



openwayacademy

# Transaction Processing in WAY4

A horizontal bar with a black outline, divided into five colored segments: blue, teal, green, red, and orange.

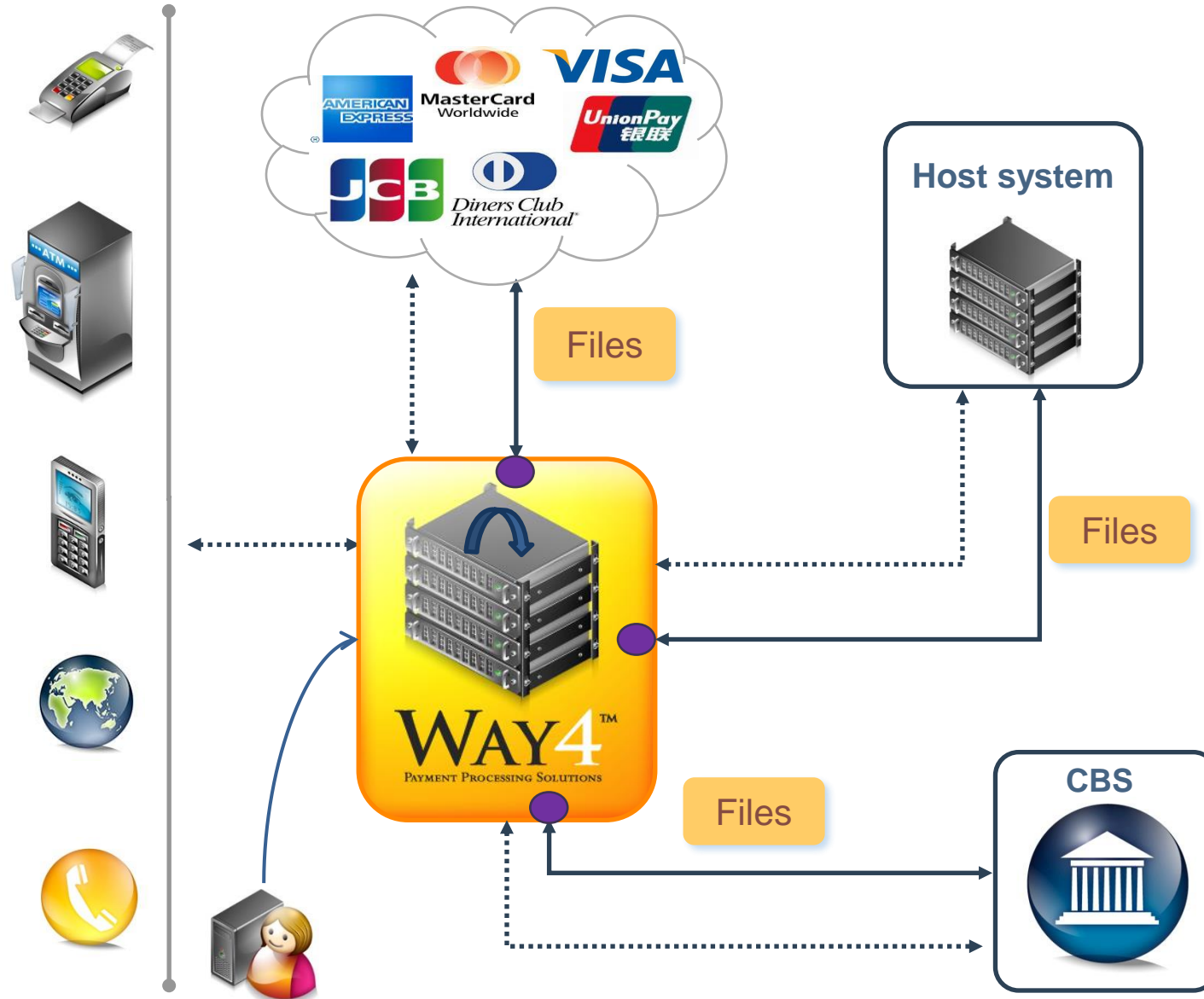
WAY4 Documents

1. Sources of Documents in WAY4. Examples
2. Transaction Processing Steps. Authorization
3. Document parameters
4. Transaction Types
5. Processing Financial Documents
6. Relations between Documents

# Sources of Documents in WAY4. Examples

A horizontal bar composed of six colored segments: blue, teal, green, red, orange, and yellow.

# Sources of Documents in WAY4



- **Online Messages**

- Terminal Network
- IPS
- H2H systems

- **Files**

- Clearing Files
- CBS operations

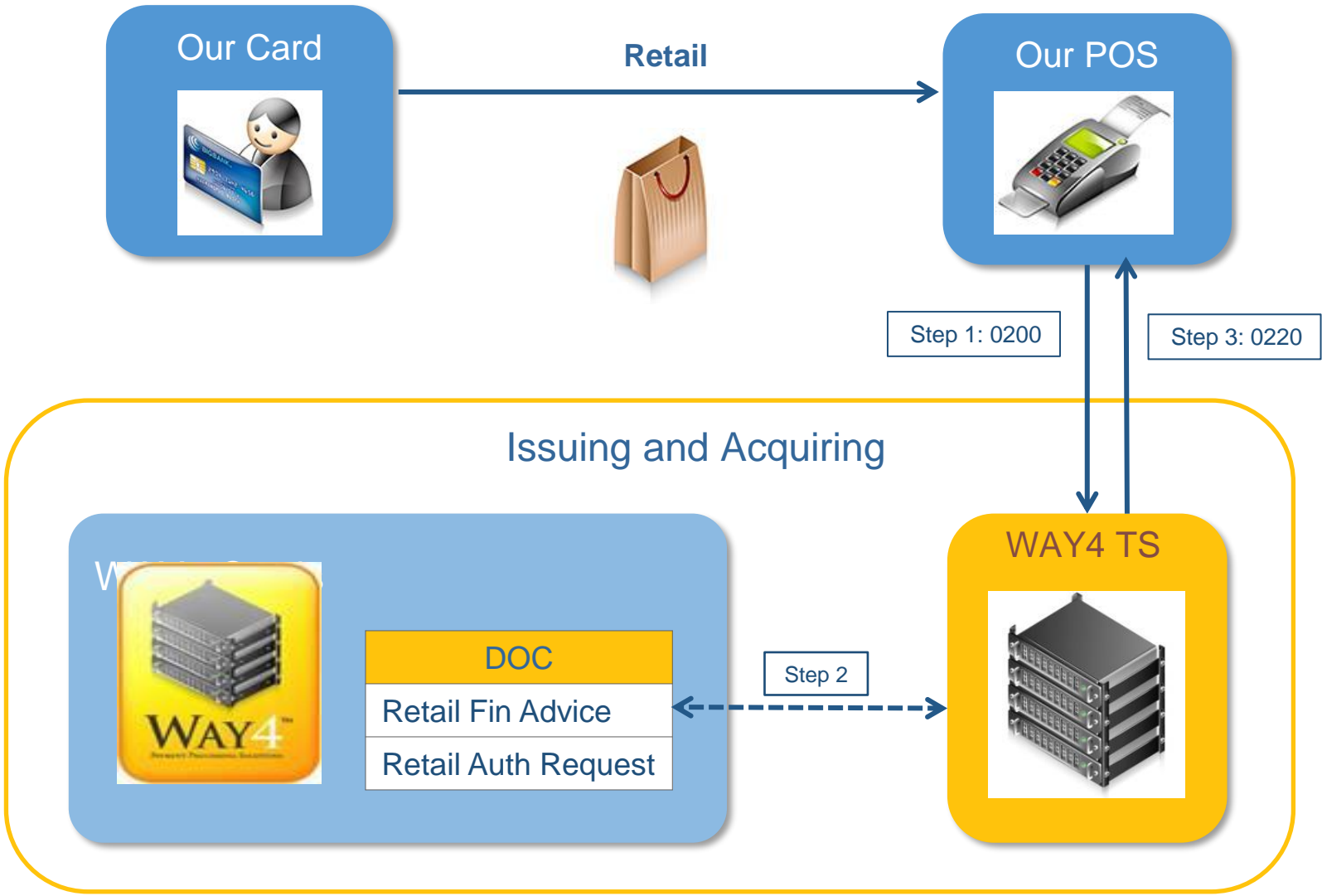
- **Manual input**

- Corrections
- Dispute Documents
- Fees
- ...

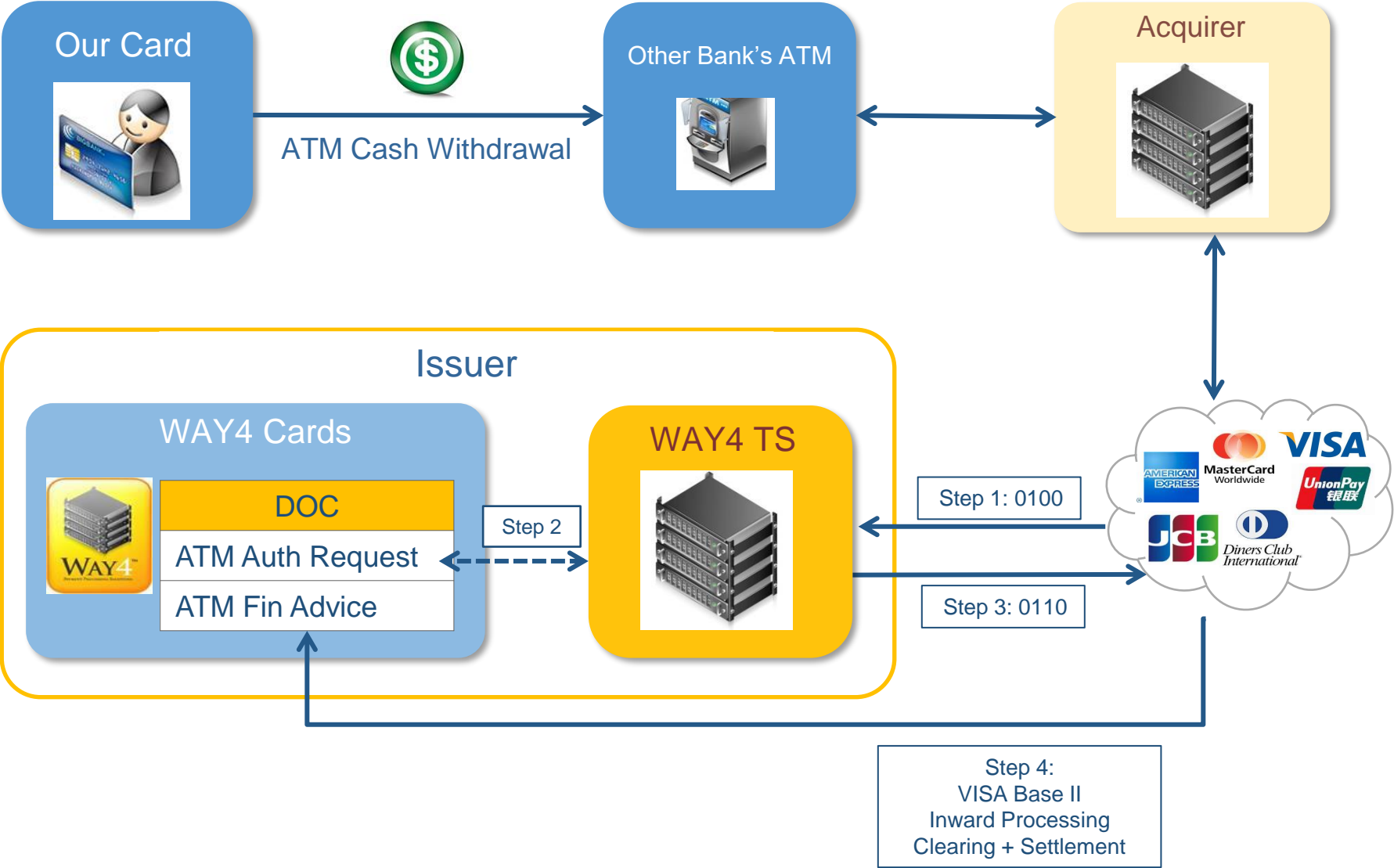
- **Automatical**

- Payments
- Direct Debit
- Servicing Fees
- ...

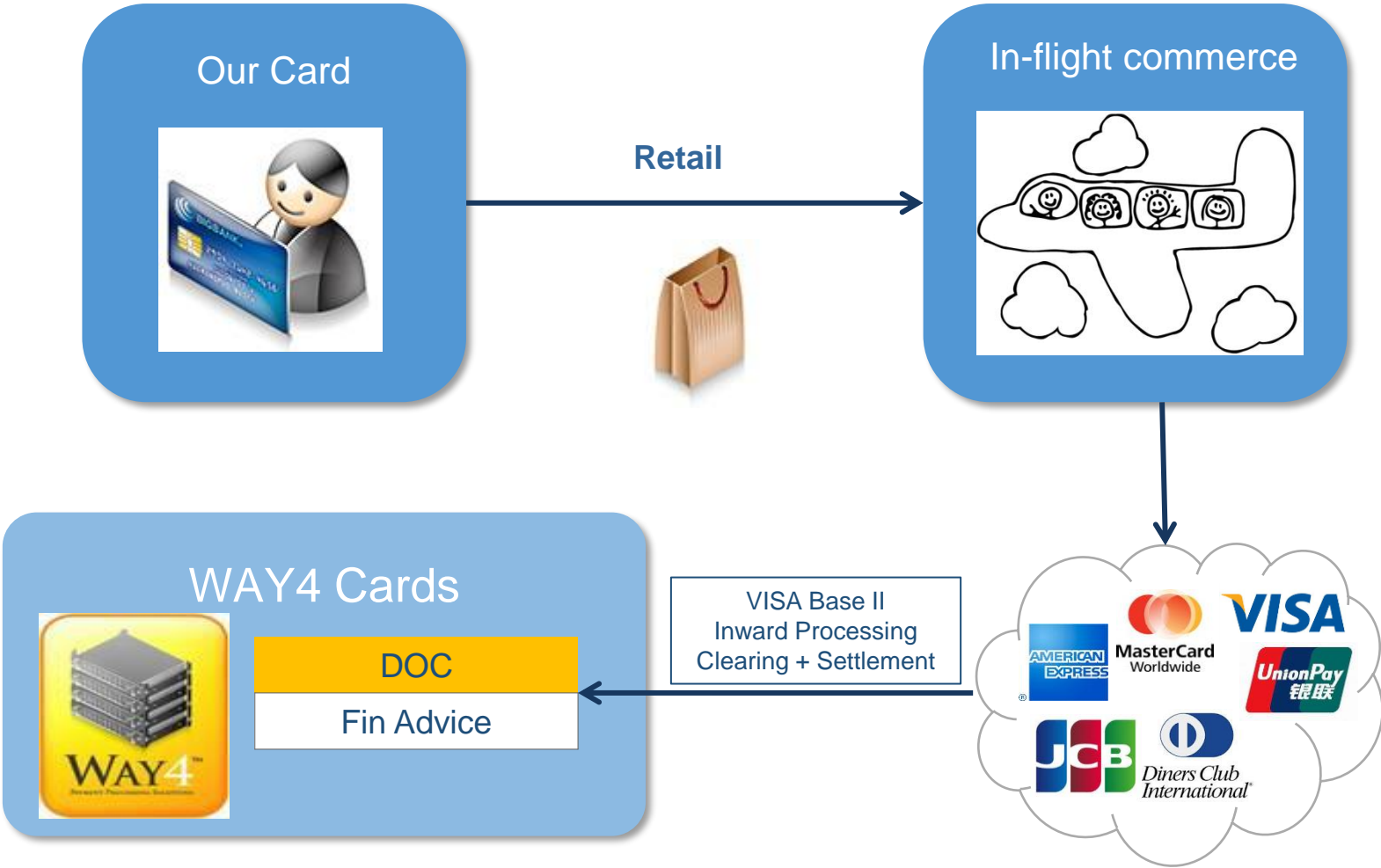
# Example 1. On-Us Transaction



# Example 2. Cash Withdrawal (Off-Us ATM)

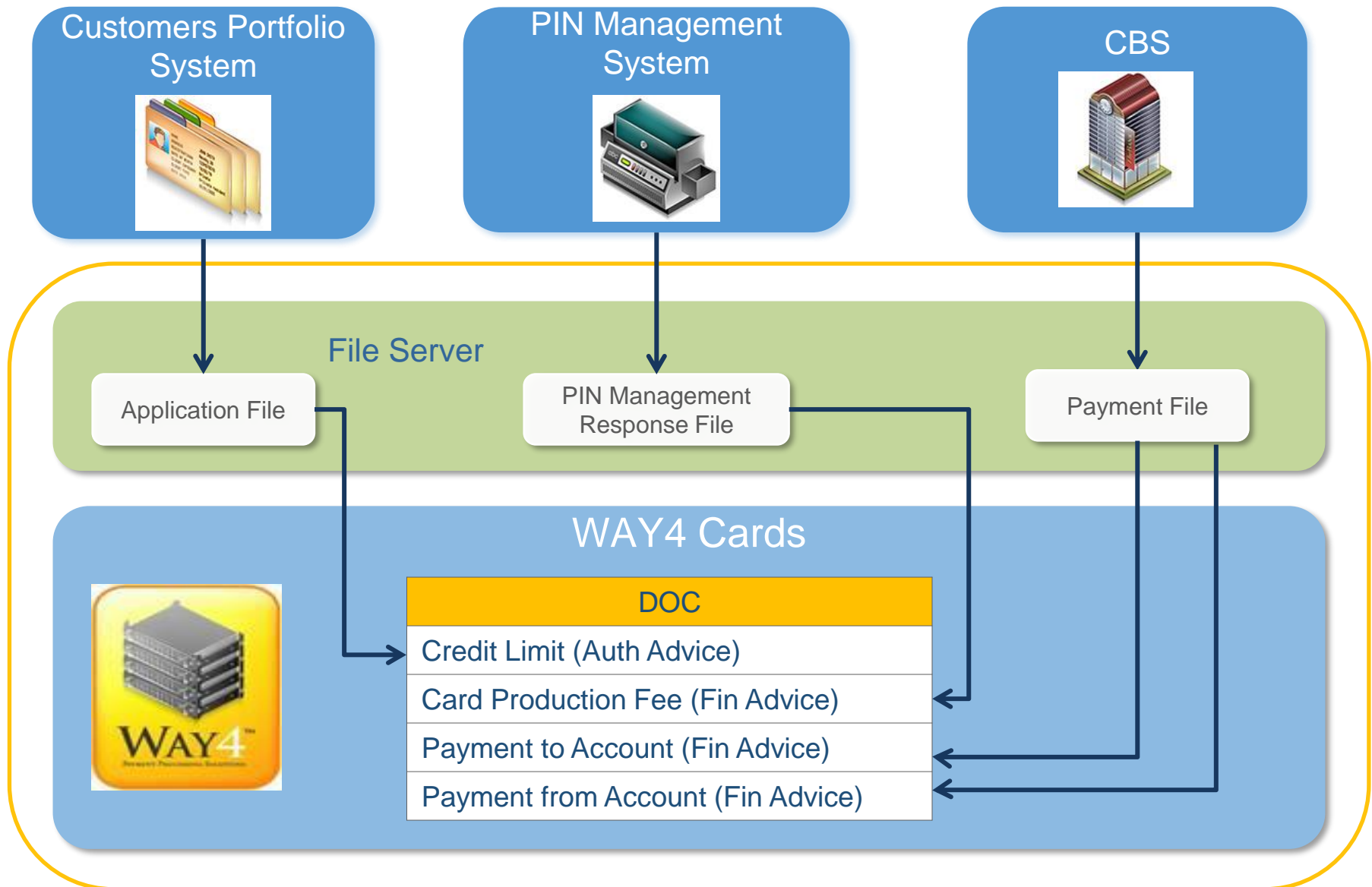


# Example 3. Off-line Purchase

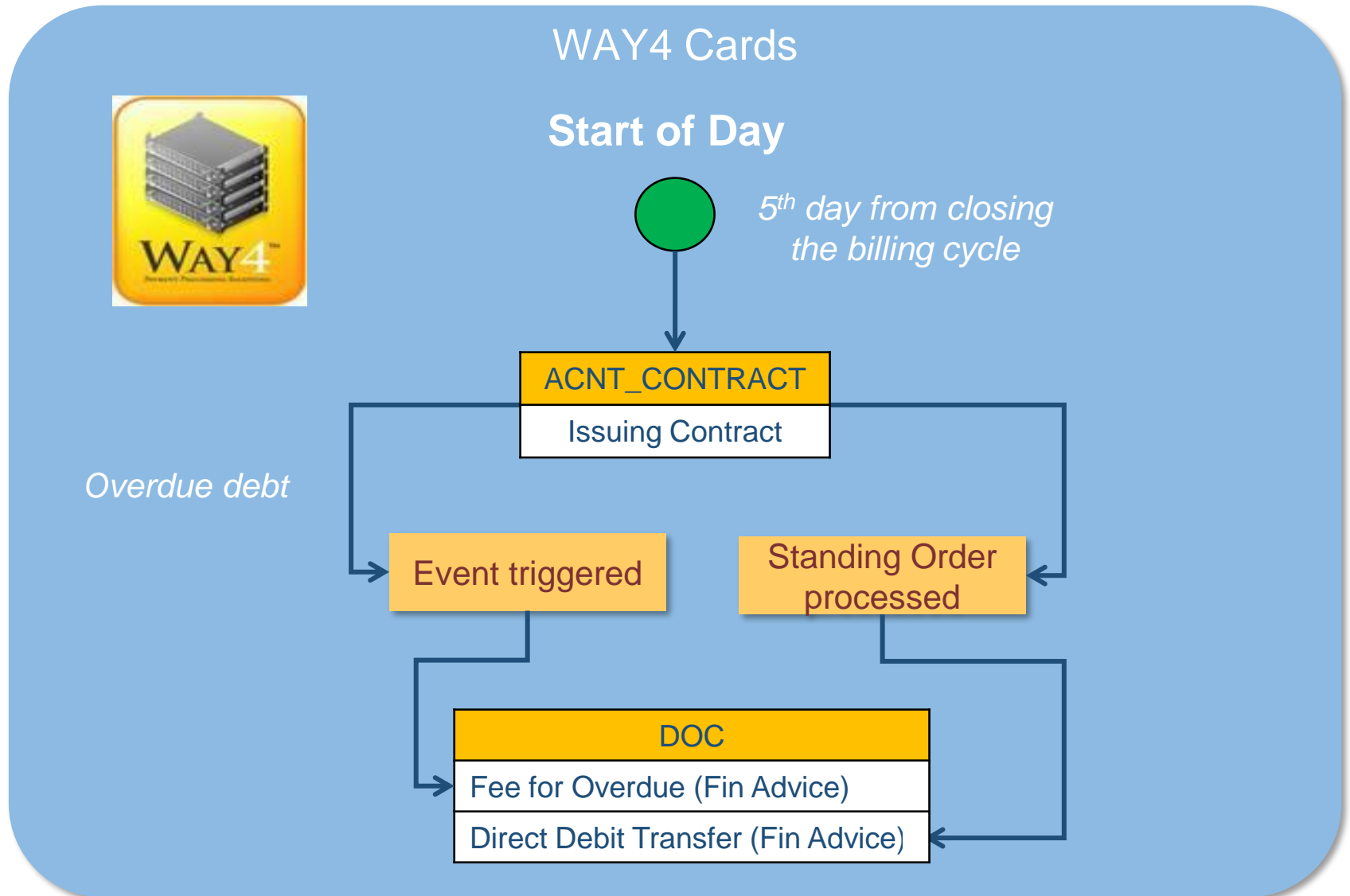




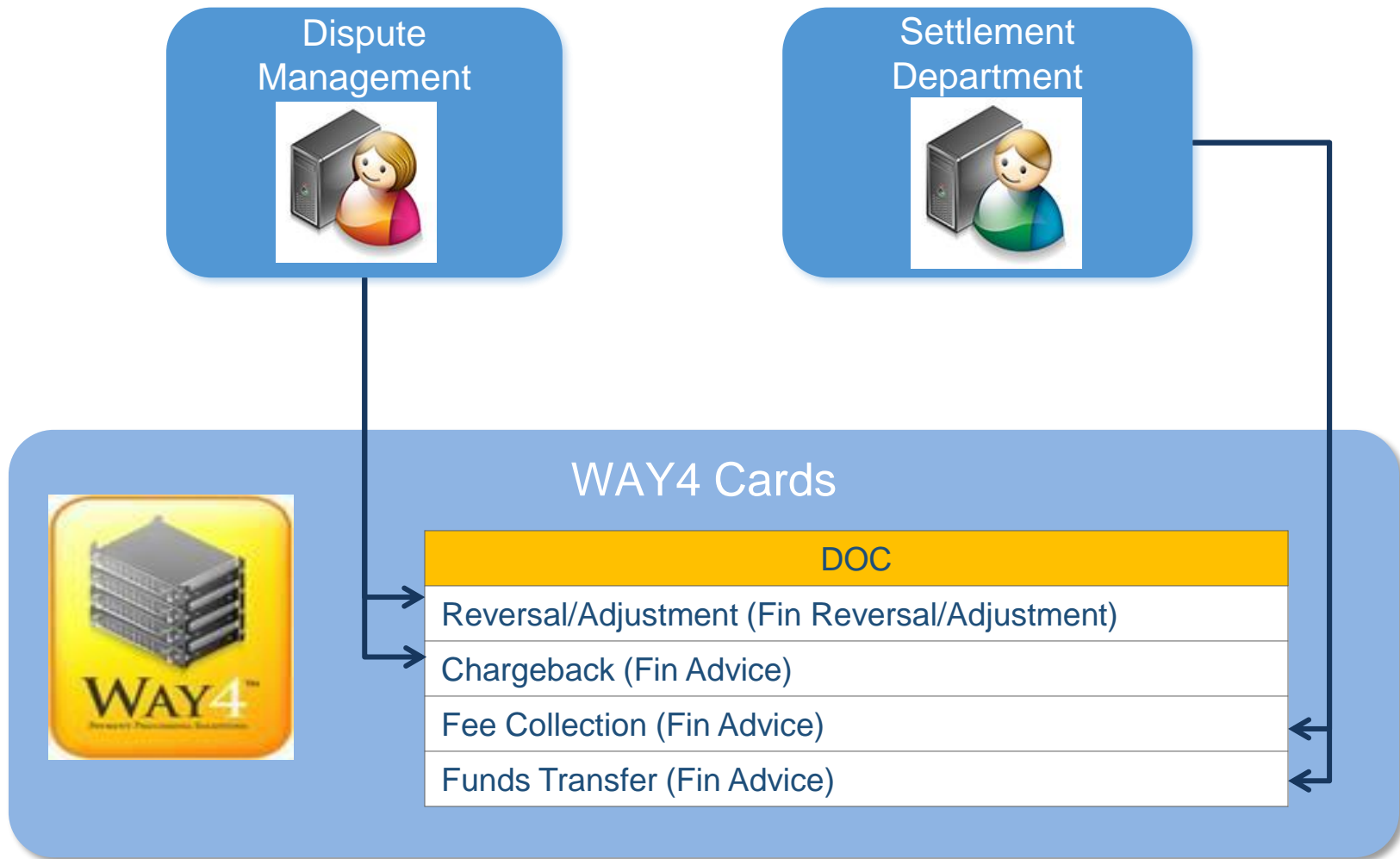
# Examples 4, 5, 6. Processing Applications/Payments



# Examples 7, 8. Direct Debit and Fee Charged by Event



# Examples 9, 10. Documents Created Manually

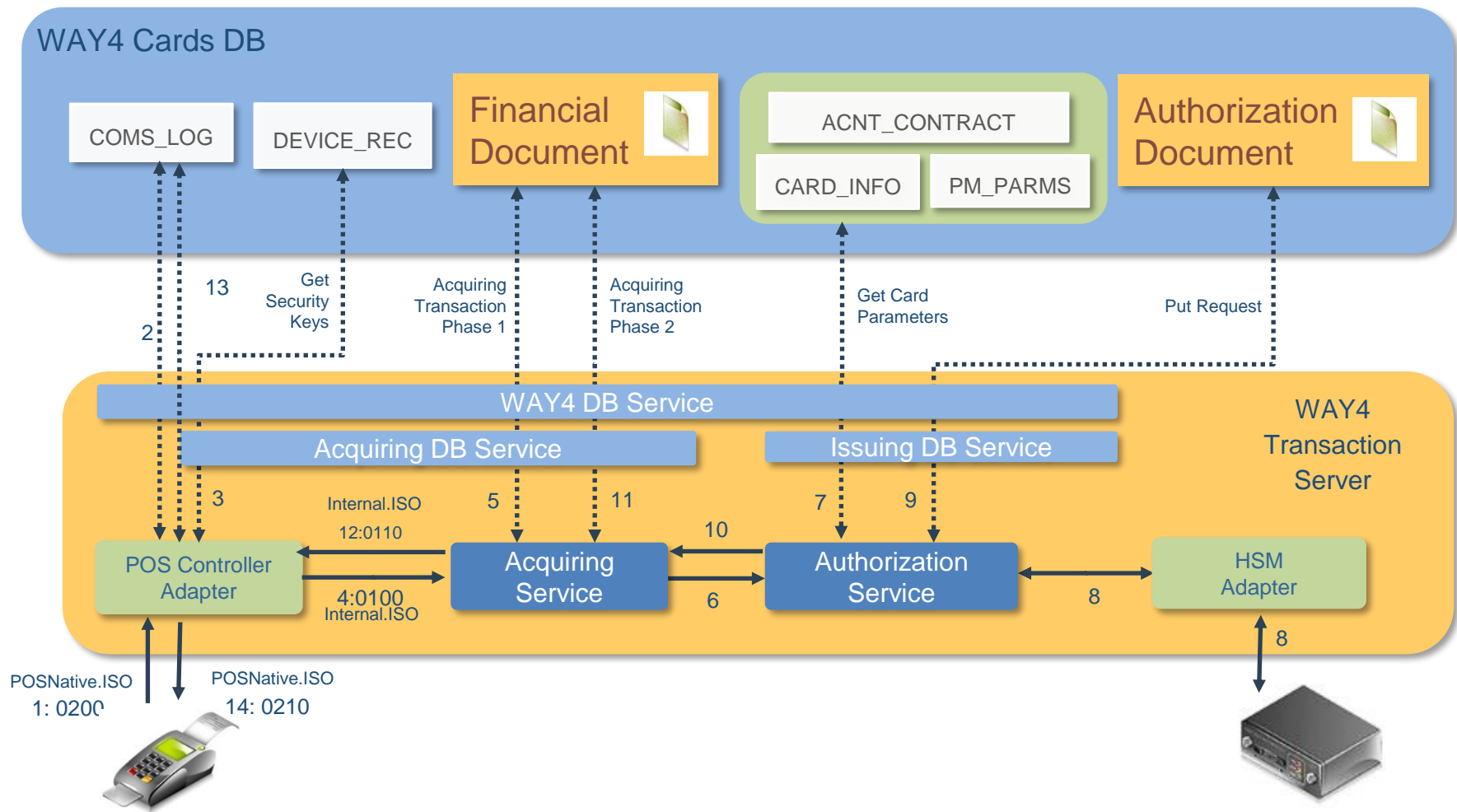


# Transaction Processing Steps

A horizontal progress bar with six colored segments: blue, teal, green, red, orange, and yellow.

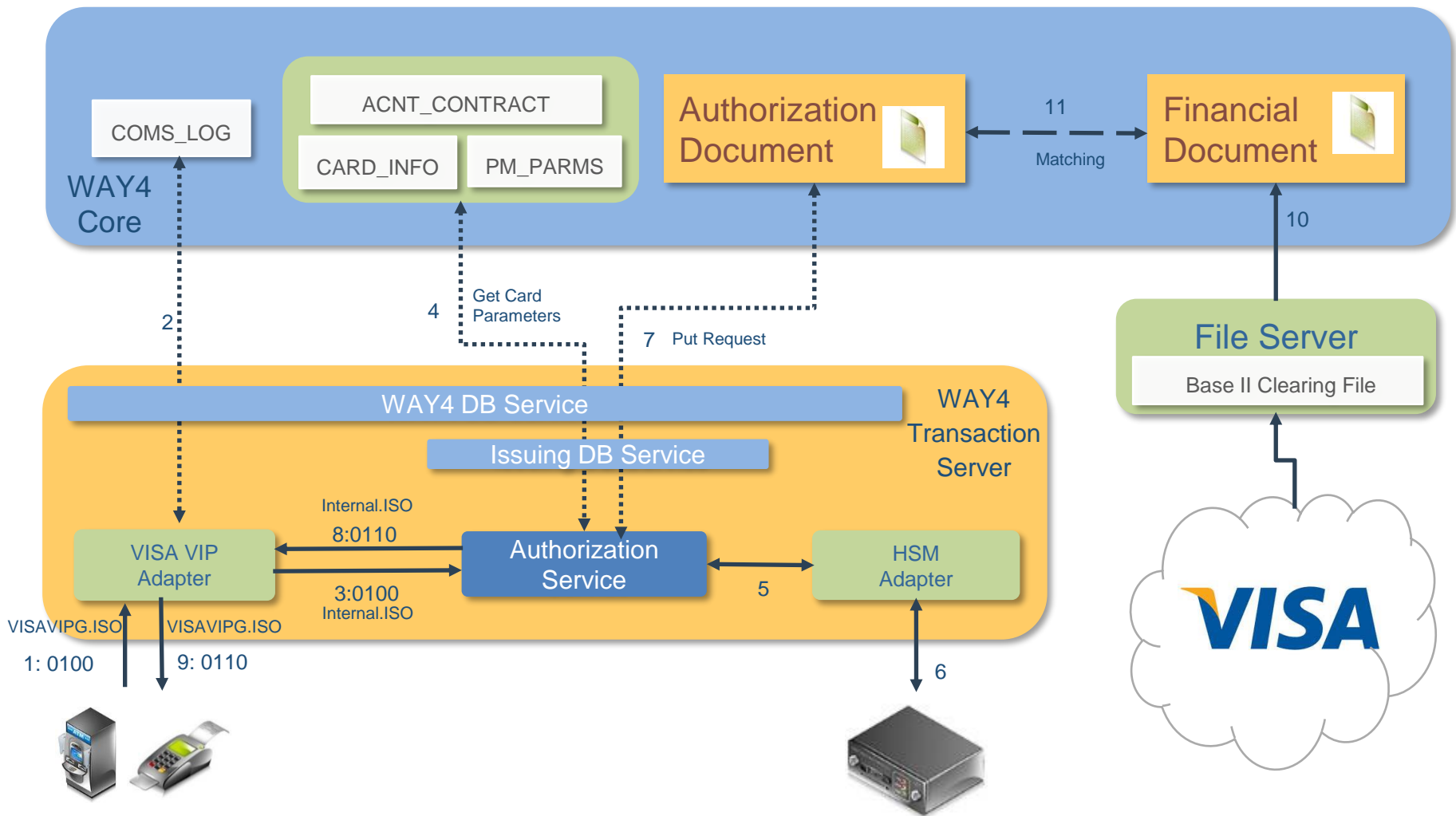
Authorization

# Example 1. On-Us Transaction Online Processing



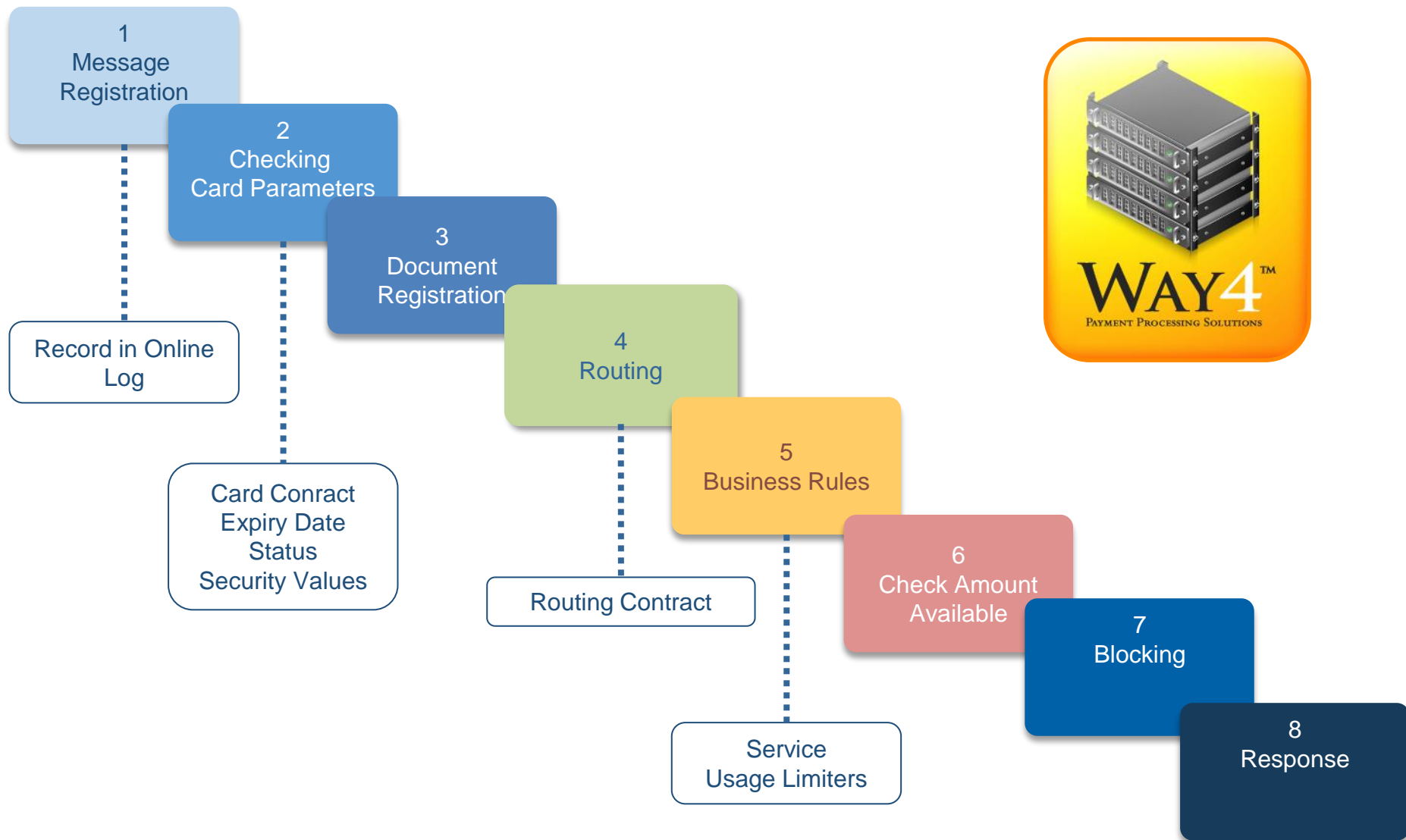
*When processing On-Us transactions a financial document created first and then an authorization document*

# Example 2. Off-Us Transaction Processing

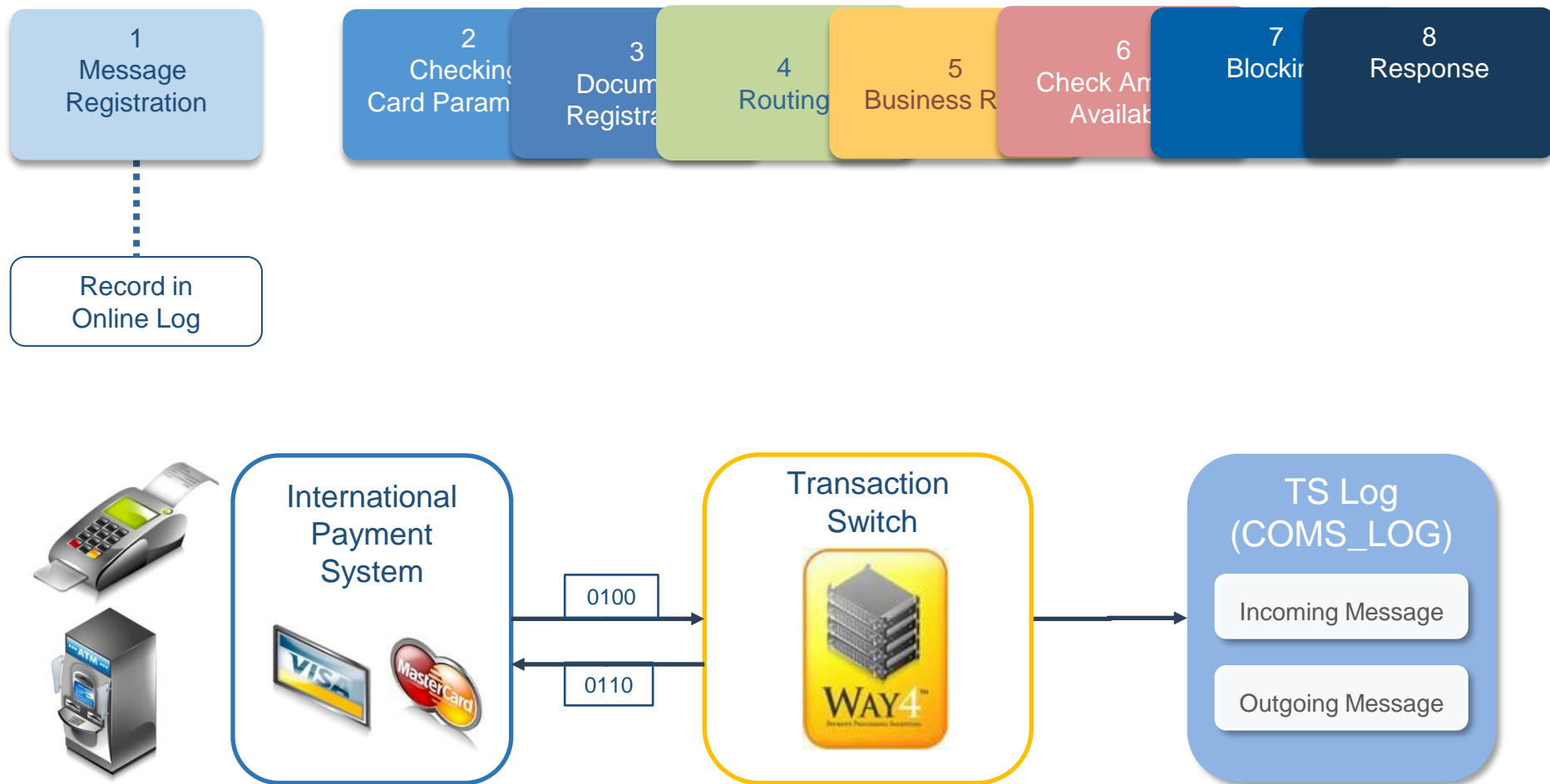


When processing Off-Us transaction, first **authorization document** is created in the system, then, after loading clearing file, the **authorization document**

# Authorization Processing Steps



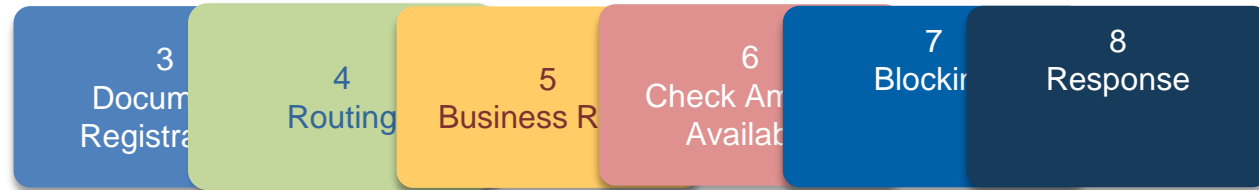
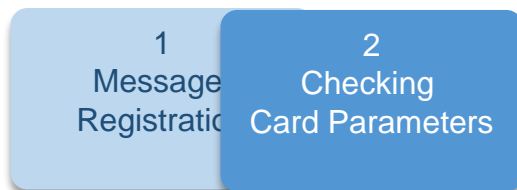
# Step 1. Message Registration



*OpenWay\Full\DB Administrator Utilities\Special OpenWay Utilities\Emergency Reports\Online Log - Not Safe*



# Step 2. Checking Card Parameters

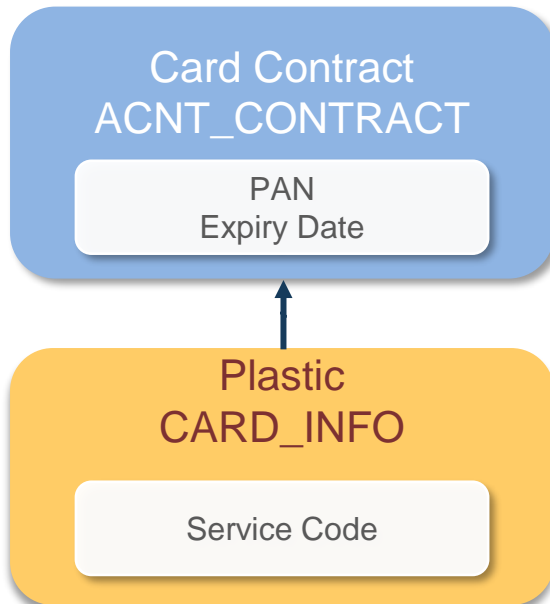


## Card

- Negative Response Codes:
- 14 – No such Card

## Expire Date

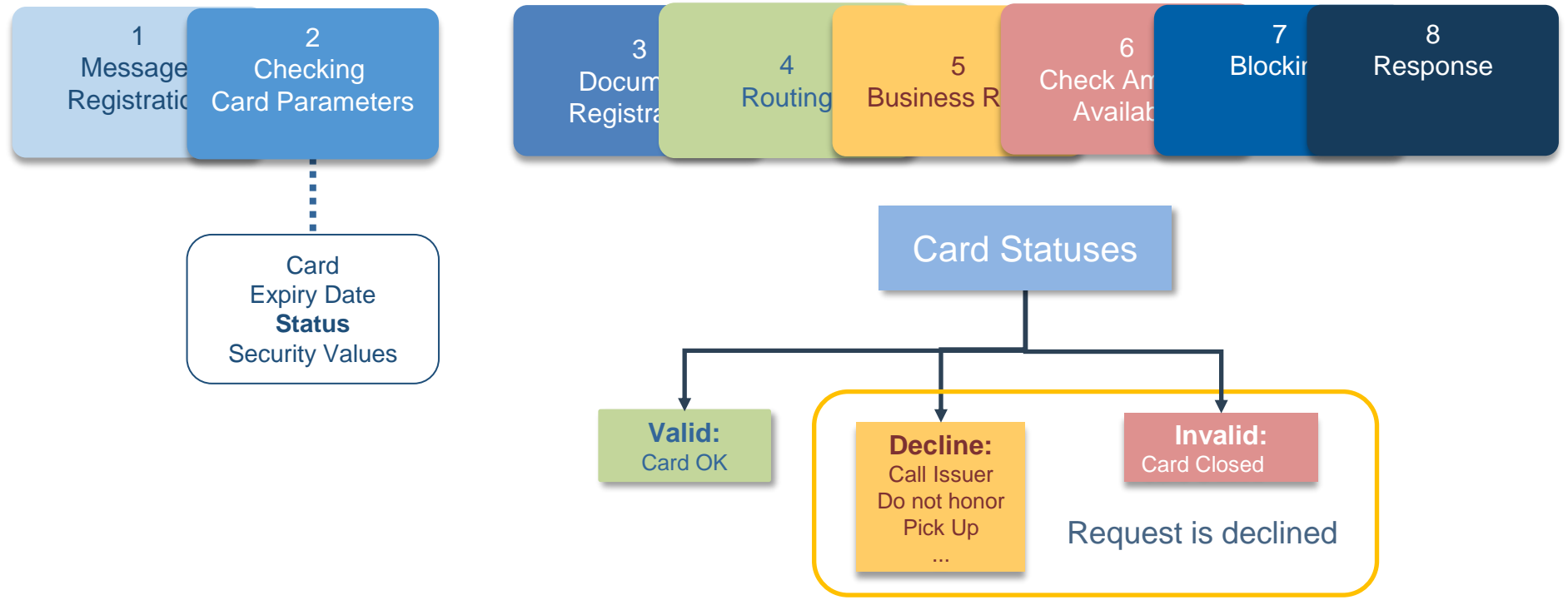
- Negative Response Codes:
- 54 – Expired card / target



OLD Contract Info		1 of 1	
<b>Identification</b>		<b>Product Settings</b>	
Contract #	1000040172376315	Product	001-VISA CREDIT TEST
Contract	See main [1000040172376315]	Acc Scheme	001-Full Iss Local Priv
Rel Sch		Subtype	001-VISA CLASS
Client	JAMES_BOND	Service	001-Our Priv VISA
Main	001-P-347185	Auth Scenario	See main
Liability		Usage Scenario	Main and Own
RBS #		Date Open	21/12/2015
Institution	Principal	Date Expire	00/00/0000
		<b>Current State</b>	
		RUR	
		Available	0,00
		Blocked	0,00
		Balance	0,00
		PIN Attempts	0 of 3
		Card Expire	16-12
		Status	Card OK
		Approval	Ready

Ins Del Query Ch Status Main Subs Auth Docs Balance Cr Limit Client

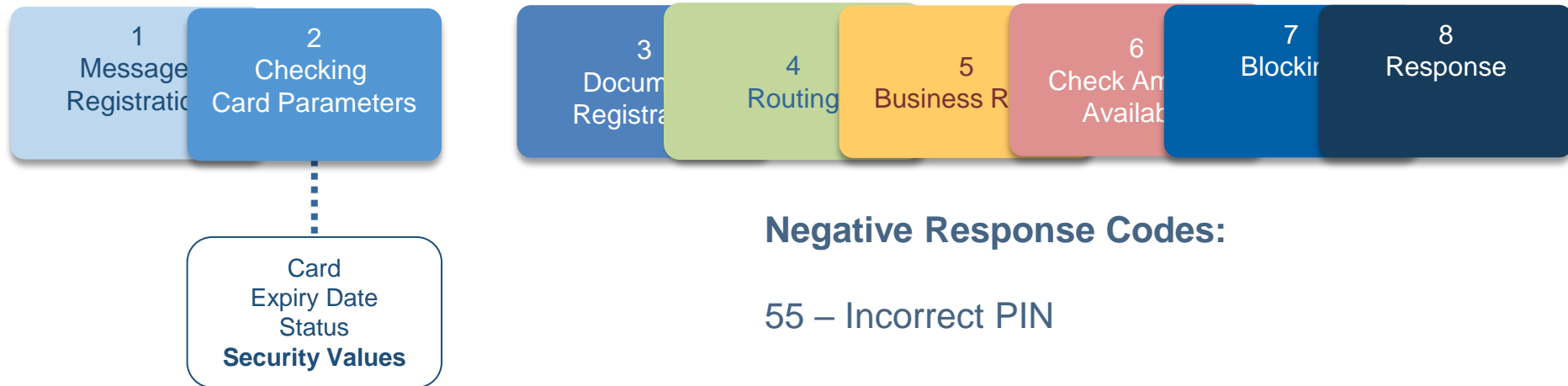
# Step 2. Checking Card Parameters. Status



Contract Statuses							
				<< < > >>		1 of 22	
Category	Name	Code	Is Valid	External Code	Code Parms	Chip Card Action Type	
Card	Call Issuer	01	Decline	01			
Card	Card Blocking	05	Decline	05			
Card	Card Closed	14	Invalid	14	CLOSE_ACNT		
Card	Card Do not honor	05	Decline	05			
Card	Card No Renewal	50	Valid	50	DOC_RC=0;		
Card	Card OK	00	Valid	00			
Card	Honour with identification	08	Valid	08			
Card	PickUp 04	04	Decline	04			

OpenWay\Full\Configuration Setup\  
Contract Types\Contract Statuses

# Step 2. Checking Card Parameters. Security Values

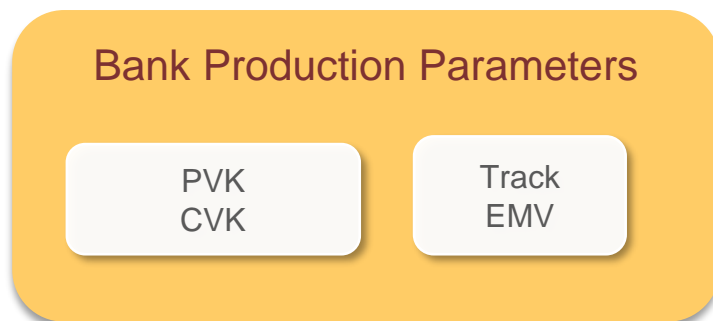


## Negative Response Codes:

55 – Incorrect PIN

75 – Allowable number of PIN tries exceeded

OpenWay\Customer Service\Customer Service->[Card & PIN]



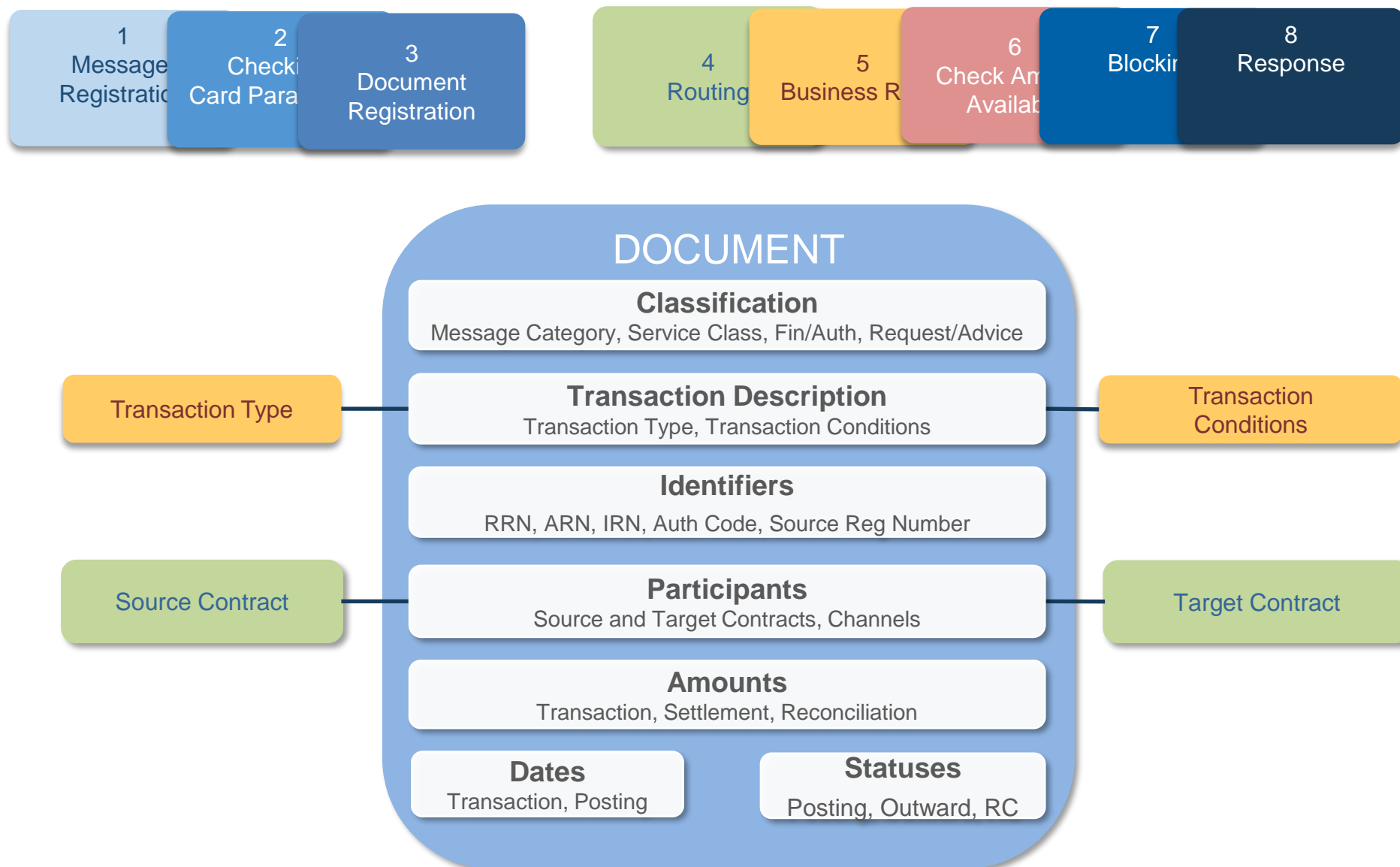
**Card Details**

Chip Scheme	
Risk Scheme	
Risk Factor	1,000
Prev Card	
Title	MR
First Name	JAMES
Last Name	BOND
Company	
Prod Status	Ready
PIN Tries	0
of	3

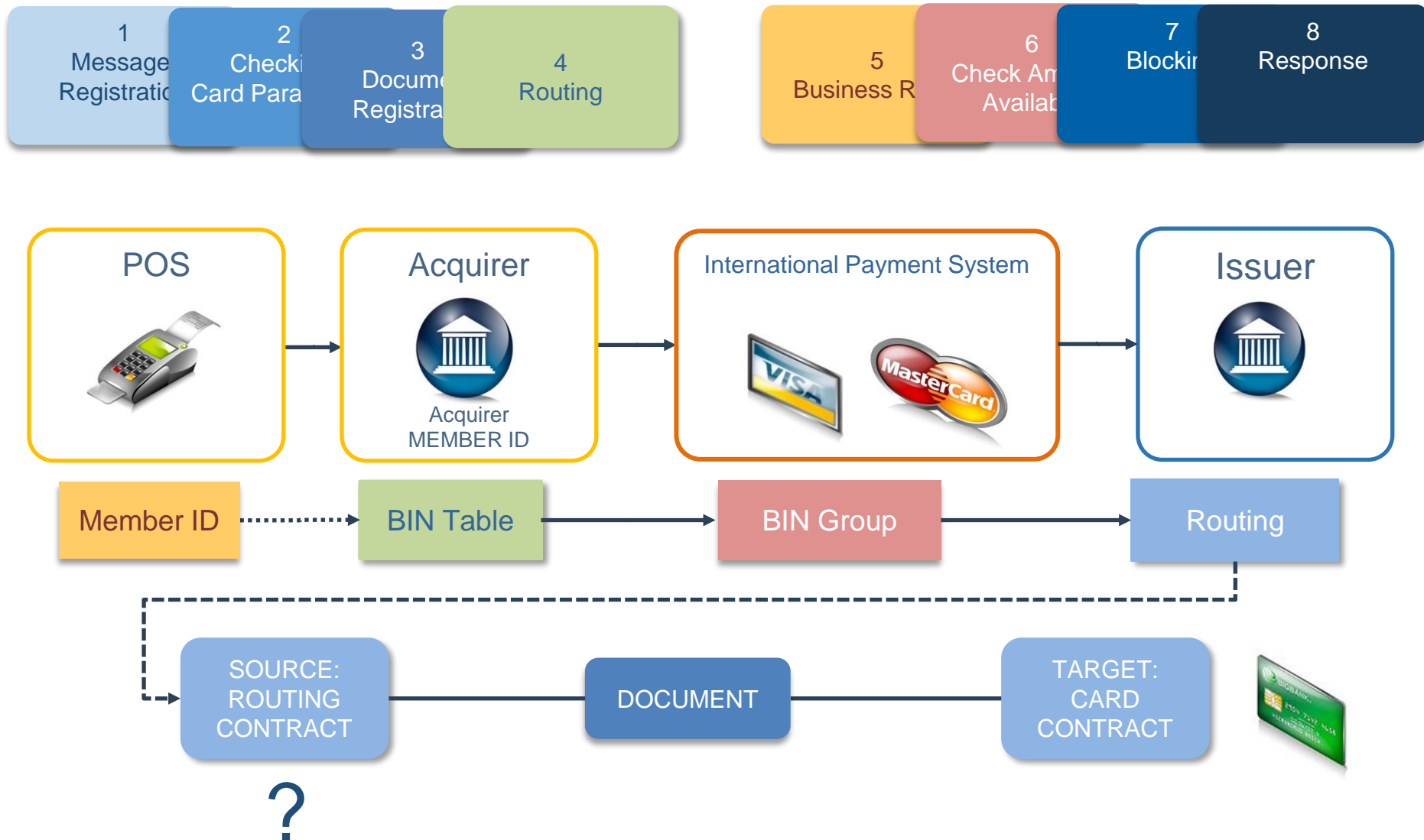
**Activate** **Plastics**

The screenshot shows a 'Card Details' form with various fields for card information. The 'PIN Tries' field is set to 0 out of 3. At the bottom, there are 'Activate' and 'Plastics' buttons.

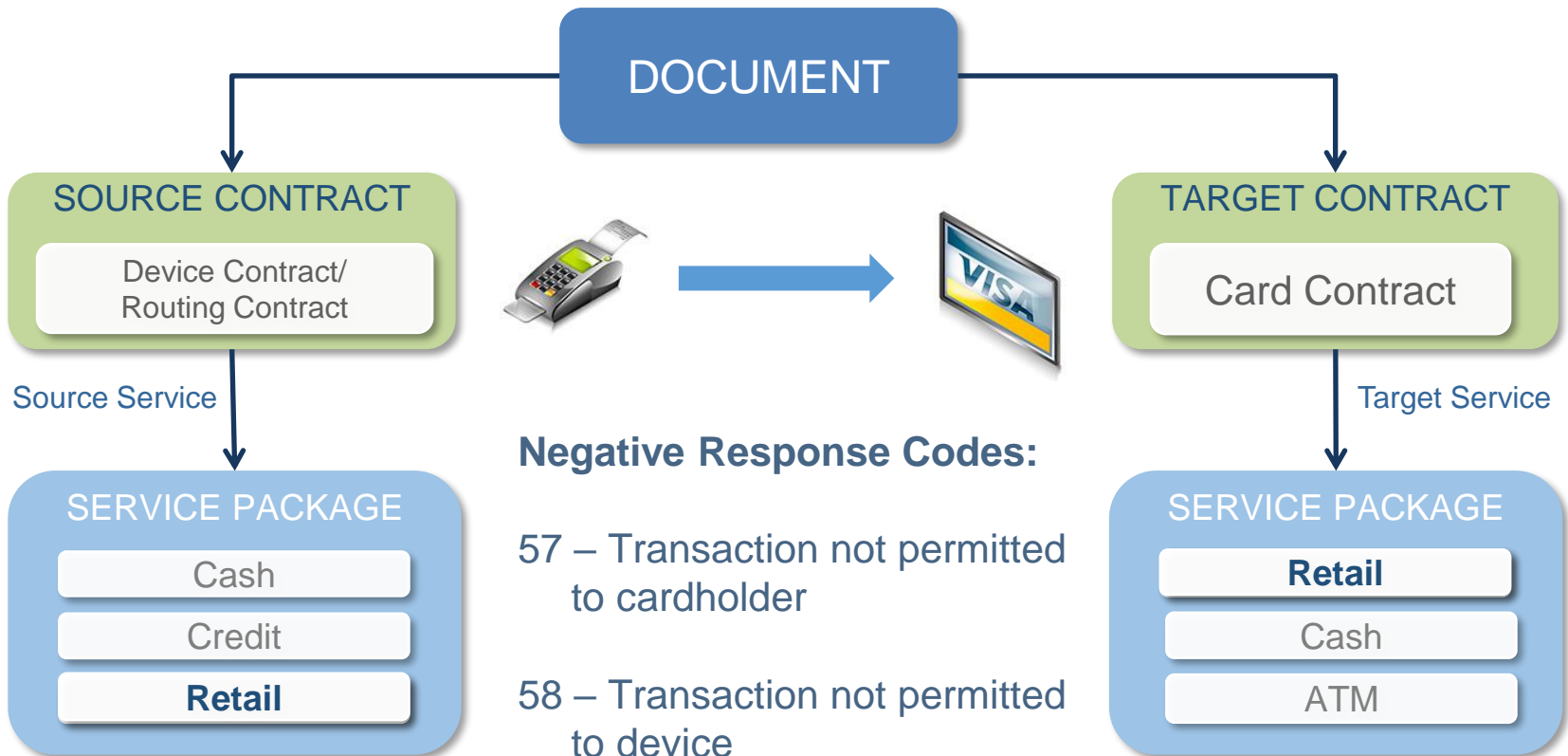
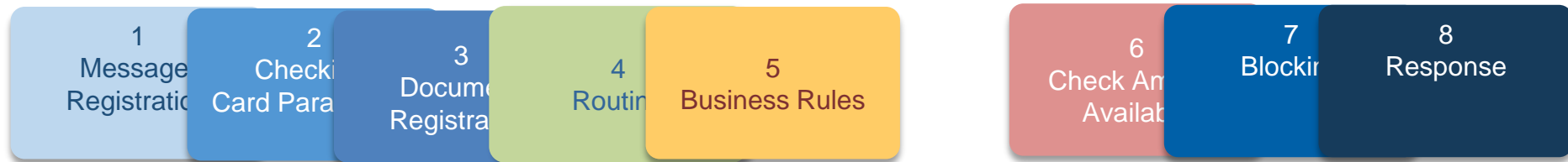
# Step 3. Document Registration



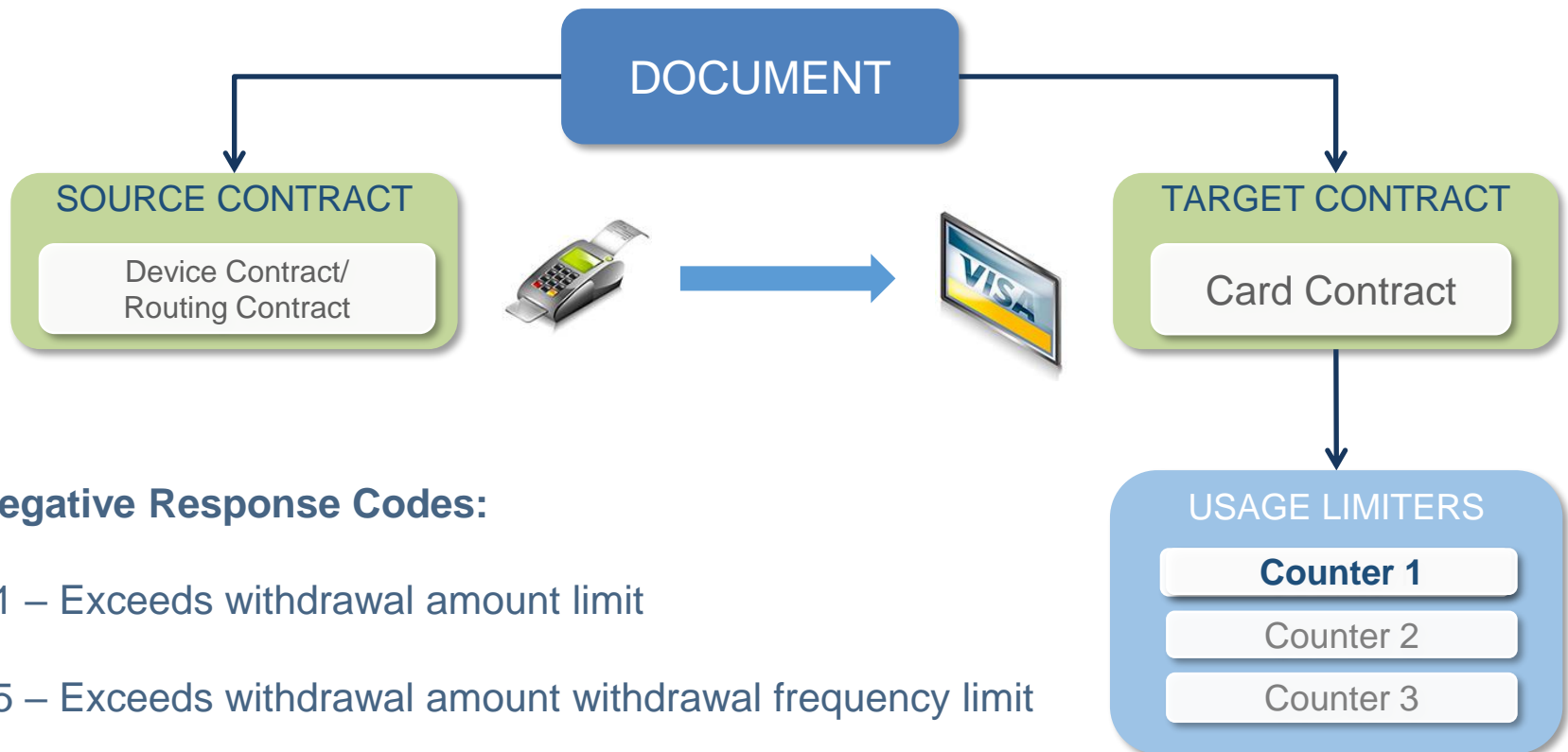
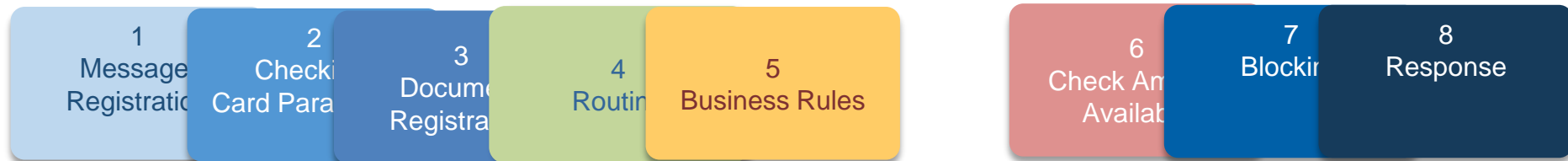
# Step 4. Routing



# Step 5. Business Rules. Services



# Step 5. Business Rules. Usage Limiters

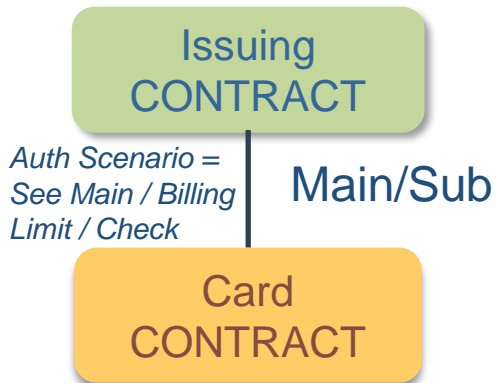
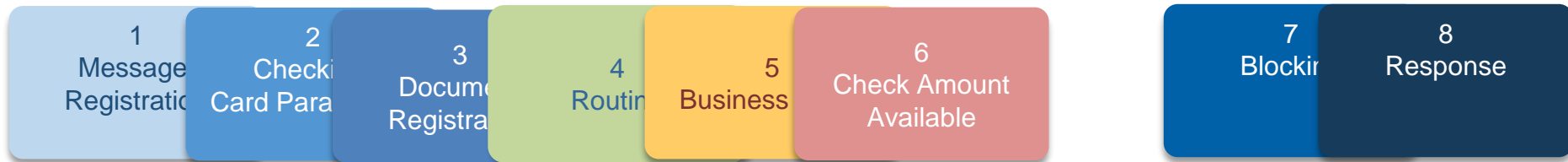


## Negative Response Codes:

61 – Exceeds withdrawal amount limit

65 – Exceeds withdrawal amount withdrawal frequency limit

# Step 6. Amount Available



*For subordinated contracts  
AmAv of main contract is  
checked*

## Negative Response Codes:

*51 – Not sufficient funds*

Balance for CLIENT\_BASIC\_ISS

Contract State

Is MultyCurrency

Scenario

Usage

Credit Limit

Current Value

New Value

Additional

Contract Currency

Contract Balance / Blocked Amount

Own	16,67	0,00
Sub	-426,67	46,67
Liab	0,00	0,00
Total	-410,00	46,67

Available

Last Scan

Last Billing

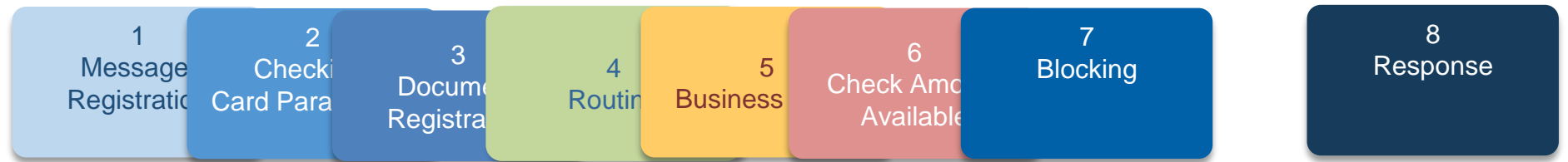
Next Billing

Keep Entries

Report Type



# Step 7. Blocking



OpenWay\Issuing\Customer Support\OLD Contract Info -> [Auth]

All Docs

<< < > >>

1 of 1

X

Source Channel	Target Channel	Is Authorization	Request Category	Trans Type	Ret Ref Number	Target Number	Auth Code	Trans Country	Trans Amount	Trans Curr	SIC Code	Return Code
Our POS	Our VISA Cards	Auth	Request	Retail	731801026002	1000040180917332	616320	Russia	300,00	RUR	5441 Candy,nut	Successfully completed

Ins Del

Query Accept Errors M-trans Doc - Brief Auth Record Chain Full Info AuthDocs All Tags Online Log Addenda Batch Docs Full Cond

OLD Contract Info

<< < > >>

1 of 1

X

Identification	Product Settings	Current State
Contract # 1000040180917332	Product 001-VISA CREDIT SIMPLE	USD
Contract CLIENT_BASIC_ISS	Acc Scheme 001-Full Iss USD Priv	Available -26,67
Rel Sch	Subtype 001-VISA CLASS	Blocked 46,67
Client CLIENT_BASIC_ISS	Service 001-Our Priv VISA	Balance 20,00
Main 001-P-352860	Auth Scenario See main	PIN Attempts 0 of 3

Auth for CLIENT\_BASIC\_ISS

<< < > >>

1 of 7

b X

Available	Blocked	BaseAmnt	Fee	Curr	Return Code	Type	Status	A Code	RRN	Country	City	Trans Details	TrCurr	Trans Amount	SIC	Closed
48,33	5	5,00	0,00	USD	Successfully completed	In Pending	Active	616320	731801026002	Russia	St-Petersburg	BEST SHOP	RUR	300,00	441 Candy,nut,c	14/12/2017
90	41,67	41,67	0,00	USD	Successfully completed	In Pending	Active	616319	729201024348	Russia	SPb	SUPERMARKET	RUR	2 500,00	5999 Miscellaneo	18/11/2017
483,33	600	600,00	0,00	USD	Not sufficient funds	In Pending	Declined		726801023161	Russia	SPb	SUPERMARKET	USD	600,00	5999 Miscellaneo	25/09/2017
483,33	400	400,00	0,00	USD	Successfully completed	In Pending	Reversed	616316	726801023160	Russia	SPb	SUPERMARKET	RUR	24 000,00	5999 Miscellaneo	25/09/2017
483,33	10	10,00	0,00	USD	Successfully completed	In Pending	Reversed	616313	726801023154	Russia	SPb	SUPERMARKET	USD	10,00	5999 Miscellaneo	25/09/2017
500	16,67	16,67	0,00	USD	Successfully completed	In Pending	Matched	616312	726801023148	Russia	SPb	SUPERMARKET	RUR	1 000,00	5999 Miscellaneo	25/09/2017
500	16,67	16,67	0,00	USD	Successfully completed	In Pending	Matched	616310	726401001002	Russia	SPb	SUPERMARKET	RUR	1 000,00	5999 Miscellaneo	23/09/2017

Ins Del

Query Auth Doc Service Messages

# Document parameters

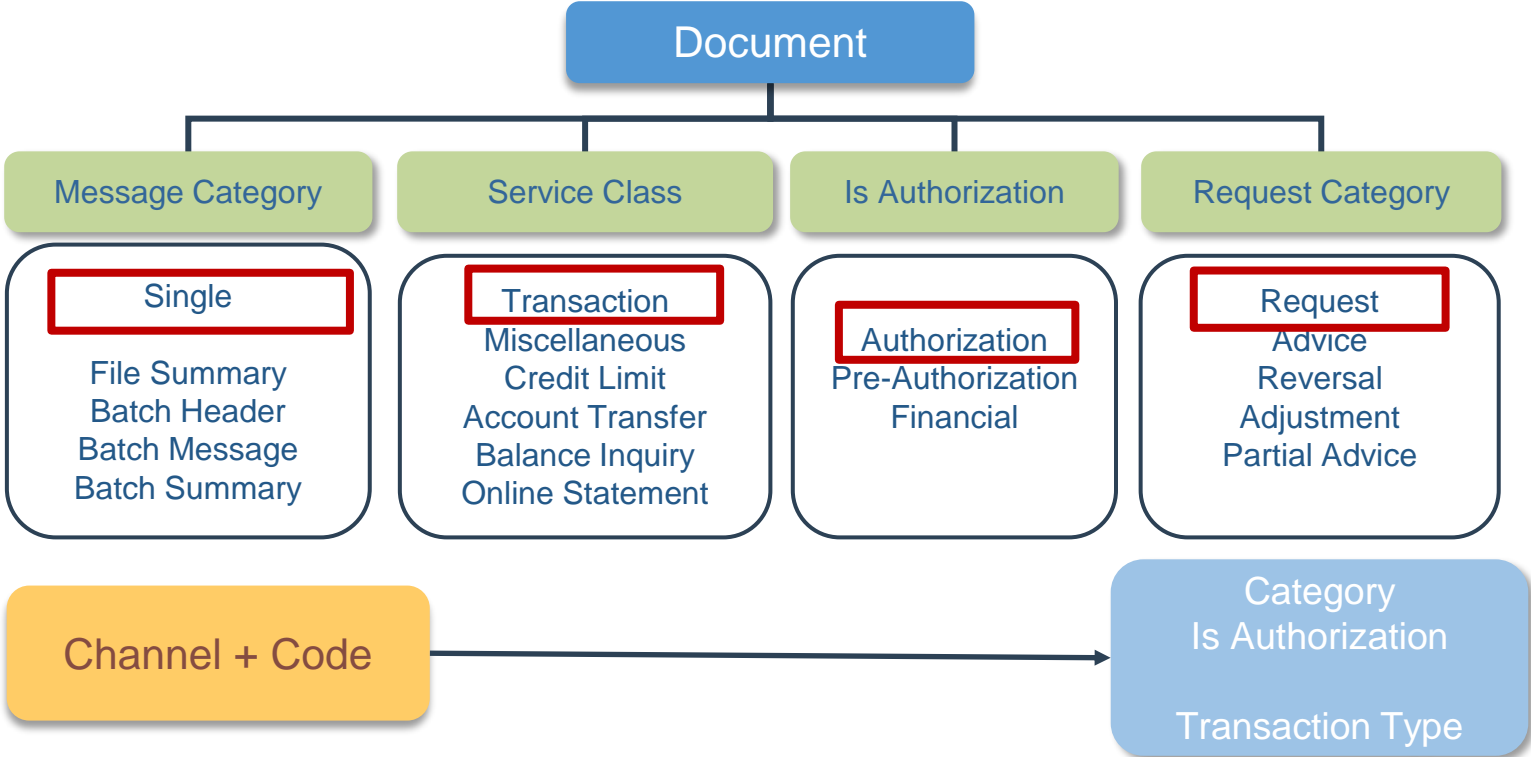


# Main Documents Parameters

Full Info for All Docs Not Safe

<div>Batch Message</div> <div>Transaction</div> <div>Fin</div> <div>Advice</div>				<div>Classification</div>	<div>Dates</div>																		
<div>RRN:</div> <div>Auth Code: 533915</div>				<div>ARN: 7444555931800520502841</div> <div>IRN:</div>	<div>Trans Date: 18/06/15 22:15:32</div> <div>NW Date: 00/00/00 00:00:00</div>																		
<div>Source:</div> <div>Msg Code: 0515</div> <div>Channel: VISA</div> <div>Member ID: 454109 &gt; 479782</div> <div>Category: Device</div> <div>Contract #: 444555</div> <div>Acc Type:</div> <div>Spec:</div> <div>Send BIN:</div>				<div>Target:</div> <div>Our VISA Cards</div> <div>&gt;</div> <div>Card</div> <div>4440041234567890</div>	<div>Identifiers</div>																		
<div>Transaction Type: Retail</div> <div>Condition: El Comm Secure w/o cer</div> <div>Condition Details: ENET,SECURE_ATTEMPT</div> <div>Reason Code:</div> <div>Reason Details:</div> <div>Requirements:</div> <div>Add Data: ;CPS= N 639321559611668 000000000000;PEM=01;MOTO=6;L</div>				<div>Amounts</div> <table><thead><tr><th></th><th>Amount:</th><th>Currency:</th></tr></thead><tbody><tr><td>Transaction:</td><td>150,00</td><td>AUD</td></tr><tr><td>Settlement:</td><td>120,00</td><td>USD</td></tr><tr><td>Reconcil:</td><td>120,00</td><td>USD</td></tr><tr><td>Source Fee:</td><td>0,00</td><td></td></tr><tr><td>Target Fee:</td><td>0,00</td><td></td></tr></tbody></table>			Amount:	Currency:	Transaction:	150,00	AUD	Settlement:	120,00	USD	Reconcil:	120,00	USD	Source Fee:	0,00		Target Fee:	0,00	
	Amount:	Currency:																					
Transaction:	150,00	AUD																					
Settlement:	120,00	USD																					
Reconcil:	120,00	USD																					
Source Fee:	0,00																						
Target Fee:	0,00																						
<div>Country: Australia</div> <div>City: MELBURN</div> <div>Details: WWW.AVSBALTIC.AS</div> <div>Merchant ID: 3261070</div> <div>SIC: 4511 Airlines, Air Carriers</div> <div>Card Expire: -</div> <div>Seq #:</div>				<div>Additional parameters</div>																			
<div>Transaction Details</div>				<div>Statuses</div> <table><tbody><tr><td>Return Code:</td><td>Successfully completed</td></tr><tr><td>Posting Status:</td><td>Posted</td></tr><tr><td>Outward:</td><td>Closed</td></tr><tr><td>Posting, Settl Date:</td><td>22/06/2015 19/06/2015</td></tr></tbody></table>		Return Code:	Successfully completed	Posting Status:	Posted	Outward:	Closed	Posting, Settl Date:	22/06/2015 19/06/2015										
Return Code:	Successfully completed																						
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Posting, Settl Date:	22/06/2015 19/06/2015																						

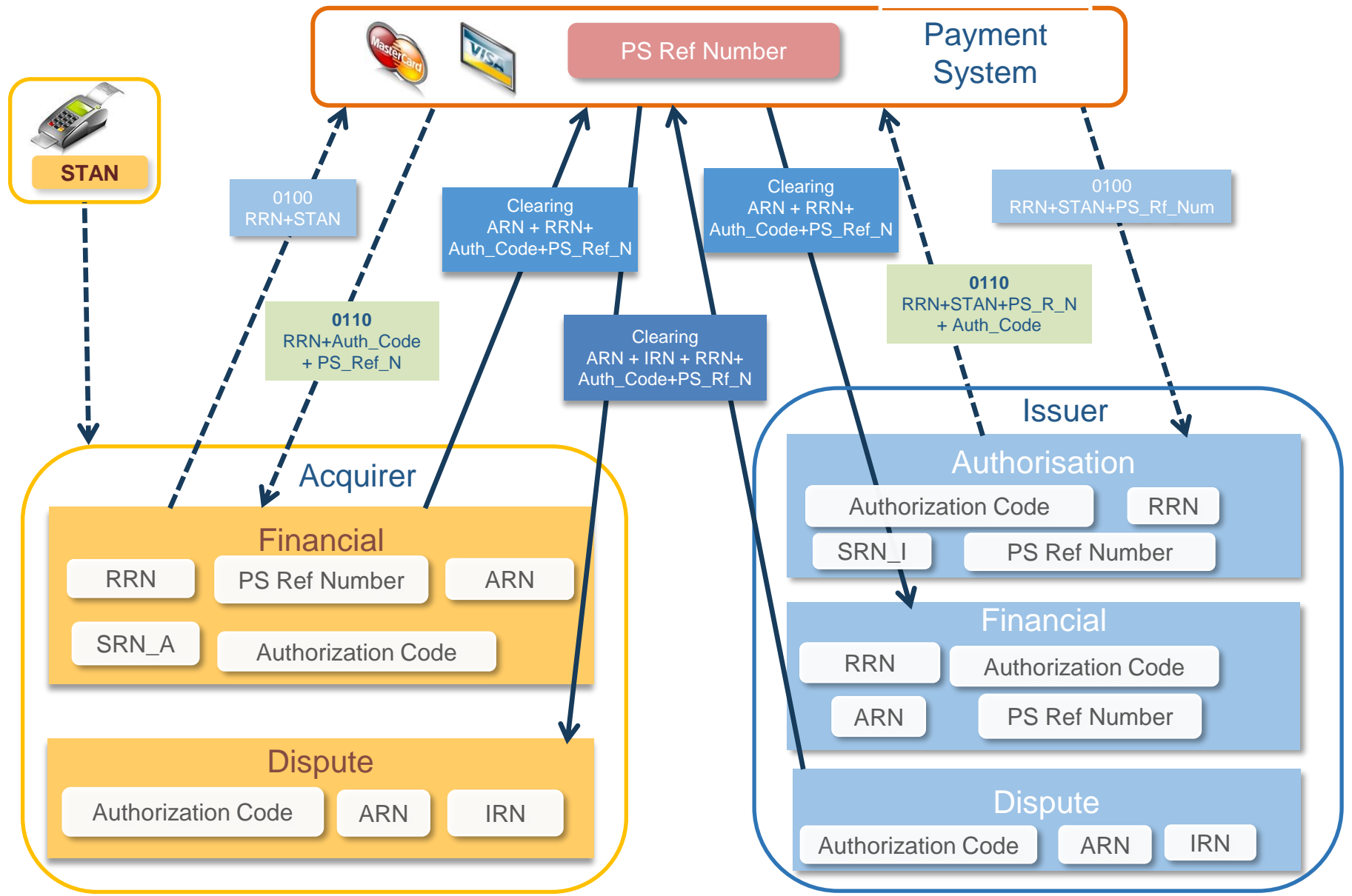
# Document Classification



OpenWay\Full\Configuration Setup\Transaction Types\Message Types - All

Channel	Code	Category	Is Authorization	Transaction Type
	01000A	Request	Auth	ATM
	01000B	Request	Auth	Balance Inquiry
	01000C	Request	Auth	Cash
	01000R	Request	Auth	Retail
	01000S	Request	Auth	Mini-Statement

# Document Identifiers



# Transaction Counterparties

Doc - General

Batch Message Transaction Fin Advice #

Trans Date: 18/06/15 22:15:32  
NW Date: 00/00/00 00:00:00

RRN:  ARN: 7444555931800520502841  
Auth Code: 533915 IRN:

Source:	Target:
Msg Code: 0515	<input type="text"/>
Channel: VISA	Our VISA Cards
Member ID: 444555 > 444004	<input type="text"/> > <input type="text"/>
Category: Device	Card
Contract #: T01234567	4440041234567890
Acc Type: <input type="text"/>	<input type="text"/>
Spec: <input type="text"/>	<input type="text"/>
Send BIN: <input type="text"/>	<input type="text"/>

Transaction Type: Retail Condition: El Comm Secure w/o Cer  
Condition Details: ENET,SECURE\_ATTEMPT

Amount:	Currency:
Transaction: 150,00	AUD
Settlement: 120,00	USD
Reconcil: 120,00	USD
Source Fee: 0,00	
Target Fee: 0,00	

Country: Australia
City: MELBURN
Details: WWW.AVSBALTIC.AS
Merchant ID: 3261070
SIC: 4511 Airlines, Air Carriers
Card Expire: -
Seq #: <input type="text"/>

Return Code: Successfully completed  
Posting Status: Posted  
Outward: Closed  
Posting, Settl Date: 22/06/2015 19/06/2015

Sender Member ID Receiver (our) Member ID Sender (our) Member ID Receiver Member ID

Requirements: Add Date: CPS= N 639321559611668 000000000000;PEM=01;MON=6;L

Incoming Message Outgoing Message

Ins Del Query Approve Messages Parties Curr Ctrl

# Document Parameters. Dates

Doc - General

Batch Message Transaction Fin Advice # 1 of 1

RRN: Auth Code: 533915

ARN: 7444555931800520502841

Transaction Date

Trans Date: 18/06/15 22:15:32  
NW Date: 00/00/00 00:00:00

NW Date

Source: Msg Code: 0515 Channel: VISA Member ID: 444555 > 444004 Category: Device Contract #: T01234567 Acc Type: Spec Send BIN:

Our VISA Cards Card 4440041234567890

Amount: Transaction: 150,00 Settlement: 120,00 Reconcil: 120,00 0,00 0,00 Currency: AUD USD USD

Country: Australia City: MELBURN

Settle Date

Posting Date

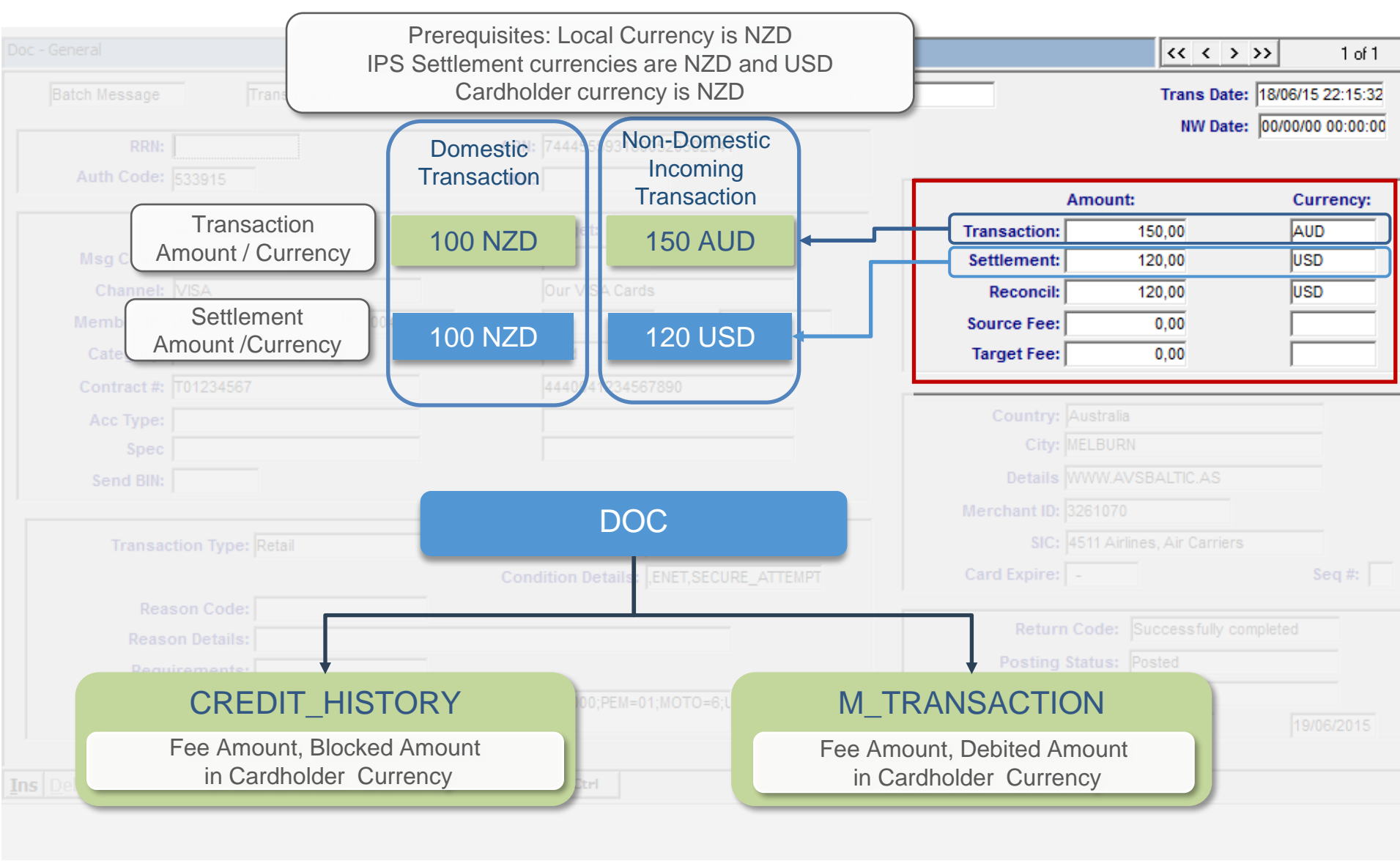
Posting, Settl Date: 22/06/2015 19/06/2015

Amendment Date

Transaction Type: Retail Reason Code: Reason Details: Requirements: Add Data: CPS= N 639321559611668 000000000000;PEM=01;MOTO=6;L

Ins Parties Curr Ctrl

# Document Parameters. Amounts and Currencies





# Additional Document Parameters

Doc - General

Batch Message Transaction Fin Advice #

Trans Date: 18/06/15 22:15:32  
NW Date: 00/00/00 00:00:00

RRN:  ARN: 7444555931800520502841

Auth Code: 533915

Source:

Msg Code: 0515

Channel: VISA

Member ID: 444555

Category: Device

Contract #: T01234567

Acc Type:

Spec:

Send BIN:

Transaction Type: Retail

Reason Code:

Reason Details:

Requirements:

Add Data: CPS= N 639321559611668 000000000000;PEM=01;MOTO=6;L

Merchant (Device) Location

Merchant Name

Card Acceptor ID

MCC

	Amount:	Currency:
Transaction:	150,00	AUD
Settlement:	120,00	USD
Reconcil:	120,00	USD
Source Fee:	0,00	
Target Fee:	0,00	

Country: Australia

City: MELBURN

Details: WWW.AVSBALTIC.AS

Merchant ID: 3261070

SIC: 4511 Airlines, Air Carriers

Card Expire: -

Seq #:

Return Code: Successfully completed

Posting Status: Posted

Outward: Closed

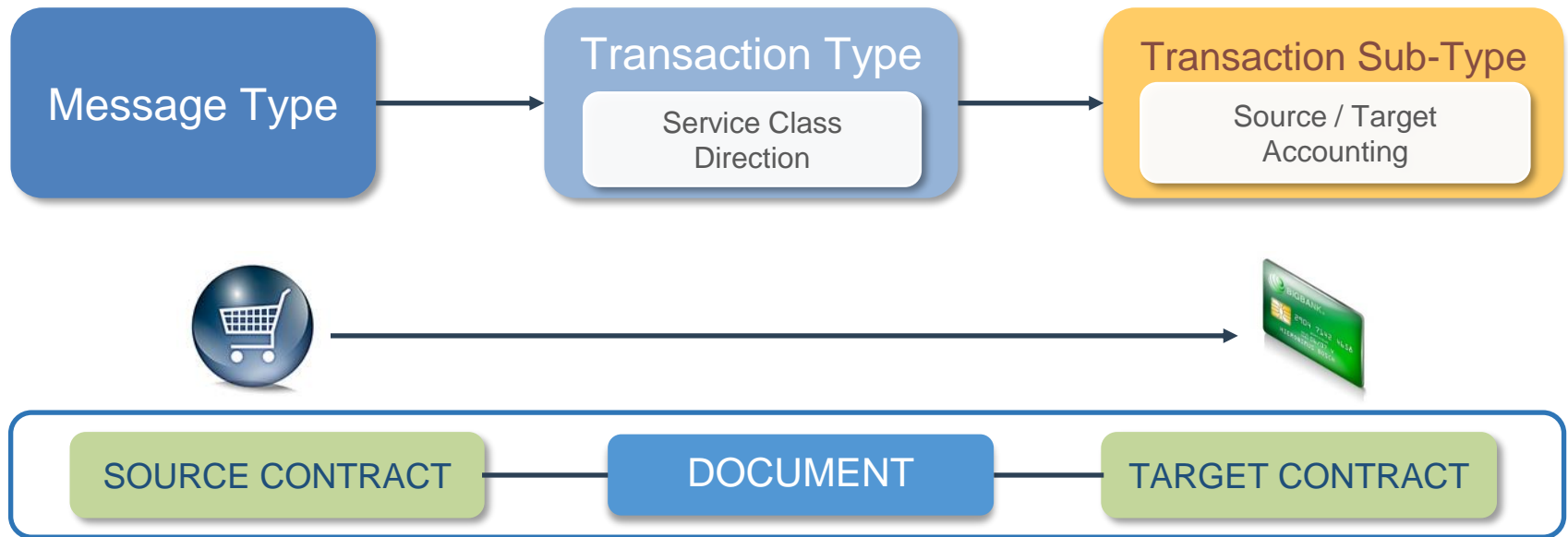
Posting, Settl Date: 22/06/2015 19/06/2015

Ins Del Query Approve Messages Parties Curr Ctrl

# Transaction Types



# Transaction Types



Full → Configuration Setup → Transaction Types

Service Class	Transaction Type	Direction	Source	Target
Transaction	ATM	Debit	IPS Acquiring Contract	Card Contract
Transaction	Retail	Debit	IPS Acquiring Contract	Card Contract

# Transaction Types. Funds Movement Direction

## TRANSACTION TYPES

- Retail
- Cash
- ATM
- Card Production fee
- Payment to card
- Credit
- Balance Inquiry
- Online Statement

Direction =  
Debit

Source  
+100

Document  
Amount = 100

Target  
-100

Direction =  
Credit

Source  
-100

Document  
Amount = 100

Target  
+100

Direction =  
None

Source

Document  
Amount = 0

Target

Transaction Type: Retail

Condition: El Comm Secure w/o cer

Condition Details: ENET,SECURE\_ATTEMPT

Reason Code:

Reason Details:

Requirements:

Add Data: CPS= N 639321559611668 000000000000;PEM=01;MOTO=6;L

SIC: 4511 Airlines, Air Carriers

Card Expire: -

Seq #:

Return Code: Successfully completed

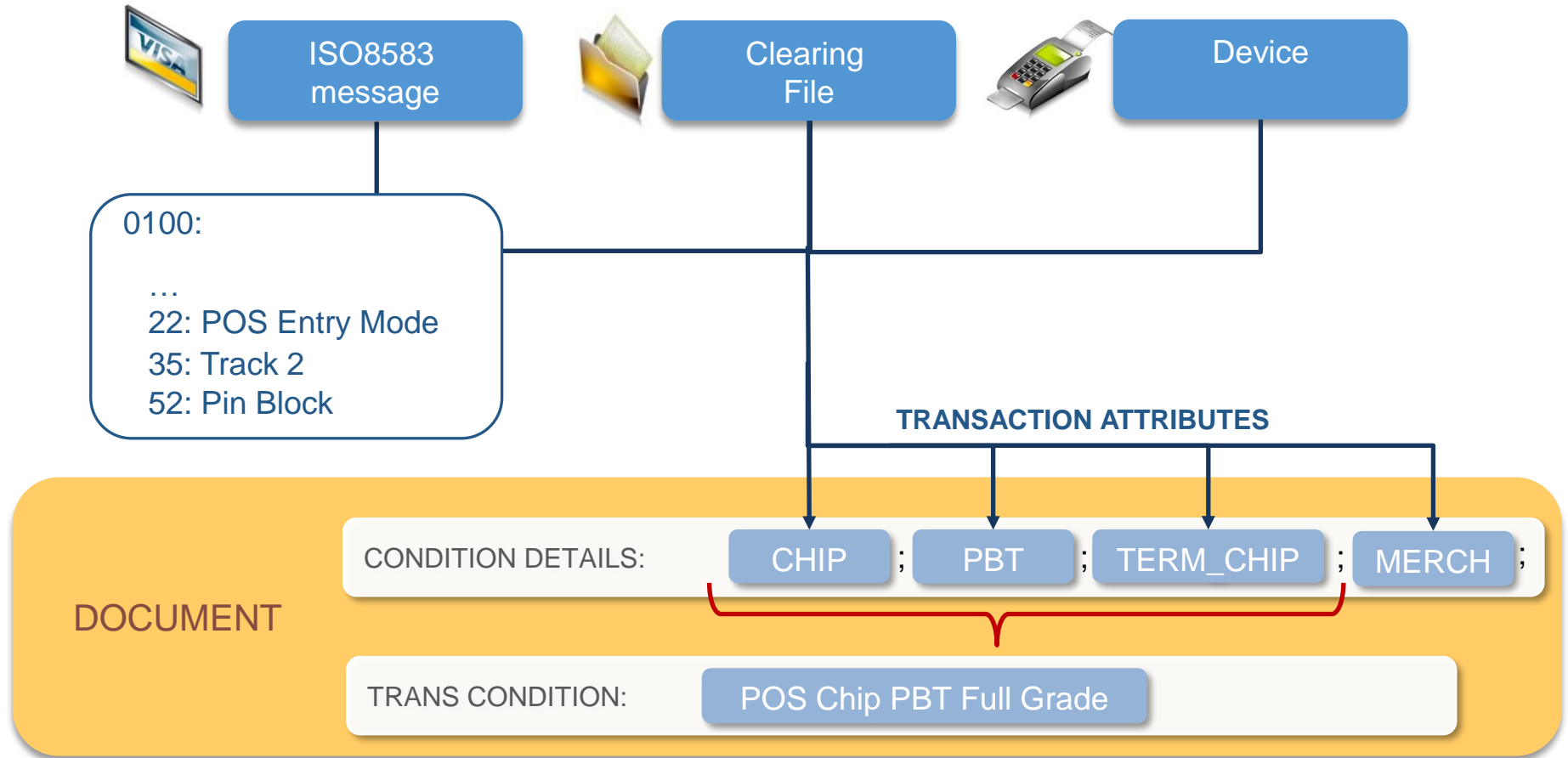
Posting Status: Posted

Outward: Closed

Posting, Settl Date: 22/06/2015

19/06/2015

# Transaction Details



OpenWay\Full\DB Administrator Utilities\!!! STAFF ONLY !!!\Main Dictionaries\Transaction Conditions

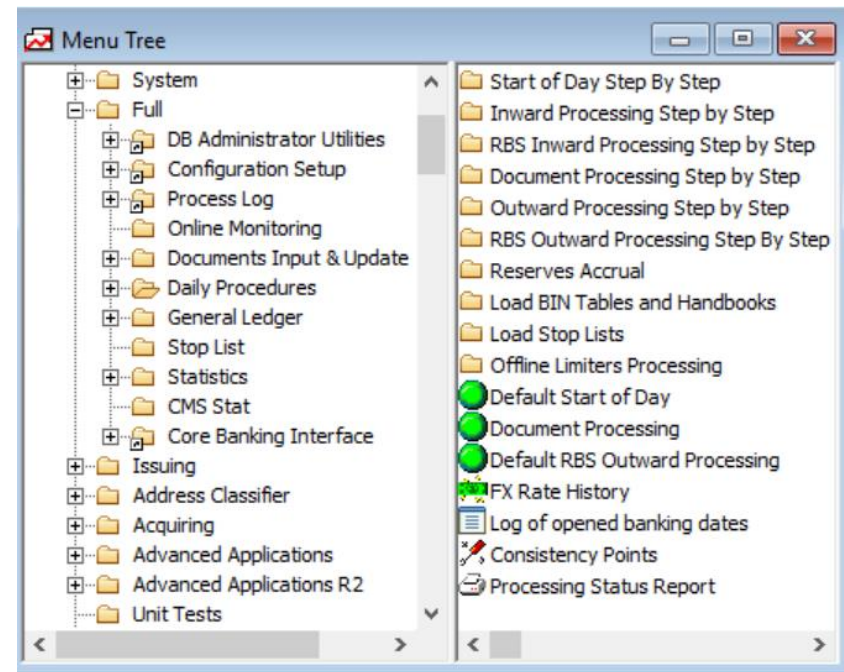
OpenWay\Full\DB Administrator Utilities\!!! STAFF ONLY !!!\Main Dictionaries\TransCondition Attributes

# Processing Financial Documents

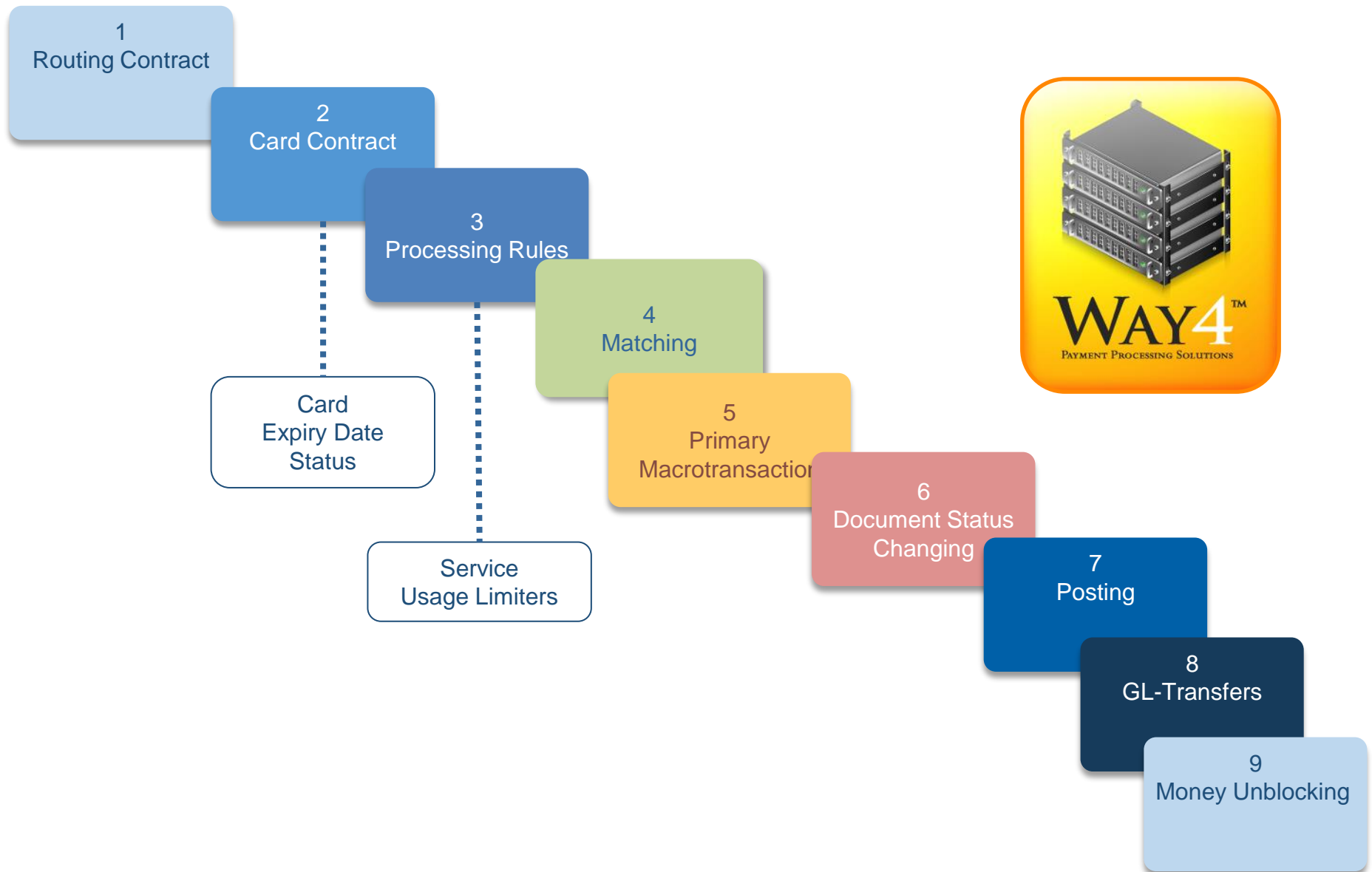


# Document Processing Procedure

- OpenWay\Full\Daily Procedures\Document Processing
- OpenWay\Full\Daily Procedures\Document Processing Step by Step
  - Accept Documents
  - Posting
  - Apply Buffered Balance
  - Clear Old Pendings
  - Renew When Available Docs

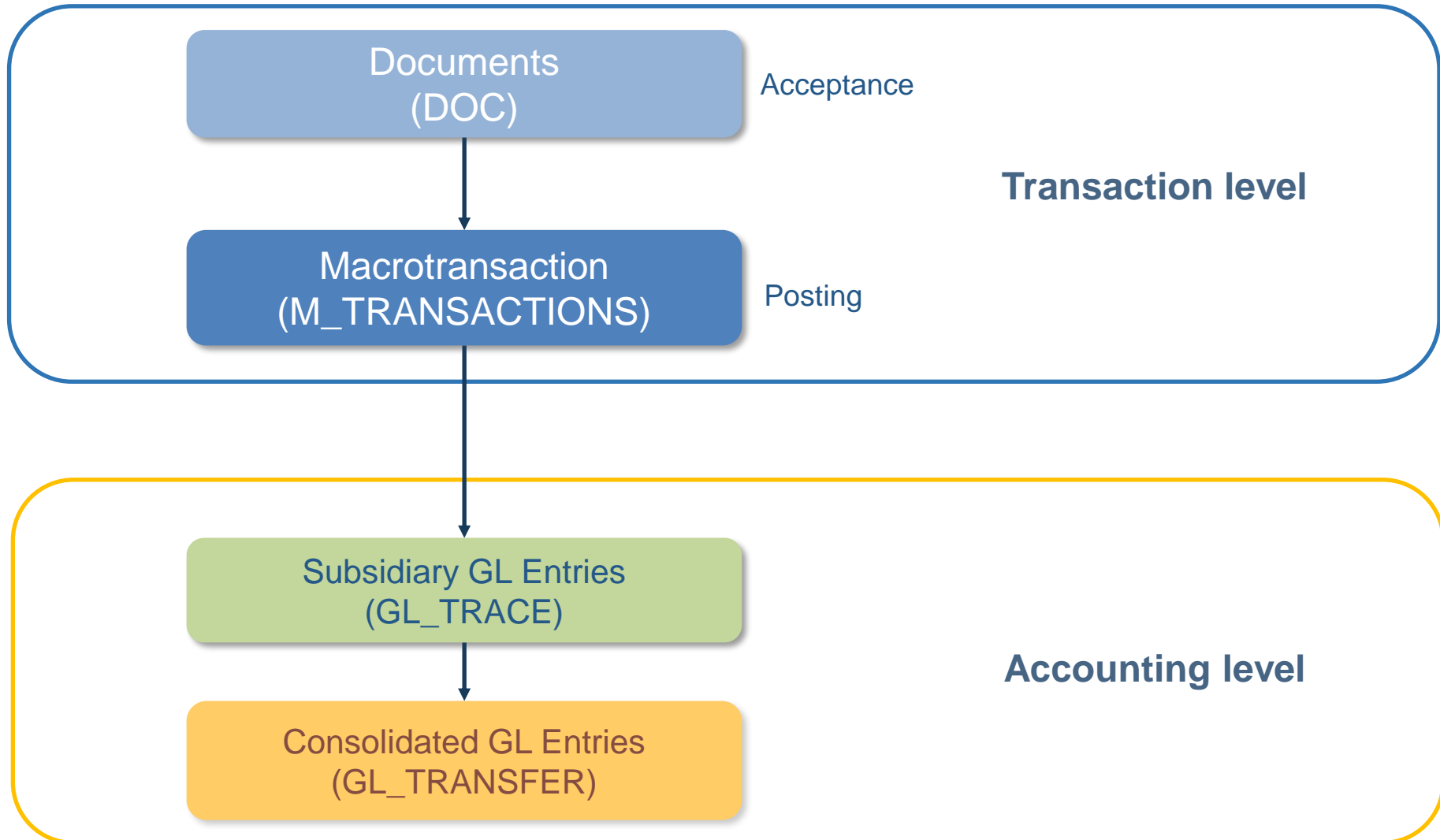


# Financial Document Processing

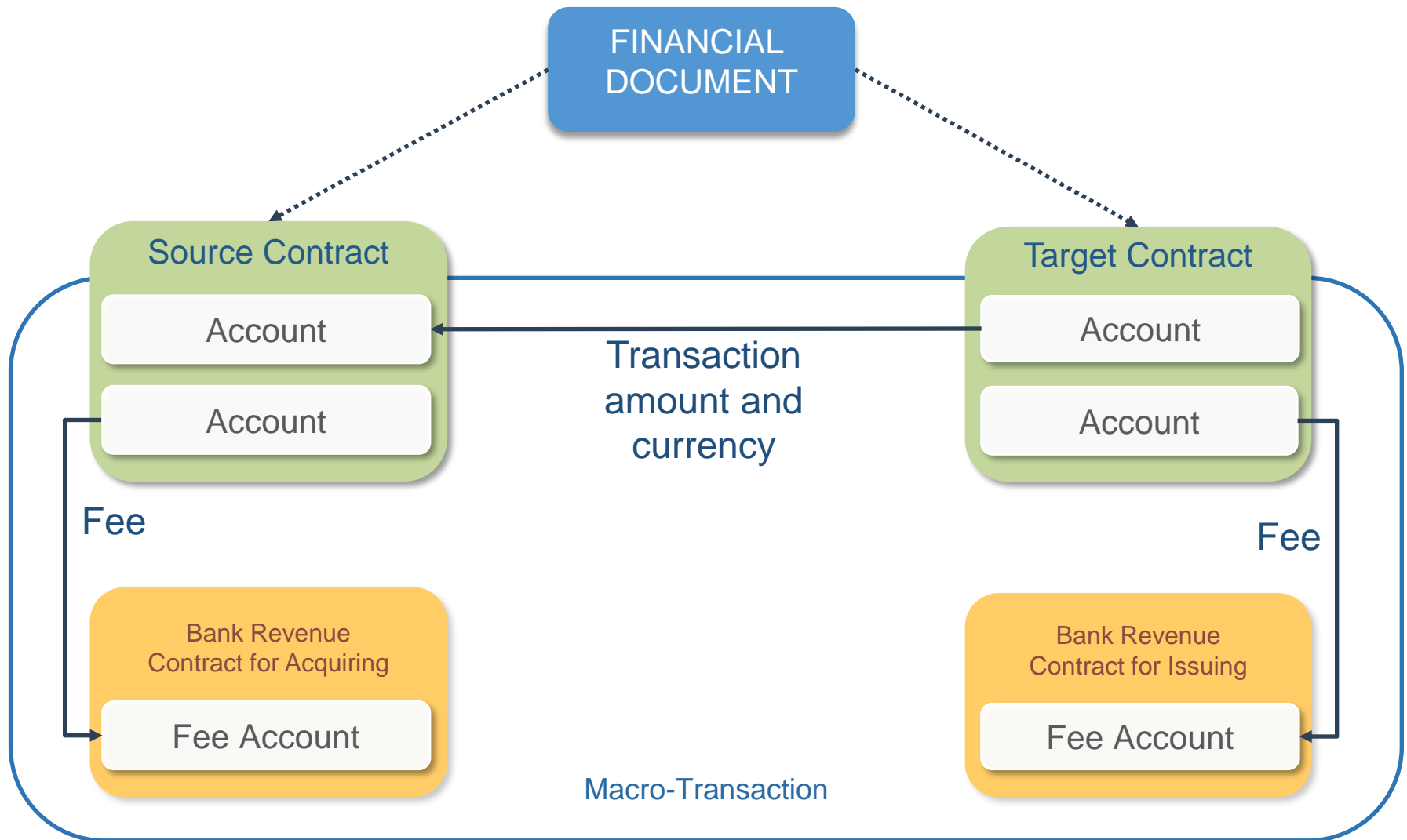




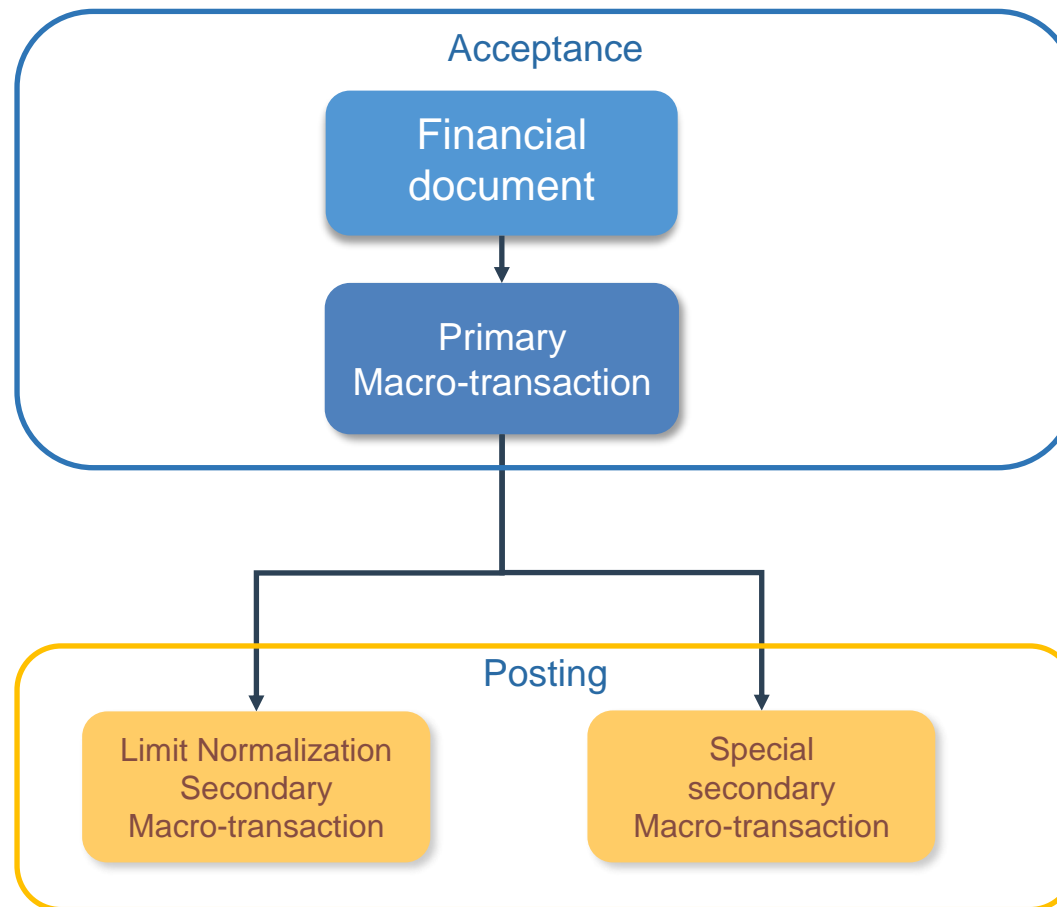
# Accounting. 2-level DB-Structure



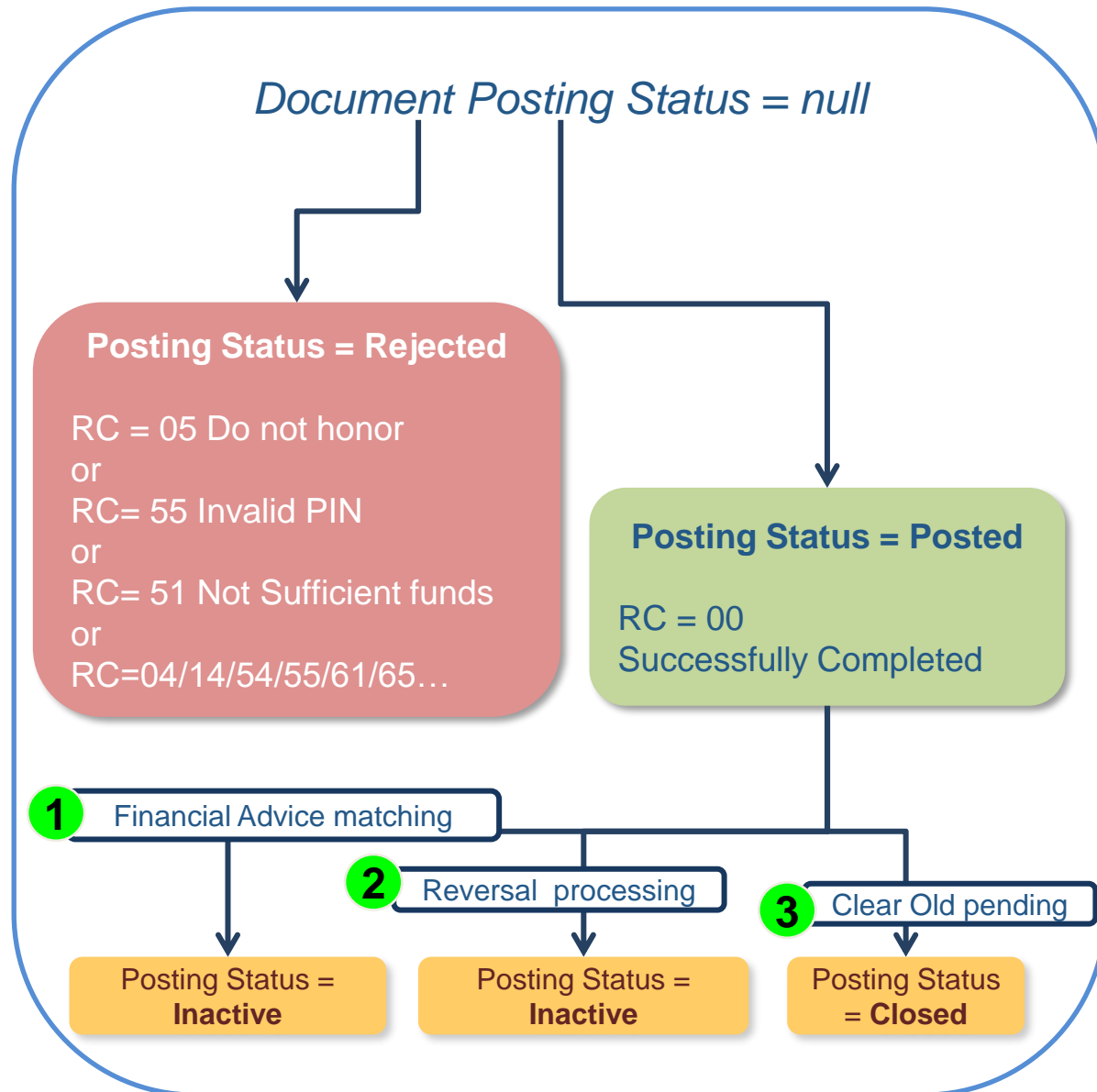
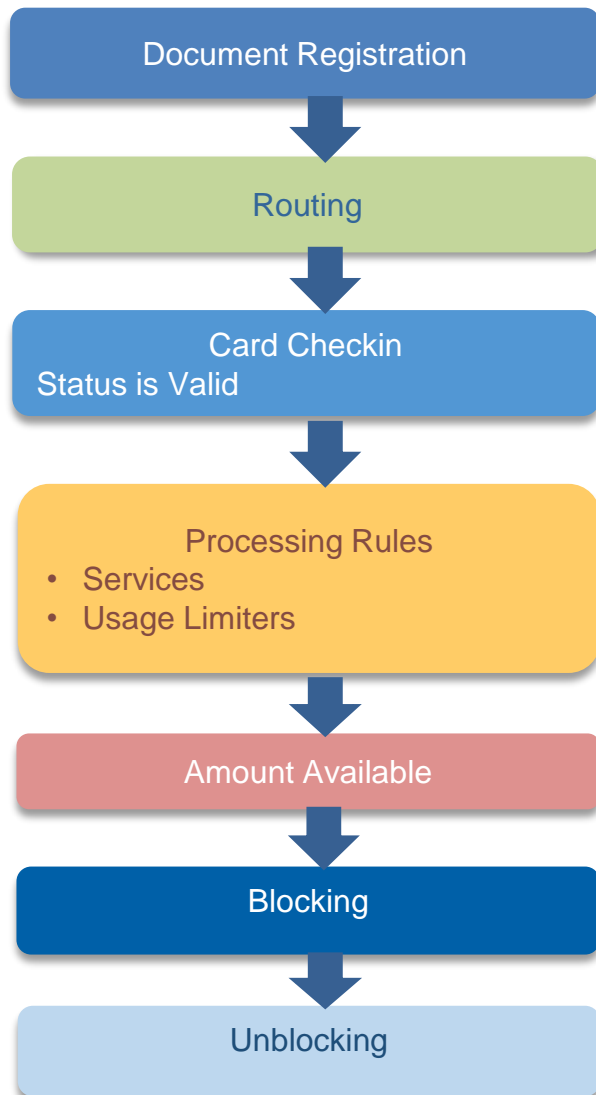
# Macro-Transaction



# Primary and Secondary Macro-transactions



# Authorization Document Statuses



# Financial Document Statuses

Document Registration

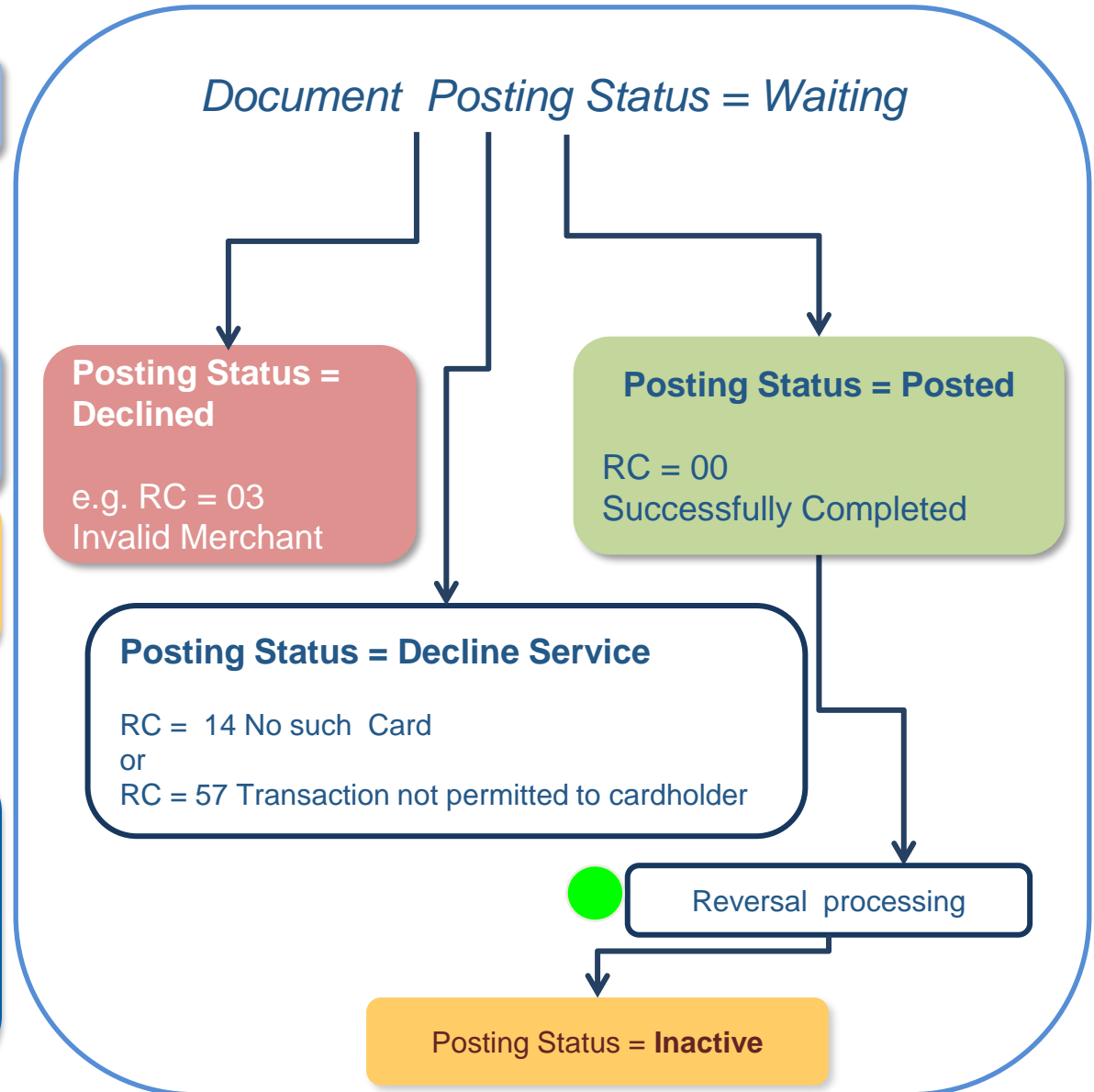
Document Processing

**1** Acceptance:

- Checking Document
- Waiting Macrotransaction Creation

**2** Posting:

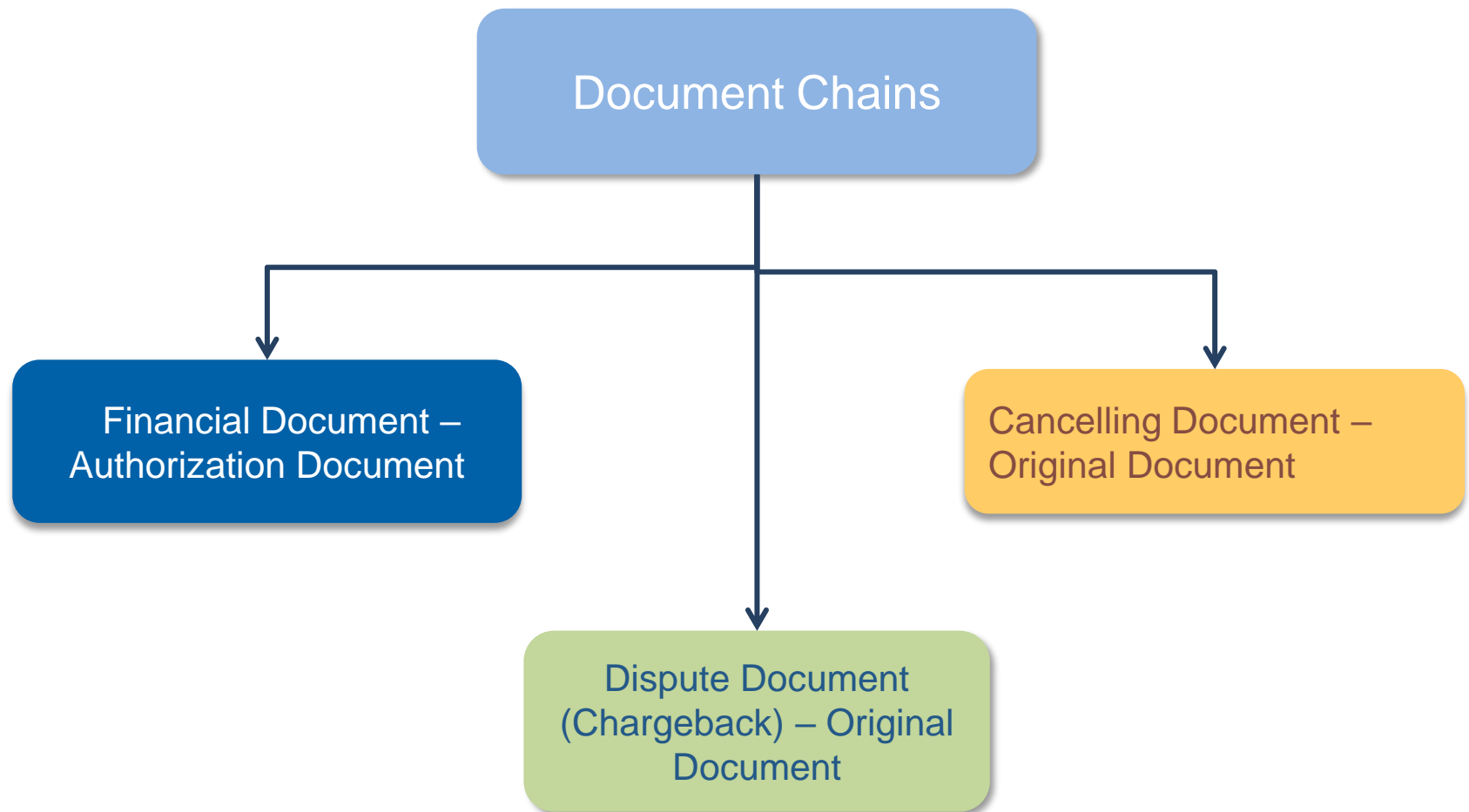
- Macrotransaction Processing
- GL-transfers creation



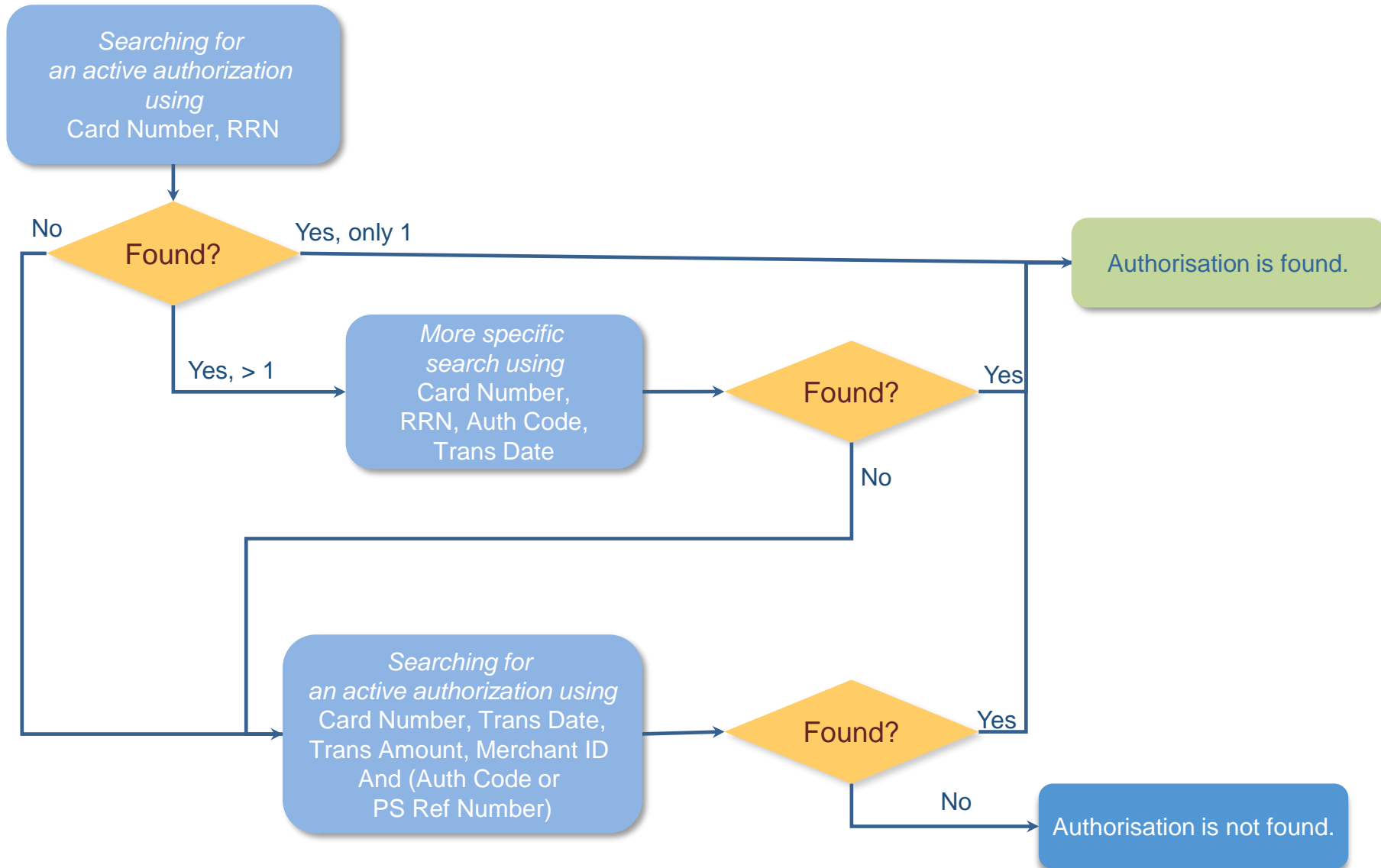
# Relations between Documents



# Types of Document Chains



# Matching Fin + Authorization





- OW\_HOME>\manuals\english\Transaction\_management\Documents.pdf

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