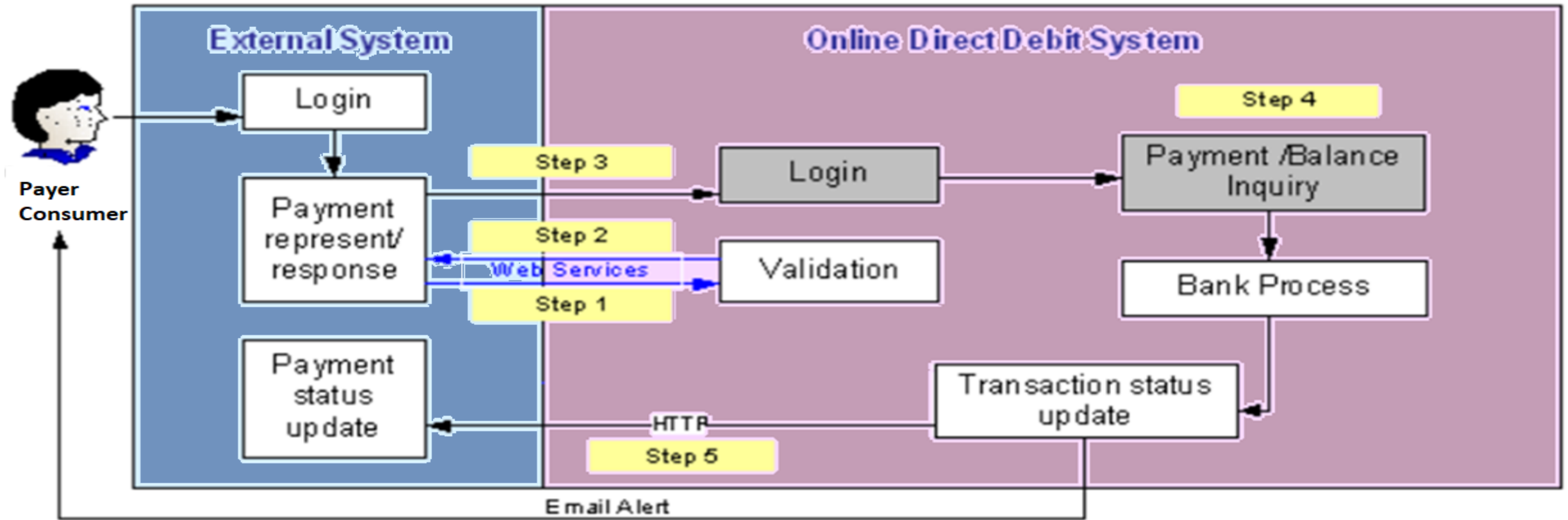




INSEE Plus Payment Online Integration Banking-KBank(Kasikorn)-ODD

- Integration High Level Overview
- Integration Sequence Flow
- Request Response Mapping

KBank – ODD High Level Flow

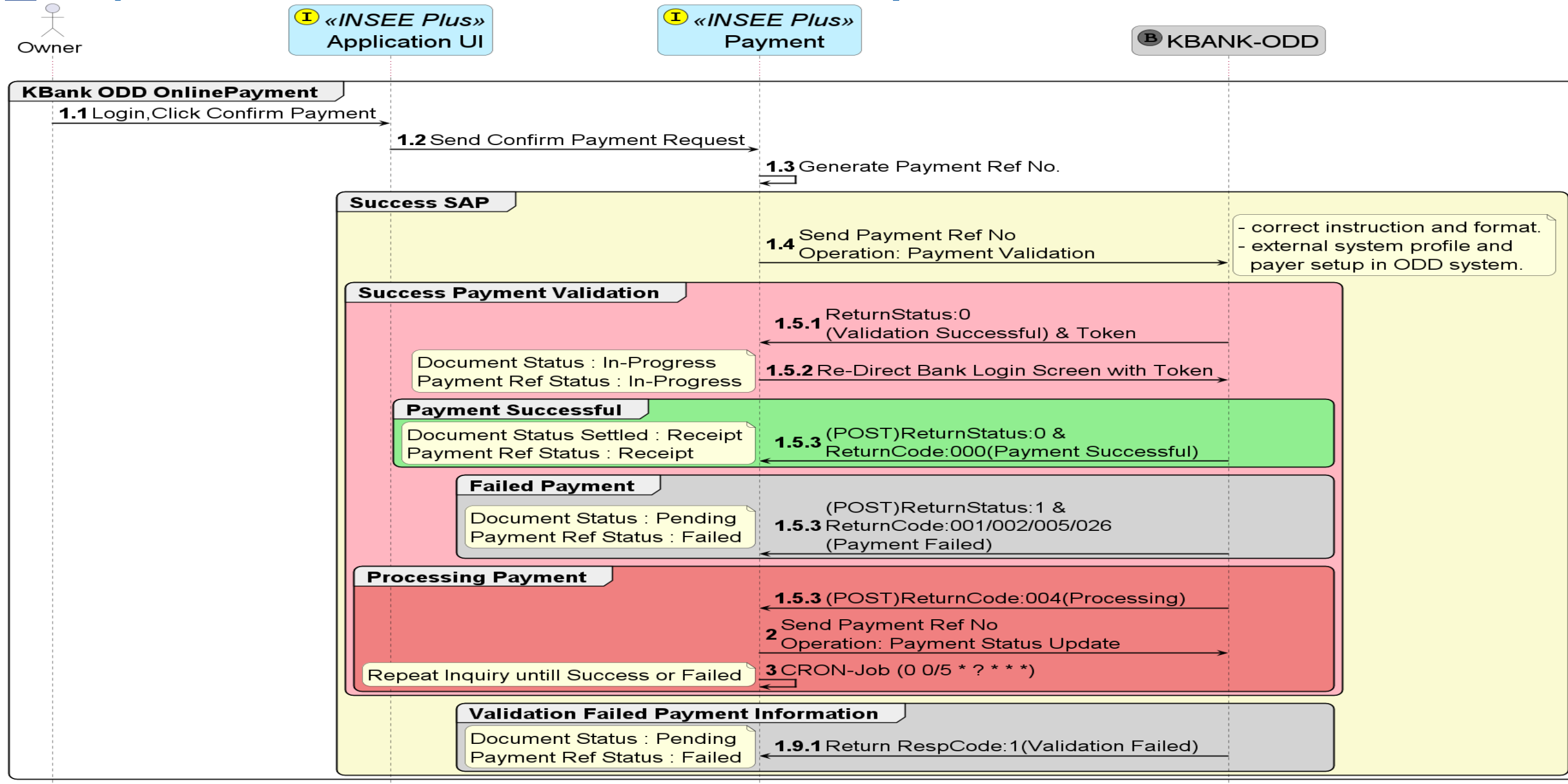


Payment Flow Diagram

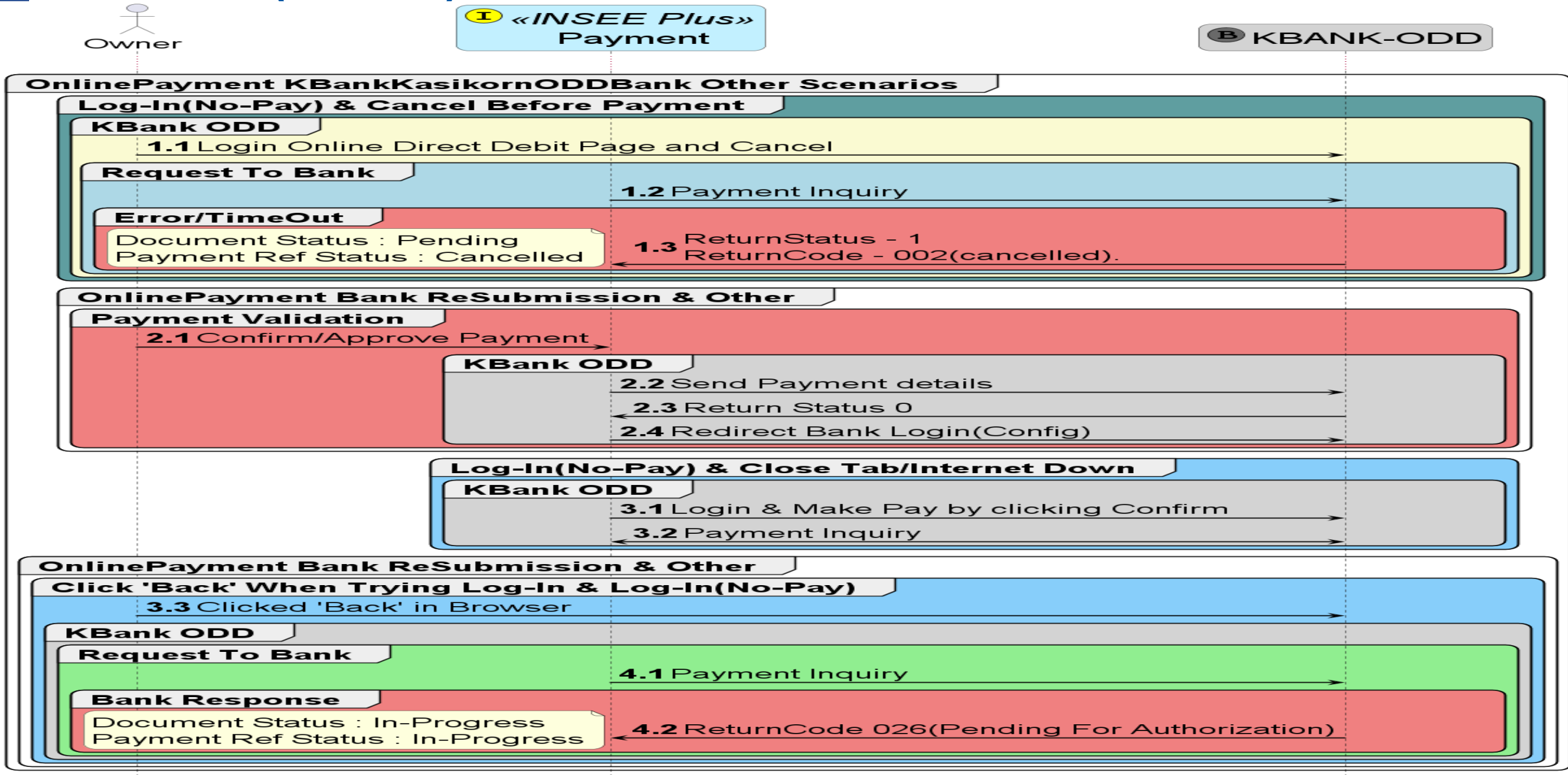


Payment Inquiry Diagram

Sequence Flow : Insee Plus – KBank ODD Payment Process



Kbank-ODD (Kasikorn) - Other Scenarios




KBank ODD - Payment Data to Validation Request (Insee Plus -> Bank) (1/3)

No	Field	Data Type	M/O	Length	Data
Header Record – Single Record per Transaction ← paymentStr[0]					
1	Header Record Indicator	Number	M	1	0
2	Transaction Type	Number	M	4	0100
3	External System Short Number	Alphanumeric	M	12	EXT_SYSTEM
4	Submitter's Login Name	Alphanumeric	O	50	User1
5	Language	Alphanumeric	M	15	th_TH
6	Payment Mode	Number	M	4	0001

Details Record – Single Record per Transaction ← paymentStr[1]

1	Details Record Indicator	Number	M	1	1
2	Payer Company Short Name/Payer Code	Alphanumeric	O	30	Payer1
3	Entity Type	Alphanumeric	M	1	R
4	Payer Bank Account Numeric	Alphanumeric	O	20	
5	Payment Timestamp	Alphanumeric	M	14	20080601205600

KBank ODD - Payment Data to Validation Request (Insee Plus -> Bank) (2/3)

Payment Header – One record per payment.  paymentStr[2]					
1	Payment header Indicator	Numeric	M	1	2
2	Payee Company Short Name/Payee Code	Alphanumeric	M	12	Payee1
3	External System Reference Numeric	Alphanumeric	M	20	20080601153300000001
4	Total Payment Amount	Decimal	M	15,2	000000000050020
5	Effective Payment Date	Numeric	O	8	20080601
Details Item Recode – Zero or Multiple Record per Transaction					
1	Details Item Indicator	Number	M	1	3
2	Reference No 1	Alphanumeric	O	100	INV00001
3	Reference No 2	Alphanumeric	O	100	article1
4	Reference No 3	Alphanumeric	O	100	merchandise1
5	Reference No 4	Alphanumeric	O	100	100.20

Trailer Record – Single Record per Transaction					
1	Trailer Record Indicator	Numeric	M	1	4
2	Number of Detail Items	Numeric	M	-	1

Header Trailer Record – Single Record per Submission					
1	Trailer Record Indicator	Number	M	1	9
2	Number of Details Item Record	Number	M	-	1

Refer Slide 8 : Examples for paymentStr[3] & others

KBank ODD - Payment Data to Validation (Insee Plus -> Bank) (Samples)

แบบไม่ส่งข้อมูล ของรายละเอียดของการชำระหนี้ (not sending payment details)

```
String paymentStr[] = new String[5];  
paymentStr[0]="00100EXT_SYSTEM User1 th_TH 0001";  
paymentStr[1]="1 R 20080601163512";  
paymentStr[2]=" 2Payee1 20080601153300000001000000000050020200806011";  
paymentStr[3]="40";  
paymentStr[4]="91";
```

แบบส่ง รายละเอียดของการชำระหนี้ (1 invoice)

```
String paymentStr[] = new String[6];  
paymentStr[0]="00100EXT_SYSTEM User1 th_TH 0001";  
paymentStr[1]="1 R 20080601163512";  
paymentStr[2]=" 2Payee1 20080601153300000001000000000050020200806011";  
paymentStr[3]=" 3INV00001 article1 merchandise1 500.20 ";  
paymentStr[4]="41";  
paymentStr[5]="91";
```


KBank ODD - Payment Data to Validation (Insee Plus -> Bank) (Samples)

แบบส่ง รายละเอียดของการชำระหนี้ (Many invoices)

```
String paymentStr[] = new String[8];
```

```
paymentStr[0]="00100EXT_SYSTEM User1 th_TH 0001";
```

```
paymentStr[1]="1 R 20080601163512"
```

```
paymentStr[2]=" 2Payee1 2008060115330000000100000000005002020080601";
```

```
paymentStr[3]="3INV00001 article1 merchandise1 100.00 ";
```

```
paymentStr[4]="3INV00002 article2 merchandise2 200.00 ";
```

```
paymentStr[5]="3INV00003 article3 merchandise3 200.20 ";
```

```
paymentStr[6]="43";
```

```
paymentStr[7]="91";
```

KBank ODD - Payment Data to Validation-WebClient Method(Insee Plus -> Bank)

Configurable Params Provided By KBank ODD:

Payee Company ShortName : INSEEPYE (//Check Kbank Config)
External System Short name = SCCCETN (//Check Kbank Config)
Language encoding = ISO-8859-1
Locale = en_US
External System Reference Numeric = (//Check Kbank Config)

KBANK-ODD Jar file : kbank_ws2.jar

Dependencies : axis.jar, commons-discovery.jar, saaj.jar

Web Services Client - DSO

```
com.ebx.pg.user.ws.axis.dsov2.PGUWSbDigitalOrderv2Service service =new  
com.ebx.pg.user.ws.axis.dsov2.PGUWSbDigitalOrderv2ServiceLocator  
("https://ws05.kasikornbank.com/services/EBXPGDSOv2"," EBXPGDSOv2");
```

```
com.ebx.pg.user.ws.axis.dsov2.PGUWSbDigitalOrderv2 digitalOrder= service. getEBXPGDSOv2 ();  
String returnStr = digitalOrder.sendDSO(paymentStr, extSysShortName, laguageEncoding, locale);
```

paymentStr – Refer Page 8 & 9

In case Production URL : <https://ws05.kasikornbank.com/services/EBXPGDSOv2>

© 2022 Coforge **In case UAT URL** : <https://ws05.uatebpp.kasikornbank.com/services/EBXPGDSOv2>

KBank ODD - Payment Data to Validation-HTTP POST Method(Insee Plus -> Bank)

In case Production URL: <https://ws05.kasikornbank.com/oddfc/inctx>

In case Test Module URL: <https://ws05.uatebpp.kasikornbank.com/oddfc/inctx>

not sending payment details :

header=00100EXT_SYSTEM User1 th_TH 0001 &detail=1 R 20080601163512
&payment=2Payee1 2008060115330000000100000000005002020080601&trailer=40
&head_trailer=91

One Payment Item :

header=00100EXT_SYSTEM User1 th_TH 0001 &detail=1 R 20080601163512
&payment=2Payee1 2008060115330000000100000000005002020080601&item=3INV00001
article1 merchandise1 500.20 &trailer=41 &head_trailer=91

More than One Payment Item :

header=00100EXT_SYSTEM User1 th_TH 0001 &detail=1 R 20080601163512
&payment=2Payee1 2008060115330000000100000000005002020080601&item=3INV00001
article1 merchandise1 100.20 &item=3INV00002 article2 merchandise2 200.20
&item=3INV00003 article3 merchandise3 300.20 &trailer=43 &head_trailer=91

KBank ODD - Return Data From Validation (Bank -> Insee Plus) (WebClient/HTTP POST)

Bank URL	PRD: https://ws05.kasikornbank.com UAT:https://ws05.uatebpp.kasikornbank.com/				
PARAMETER	Name	Type	Length	Description	Sample Value
	Return Status	Alphanumeric	1	Bank return status 0 : success, 1: false	0
	Token length	Alphanumeric	3	Token length	12
	Token ID	Alphanumeric	20	Bank create Token ID and send to INSEE Plus	20040329415232000001
	Return Message	Alphanumeric	100	Bank return validation status	This process is successful

**** Length of Token ID is varying on value of "Token length"**

External system will redirect to ODD Login page only Return Status = 0

Sample Return : Success Case

001220040329415232000001This process is successful

KBank – ODD Redirect To Bank Login Page (Insee Plus -> Bank)

Bank URL	PRD: https://ws06.kasikornbank.com/PGSLGNcPreLogin.do?payId=20040329415232000001				
	UAT: https://ws06.uatebpp.kasikornbank.com/PGSLGNcPreLogin.do?payId=20040329415232000001				
PARAMETER	Name	Type	Length	Description	Sample Value
	payId	String	20	INSEE Plus get "Token id" from Bank and redirect login page with the same Token id	20040329415232000001
Sample Redirect to PRODUCTION Bank Login Page https://ws06.kasikornbank.com/PGSLGNcPreLogin.do?payId=20040329415232000001					

KBank – ODD Return Payment Status (Bank -> Insee Plus) (1/2)

No	Field	Data Type	M/O	Length	Data
Header Record – Single Record per Transaction					
1	Header Record Indicator	Number	M	1	0
2	Transaction Type	Number	M	4	0110
3	External System Short Name	Alphanumeric	M	12	EXT_SYSTEM
4	Payment Mode	Number	M	4	0001
Details Record – Single Record per Transaction					
1	Details Record Indicator	Number	M	1	1
2	External System Reference Number	Alphanumeric	M	20	20060706153300000001
3	ODD Transaction No	Alphanumeric	O	20	20060803081853000001
4	Transaction Timestamp	Timestamp	M	14	20060706215600
5	Payee Company Short Name/Payee Code	Alphanumeric	M	12	Payee1
6	Payer Company Short Name/Payer Code/Consumer ID	Alphanumeric	O	30	Payer1
7	Payer Bank Account Number	Alphanumeric	O	20	745ACC0001
8	Total Payment Amount	Decimal	M	15,2	500.20
9	Return Status	Alphanumeric	M	1	0

KBank – ODD Return Payment Status (Bank -> Insee Plus) (2/2)

10	Return Code	Alphanumeric	M	3	000
11	Return Message	Alphanumeric	M	100	The payment has been process successfully
Details Item Recode – Zero or Multiple Record per Transaction					
1	Details Item Indicator	Number	M	1	2
2	Reference No 1	Alphanumeric	O	100	INV00002
3	Reference No 2	Alphanumeric	O	100	20040112
4	Reference No 3	Alphanumeric	O	100	
5	Reference No 4	Alphanumeric	O	100	500.20
Trailer Record – Single Record per Transaction					
1	Trailer Record Indicator	Number	M	1	9
2	Number of Details Item Record	Number	M	-	1

Note : External system's URL for status update (as setup in external system profile) (//Check Kbank Config)

In Case UAT URL : <https://uat.insee.com/payment/statusUpdate>

In Case PROD URL : <https://api.insee.com/payment/statusUpdate>

KBank – ODD Return Payment Status (Bank -> Insee Plus) (Sample)

No information on payment details :

header=00100EXT_SYSTEM User1 th_TH 0001 &detail=1 R 20080601163512
&payment=2Payee1 2008060115330000000100000000005002020080601&trailer=40
&head_trailer=91

One Payment Item Information :

header=00100EXT_SYSTEM User1 th_TH 0001 &detail=1 R 20080601163512
&payment=2Payee1 2008060115330000000100000000005002020080601&item=3INV00001
article1 merchandise1 500.20 &trailer=41 &head_trailer=91

Details of more than One Payment Item :

header=00100EXT_SYSTEM User1 th_TH 0001 &detail=1 R 20080601163512
&payment=2Payee1 2008060115330000000100000000005002020080601&item=3INV00001
article1 merchandise1 100.20 &item=3INV00002 article2 merchandise2 200.20
&item=3INV00003 article3 merchandise3 300.20 &trailer=43 &head_trailer=91

KBank – ODD WebService Client Payment Inquiry (Insee Plus -> KBank ODD)

Web Services Client-DSO :

```
com.ebx.pg.user.ws.axis.ps.PGUWSbDigitalOrderService service = new  
com.ebx.pg.user.ws.axis.ps.PGUWSbDigitalOrderServiceLocator(https://ws04.kasikornbank.com/servi  
ces/EBXPGPaymentStatus,"EBXPGPaymentStatus");  
com.ebx.pg.user.ws.axis.ps.PGUWSbDigitalOrder digitalOrder= service.getEBXPGPaymentStatus();  
String returnStr = digitalOrder.findPaymentStatus(extSysReferenceNo , extSysShortName ,languageEncoding ,locale);
```

In case Production URL : <https://ws04.kasikornbank.com/services/EBXPGPaymentStatus>

In case UAT URL : <https://ws04.uatebpp.kasikornbank.com/services/EBXPGPaymentStatus>

External System -> ODD DSO – ODD Input parameters for payment status checking:

No	Field	Data Type	M/O	Length	Data
1.	External System Reference Number	Alphanumeric	M	-	20060706153300000001
2.	External System Short Name	Alphanumeric	M	-	EXT_SYSTEM
3.	Language encoding	Alphanumeric	M	-	iso-8859-1
4.	Locale	Alphanumeric	M	-	en_US

DSO – ODD The string return from the payment status checking web services

No	Field	Data Type	M/O	Length	Data
1.	Return Code	Alphanumeric	M	3	000
2.	Return Message	Alphanumeric	M	100	The payment has been process successfully

HTTP POST Payment Inquiry is supported by KBank ODD

(can use instead of WebClient)

When retrieving using HTTP Post it is necessary to specify 4 parameters:

extrefno: The reference number of the transaction you want to check.

extsysshortname : (*//Check Kbank Config*)

encode : ISO-8859-1

locale : en_US

In case Production URL: <https://ws05.kasikornbank.com/oddfc/inqtx>

In case Test Module URL: <https://ws05.uatebpp.kasikornbank.com/oddfc/inqtx>

Ex. of a data form sent to the KBank ODD system by using the HTTP Post method.

[extrefno=extsys00001&extsysshortname=extsys1&encode=iso-8859-1&locale=en_US](#)

Inquiry data in HTTP Post format, the Kbank system will respond in full format

Refer Page 14 & 15

Return Code from KBank ODD -> Insee Plus

Code	Original Message
000	Payment Successful
001	Invalid Data
002	Your payment transaction has cancelled.
003	Bank Process. Please contact bank for result
004	Bank Process. Please contact bank for result
005	Insufficient Balance
006	Transaction Fail
007	Cannot connect to the System (ODD does not receive the payment or validation Failed) จะเกิดขึ้นเฉพาะกรณีส่งมา inquiry ข้อมูลเก่าที่เคยส่งมาแล้ว ข้อมูลที่เคยส่งมาหายไปจากระบบ ODD
008	Payment amount exceeded user authorization limit.
009	Invalid account type
010	Inactive account for a period
011	Account closed
012	Account doesn't exist
013	Cannot do the payment at this time

014	Success for Future Payment Transaction Receive
015	Fail for Future Payment Transaction Receive
016	Success for Cancel Future Payment Transaction Receive
017	Fail for Cancel Future Payment Transaction Receive
019	Message Warehoused Payment (Payment is successfully warehoused. Payment is warehoused as it is initiated after the system cut-off time. External system should check the payment status on the next day)
020	Payment amount is over the VIP limit.
022	Payment transaction holding the "pending for verification" status.
023	Payment transaction holding the "pending for authorisation" status.
024	Your payment transaction is pending for payer user action. Non web confirmation payment transaction is pending for payer user action.
025	Your payment transaction had encounter timeout. Please contact KBANK customer service.
026	Your payment transaction is pending for authorization.

Return Message from Pre-ODD (In case HTTP Post) KBank ODD -> Insee Plus

Code	Original Message	Responsible to
001	Empty header string	External System
002	Header length mismatched.	External System
003	Incorrect 'Header Indicator'.	External System
004	'External System Reference Number' is empty.	External System
005	'Payment Timestamp' is empty.	External System
006	'External System Short Name' is empty.	External System
007	'Payee Company Short Name' is empty.	External System
008	'Total Payment Amount' is empty.	External System
009	'Payer Company Short Name' is empty.	External System
010	'Payer Bank Account Number' is empty.	External System
011	'Language' is empty.	External System
012	'Entity Type' is empty.	External System
013	Entity Type' is invalid, must be 'R' or 'C'.	External System
014	Detail length mismatched.	External System

015	Incorrect 'Detail Indicator'	External System
016	Trailer string is empty."	External System
017	Incorrect 'Trailer Indicator'.	External System
018	The number of detail record does not matches it's actual string.	External System
019	Invalid incoming data.	KBANK
020	Duplicate data inserted to database while processed input data.	KBANK
021	Input data validation failed.	KBANK
022	Database exception while processed input data.	KBANK
023	Unknown exception while processed input data.	KBANK
024	Duplicate data inserted to database while processed output data.	KBANK
025	Database Pre-Validation Error.	KBANK
026	Database error while processed output data.	KBANK
027	Communication error while send response to external system.	KBANK
028	Unknown error while send response to external system.	KBANK

Mapping Code Listing Samples : KBank ODD -> Insee Plus

	Code to External System	Status to External System		
M0000	000	0	Payment Success	SSO, DSO
M0001	001	1	Missing web services configuration rule	SSO, DSO
M0002	001	1	Payment data indicator is invalid	SSO, DSO
M0003	001	1	Payment data content size with current indicator is invalid	SSO, DSO
M0004	001	1	Payment data total records are incorrect	SSO, DSO
M0005	001	1	Payment data missing mandatory field	SSO, DSO
M0006	001	1	Payment data missing field for current condition	SSO, DSO
M0007	001	1	Fail to load parsing rules	SSO, DSO
M0008	001	1	No payment data received	SSO, DSO
M0009	001	1	Payment data must contain at least 2 rows	SSO, DSO
M0010	001	1	Payment data content is empty	SSO, DSO
M0011	001	1	Payment data content must contains at least 2 characters	SSO, DSO
M0012	001	1	Missing external system and payee relationship	SSO, DSO
M0013	001	1	Missing external system and payer relationship	SSO, DSO
M0014	001	1	Missing payee and payer relationship	SSO, DSO

M0120	001	-	SSO cancel future payment encountered unexpected system error	SSO
M0121	001	-	SSO Exceed allowed cancel future payment days when cancel future payment	SSO
M0122	001	1	SSO Missing payer short name (RESERVED)	SSO
M0123	001	1	Invalid payee short name	SSO, DSO
M0124	001	1	Invalid payer short name	SSO, DSO
M0125	001	1	Invalid consumer login id	SSO, DSO
M0126	001	1	No supported locale code in web services implementation.	SSO, DSO
M0127	001	1	Missing trailer record	SSO, DSO
M0128	001	1	Invalid external system short name	SSO, DSO
M0129	014	-	Success for Future Payment - to backend program	SSO, DSO
M0130	015	-	Fail for Future Payment Transaction - to backend program	SSO, DSO
M0131	016	-	Success for Cancel Future Payment - to backend program	SSO, DSO
M0132	017	-	Fail for Cancel Future Payment - to backend program	SSO, DSO
M0133	019	1	Success Warehouse payment	SSO, DSO
M0134	020	1	ODD ADAPTER/ATM MQ return "Over VIP Limit"	SSO, DSO



Thank You.

