message on the customer's screen
3	Timeout - No response from RPP	<p>When no response is received from RPP after X period of time, the following actions should be taken:</p> <p>CB Clearing House:</p> <ul style="list-style-type: none"> • Stop timer • Send NEGATIVE Response message to Issuer <p>Issuer:</p>

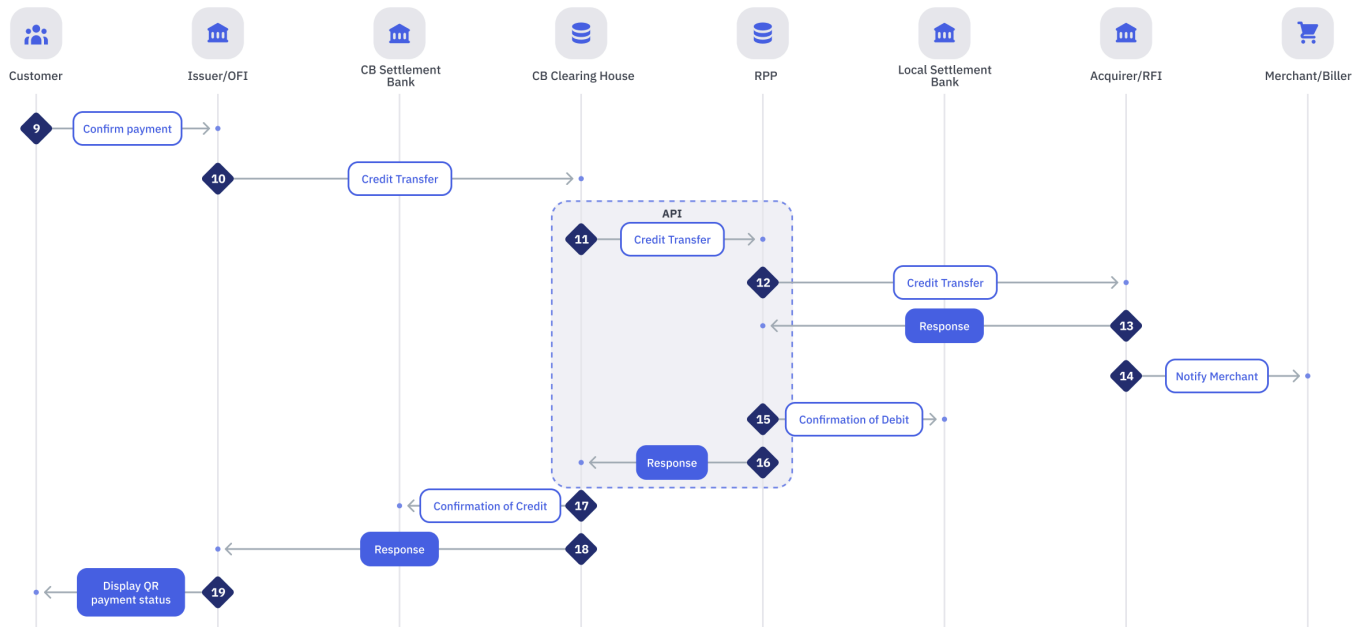
Step(s)	Event	Action
		<ul style="list-style-type: none"> • Stop timer • Message Validation • Business Validation • If all validations are successful, Issuer will display an error message on the customer's screen
3	Rejection - Rejected by RPP	<p>RPP:</p> <ul style="list-style-type: none"> • If Message Validation fails, send a REJECT Response to CB Clearing House • If Business Validation fails, send the Payment Status with NEGATIVE Response to CB Clearing House • Include a copy of the original Request message in FULL in the AddtlData field of the Reject Response message for the Sender to investigate the issue <p>CB Clearing House:</p> <ul style="list-style-type: none"> • Stop timer • Message Validation (includes digital signature verification) • Business Validation • If all validations are successful, CB Clearing House will send the Account Enquiry response to Issuer <p>Issuer:</p> <ul style="list-style-type: none"> • Stop timer

Step(s)	Event	Action
		<ul style="list-style-type: none"> • Message Validation (includes digital signature verification) • Business Validation • If all validations are successful, Issuer will display an error message on the customer screen
4	Timeout - No response from Acquirer	<p>When no response is received from Acquirer after x period of time,</p> <p>RPP:</p> <ul style="list-style-type: none"> • Stop timer • Send NEGATIVE Account Enquiry response to CB Clearing House <p>CB Clearing House:</p> <ul style="list-style-type: none"> • Stop timer • Message validation (includes digital signature verification) • Business Validation • If all validations are successful, send NEGATIVE Account Enquiry response to the Issuer <p>Issuer:</p> <ul style="list-style-type: none"> • Stop timer • Display an error message on the customer's screen

Step(s)	Event	Action
4	Rejection - Rejected by Acquirer	<p>Acquirer:</p> <ul style="list-style-type: none"> • If Message Validation fails, send a REJECT Response to RPP • If Business Validation fails, send the Payment Status with NEGATIVE Response to RPP • Include a copy of the original Request message in FULL in the AddtlData field of the Reject Response message for the Sender to investigate the issue <p>RPP</p> <ul style="list-style-type: none"> • Stop timer • Message Validation (includes digital signature verification) • Business Validation • If all validations are successful, RPP will send the Account Enquiry response to CB Clearing House <p>CB Clearing House:</p> <ul style="list-style-type: none"> • Stop timer • Message Validation (includes digital signature verification) • Business Validation • If all validations are successful, CB Clearing House will send the Account Enquiry response to Issuer <p>Issuer :</p>

Step(s)	Event	Action
		<ul style="list-style-type: none"> • Stop timer • Message Validation (includes digital signature verification) • Business Validation • If all validations are successful, display an error message on the customer's screen

Credit Transfer Flow (Steps 9-19)



Step	Sender	Receiver	Process
9	Customer	Issuer	Customer confirms the QR Payment.
10	Issuer	CB Clearing House	<p>Issuer performs the following:</p> <ul style="list-style-type: none"> • Authorize and validate the Credit Transfer request <p>If all validations are successful, Issuer will:</p> <ul style="list-style-type: none"> • Send Credit Transfer request to CB Clearing House
11	CB Clearing House	RPP	<p>CB Clearing House performs the following:</p> <ul style="list-style-type: none"> • Message Validations (including digital signature verification) • Business Validations • Liquidity Position Check <p>If any Message Validation fails, CB Clearing House will send a REJECT response to Issuer.</p> <p>If any Business Validation fails, CB Clearing House will send a NEGATIVE response to Issuer.</p> <p>If any Liquidity Position Check fails, CB Clearing House will send a NEGATIVE response to Issuer.</p> <p>If all validations are successful, CB Clearing House will:</p> <ul style="list-style-type: none"> • Send the Credit Transfer request to RPP
12	RPP	Acquirer	<p>RPP performs the following:</p> <ul style="list-style-type: none"> • Message Validations (includes digital signature verification)

Step	Sender	Receiver	Process
			<ul style="list-style-type: none"> • Business Validations <p>If any Message Validation fails, RPP will send a REJECT response to CB Clearing House.</p> <p>If any Business Validation fails, RPP will send a NEGATIVE response to CB Clearing House.</p> <p>If all validations are successful, RPP will:</p> <ul style="list-style-type: none"> • Check if an Account Enquiry request has been performed within a stipulated time interval • If no Account Enquiry found, <ul style="list-style-type: none"> ◦ Send a Payment Status with a NEGATIVE response to CB Clearing House • If an Account Enquiry is found, <ul style="list-style-type: none"> ◦ Send the Credit Transfer request to Acquirer
13	Acquirer	RPP	<p>Acquirer performs the following:</p> <ul style="list-style-type: none"> • Message Validations (includes digital signature verification) • Beneficiary Account Validation <p>If any Message Validation fails, Acquirer will send a REJECT response to RPP.</p> <p>If Beneficiary Account Validation fails, Acquirer will send a NEGATIVE response to RPP.</p>

Step	Sender	Receiver	Process
			<p>If all validations are successful, Acquirer will:</p> <ul style="list-style-type: none"> Send the Payment Status with SUCCESSFUL response to RPP <p>Notes:</p> <p>When a REPEAT request is received by the Acquirer from RPP:</p> <ul style="list-style-type: none"> If the original transaction has been POSTED successfully by the Acquirer, Acquirer will respond with the original transaction response instead of rejecting the REPEAT request as duplicate If the original transaction has not been processed previously, Acquirer will process the transaction and return the appropriate response to RPP
14	Acquirer	Merchant	Acquirer notifies merchant on successful QR Payment status.
15	RPP	Local Settlement Bank	RPP sends notification of Debit to Local Settlement Bank.
16	RPP	CB Clearing House	<p>RPP performs the following:</p> <ul style="list-style-type: none"> Message Validations (includes digital signature verification) Business Validations <p>If all validations are successful, RPP will:</p>

Step	Sender	Receiver	Process
			<ul style="list-style-type: none"> Update liquidity positions of Acquirer and Local Settlement Bank Send the Payment Status with successful response to CB Clearing House <p>Notes:</p> <p>If the signature received from Acquirer could not be verified, RPP will send an ACCEPTED (Signature error) response to CB Clearing House. This should take care of any message manipulation done within the data when a signature cannot be verified.</p>
17	CB Clearing House	CB Settlement Bank	CB Clearing House sends notification of Credit to CB Settlement Bank.
18	CB Clearing House	Issuer	<p>CB Clearing House performs the following:</p> <ul style="list-style-type: none"> Message Validations (includes digital signature verification) Business Validations <p>If all validations are successful, CB Clearing House will:</p> <ul style="list-style-type: none"> Update liquidity positions of Issuer Send the Payment Status with successful response to Issuer <p>Notes:</p> <p>If the signature received from RPP could not be verified, CB Clearing House will send an ACCEPTED (Signature</p>

Step	Sender	Receiver	Process
			error) response to Issuer. This should take care of any message manipulation done within the data when a signature cannot be verified.
19	Issuer	Customer	<p>Issuer performs the following:</p> <ul style="list-style-type: none"> • Message Validations (includes digital signature verification) • Business Validations <p>If all validations are successful, Issuer will:</p> <ul style="list-style-type: none"> • Display a successful message on the customer's screen <p>Notes:</p> <p>If the signature received from CB Clearing House could not be verified, Issuer will base the status of the transaction on the actual transaction status received from RPP.</p>

Exception Handling

Step(s)	Event	Action
10	Timeout - No response from CB Clearing House	<p>When no response is received from Clearing House after x period of time,</p> <p>Issuer will:</p> <ul style="list-style-type: none"> • Stop timer

Step(s)	Event	Action
		<ul style="list-style-type: none"> • Display an error message on the customer screen • Send a Transaction Enquiry Request to obtain the status of the Credit Transfer
10	Rejection - Rejected by CB Clearing House	<p>CB Clearing House</p> <ul style="list-style-type: none"> • If any validation fails, send a Payment Status with NEGATIVE response to Issuer <p>Issuer:</p> <ul style="list-style-type: none"> • Stop timer • Message Validation (includes digital signature verification) • Business Validation <p>If all validations are successful, Issuer will display an error message on the customer's screen</p>

Step(s)	Event	Action
11	Timeout - No response from RPP	<p>When no response is received from RPP after x period of time, the following actions should be taken:</p> <p>CB Clearing House will:</p> <ul style="list-style-type: none"> • Timeout • Store the Transaction Enquiry Request in SAF • Update the Liquidity Positions of both Issuer and CB Settlement Bank • Send an ACCEPTED response back to Issuer
11	Rejection - Rejected by RPP	<p>RPP:</p> <ul style="list-style-type: none"> • If Message Validation fails, send a REJECT Response to CB Clearing House • If Business Validation fails, send the Payment Status with NEGATIVE Response to CB Clearing House • Include a copy of the original Request message in FULL in the AddtlData field of the Reject Response message for the Sender to investigate the issue <p>CB Clearing House:</p> <ul style="list-style-type: none"> • Stop timer • Message Validation (includes digital signature verification) • Business Validation • If all validations are successful, CB Clearing House will: <ul style="list-style-type: none"> ◦ If NEGATIVE Response:

Step(s)	Event	Action
		<ul style="list-style-type: none"> ▪ Not update liquidity and settlement positions ▪ Send the Payment Status with NEGATIVE response to Issuer ○ If REJECT Response: <ul style="list-style-type: none"> ▪ Not update liquidity and settlement positions ▪ Send the Payment Status with REJECT response to Issuer <p>Issuer:</p> <ul style="list-style-type: none"> • Stops timer • Message Validation (includes digital signature verification) • Business Validation • If all validations are successful, Issuer will display an error message on the customer screen
12	Timeout - No response from Acquirer	<p>When no response is received from Acquirer after x period of time,</p> <p>RPP will:</p> <ul style="list-style-type: none"> • Timeout • Store the Credit Transfer Transaction in SAF • Update the Liquidity Positions of both Acquirer and Local Settlement Bank

Step(s)	Event	Action
		<ul style="list-style-type: none"> Send an ACCEPTED (Timeout reason) response back to CB Clearing House <p>CB Clearing House:</p> <ul style="list-style-type: none"> Send a Confirmation of Credit to CB Settlement Bank Stop timer Message Validation (includes digital signature verification) Business Validation If all validations are successful, CB Clearing House will: <ul style="list-style-type: none"> Update liquidity positions of Issuer Send the Payment Status with successful response to Issuer <p>Issuer:</p> <ul style="list-style-type: none"> Stop timer Message Validation (includes digital signature verification) Business Validation If all validations are successful, Issuer will display a successful message on the customer screen
12	Rejection - Rejected by Acquirer	<p>Acquirer:</p> <ul style="list-style-type: none"> If Message Validation (includes digital signature verification) fails, send a REJECT Response to RPP If Beneficiary Account Validation fails, send the Payment Status with NEGATIVE Response to RPP

Step(s)	Event	Action
		<ul style="list-style-type: none"> • Include a copy of the original Request message in FULL in the AddtlData field of the Reject Response message for the Sender to investigate the issue <p>RPP:</p> <ul style="list-style-type: none"> • Stop timer • Message Validation (includes digital signature verification) • Business Validation • If all validations are successful, RPP will send the Payment Status to CB Clearing House <p>CB Clearing House:</p> <ul style="list-style-type: none"> • Stop timer • Message Validation (includes digital signature verification) • Business Validation • If all validations are successful, CB Clearing House will send the Payment Status to Issuer <p>Issuer:</p> <ul style="list-style-type: none"> • Stop timer • Message Validation (includes digital signature verification) • Business Validation • If all validations are successful, Issuer will display an error message on the customer screen

Validation Rules

Message Validation	Business Validation
<ul style="list-style-type: none">• Message Format Validation• Digital Signature Verification	<p>RPP:</p> <ul style="list-style-type: none">• Mandatory and conditional fields validation• Business Message Identifier validation• Issuer Check• Acquirer Check• Repeat Check• Date Tolerance Check• Minimum & Maximum Amount Check• Liquidity Position Check• Account Enquiry Exist Check (only in Step 11) <p>Acquirer:</p> <ul style="list-style-type: none">• Mandatory and conditional fields validation• QR Validation (Only in Step 5)• Beneficiary Account Validation (Only in Step 5)• Any other validations