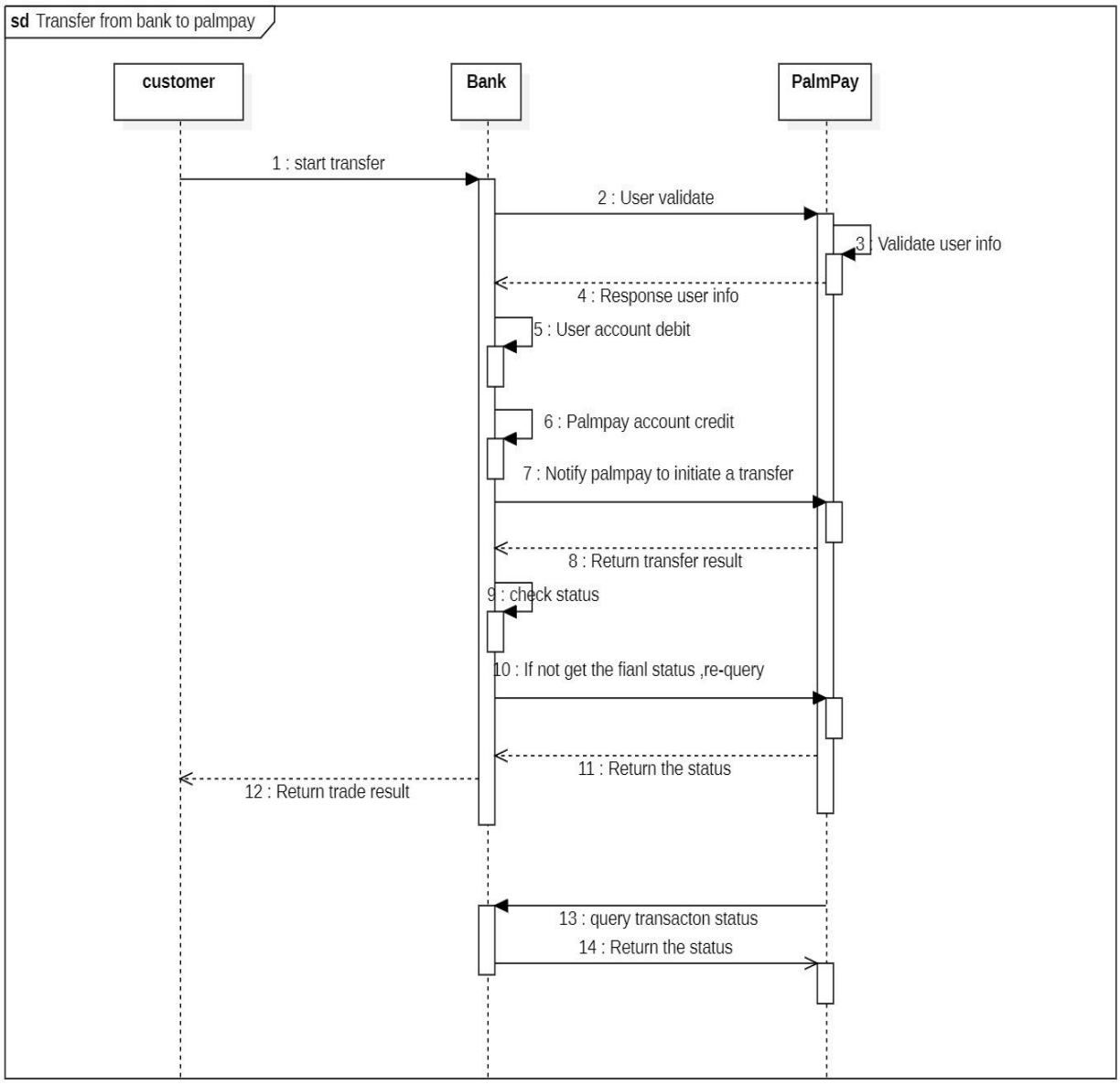
TECHNICAL SPECIFICATION DOCUMENT

FOR

PALMPAY INSTANT PAYMENTS

version 1.0

Transaction Timing Chart



API METHODS

1.1 PaymentNotification

API Url: https://${base_url}/pip/v1.0/direct/transfer/paymentNotification

1.1.1 Description

This inter-bank payment notification API will be developed and hosted at PalmPay and called by source bank to notify PalmPay of every transfer initiated by customers on Source Bank channels i.e. mobile app, internet banking etc whose destination bank is PalmPay and fund had been debited successfully from the customer's account and PalmPay Settlement/Pool account credited successfully.

1.1.2 Sample Payload

Method: POST

Header:

Authorization: To be advised by PalmPay to Source Bank (Subscription key)

Plain Sample Request:


```
{
    "amount": "100.00",
    "beneficiaryAccountName": "jack",
    "beneficiaryAccountNumber": "9160006666",
    "beneficiaryKYCLevel": "1",
    "nameEnquiryRef": "100033230322190555987656881234",
    "narration": "transfer from bank to palmpay",
    "originatorAccountName": "Frank",
    "originatorAccountNumber": "9167656234",
    "paymentReference": "49549495495954989",
    "sessionId": "100033230322190555987656621234",
    "transactionLocation": "3.38475,6.95834"
}
```


Encrypted Sample Request:


```
{
    "request": "d95gRq+hxGP+8RXy1dWlgAnxQVe5BnXHAxGi3srTSO5u+ewkquOokPiZ+SreA+7orL+lVGAO+8NQimU5FRd2koVZewZMco4OprPt4qSJpWudvJSAn4nTiVeDxkbOP1ydh
oN+qQnGYpW/QXy+zhv69np9amyTPi87beGNVVNw9Hotv61/IocdXplY3lG6SWHQRVpYDaH7TfDLVlCnSSedyYTrty28mzPNrwNoLt0ouOj6IQYYmYP/2rJxn9oMXgOcQAC7d8W/qOfU/TUxr0
APpjTv1OnOIy2r/W5ZM5PlZtIb6LWMCgZTtPCdcVlKH4/J5q7daMDoG/3H6bwvwle5npwzRVjABOjG0POjCWZOrHIboI7LDSA8ChtZV4XU16MAJ/TtiJX/wqDW1yn1Wz5rS4glB2Zt+/eW+8k
PXoqGQOm61xi1fV7bKzb5knvLJ1jSuoLjH3fxNH+RiIxEC8Ip7pCis3AOArPHJKjHyxCRQ5BmJfjXa8xfFuasEZ5z+6r7LbGi3ZuKtkHwXQ8TV3myfAhlKNld/+wko0SOydqf1K4M1AFNYvI3
8yYkB96n13YV2wl8poZTLzQF48n55/uwKAogiETsvRdCZ6UL0aPi1tAgjuWJZWbSvyDDEA34/JyvzgWgGFU6X+vQo2cciplslOKzHELCqcDAsQQVttwplXY="
}
```


Plain Successful Response:


```
{
    "responseMessage": "Approved or completed successfully",
    "responseCode": "S00",
    "sessionId": "100033230322190555987656621234",
    "data": {
        "paymentReference": "49549495495954989"
     }
}
```

OR

Plain Failed Response:


```
{
      "responseCode": "F13",
       "responseMessage": " transfer limit Exceeded",
       "sessionId": "10003323032219055598765662123 4",
       "data": {
             "paymentReference": "49549495495954989"
        }

}
```


Encrypted Sample Response:


```
{
    "response": "lTubhA5MsjsVW4pAwq476apaPvzuNKiIjlNCnyT6pi7bElbp25zVIuE/iUhM8209KR2Z81Dd/JRcRCCZxBfAOhT+spg4gvFCJimbTYyFX1vIpiH1oyiOxdrmR0gNOZD2EYTsxAzCd/6H/SG/Nsz+khVQVrk6iMissjbDV0FU8acV9OXjrPByeZbxC1+dM1bJbyA64nAcPlVP9lov+LOG6YEqo1yHq1HUg8JvG/4ixjqPHecdzI1diONfbr1jotyMBQ3ZbT7OovFvoqJ7GgUDHHGNEwu+6LIkCPDc/p1TdSYu+V4AD4zjIcwI8Wdz3HZL+0lB0oPa4C8JiIjcODT4SA=="
}
```


2.1 QueryTxnStatus

API Url: https://${base_url}/pip/v1.0/direct/transfer/queryTxnStatus

2.1.1 Description

This transaction re-query API will be developed and hosted at PalmPay and called by source bank in cases where no response was received from PalmPay when "PaymentNotification" API was called or there was time out. The objective of this method is to confirm if the payment notification got to PalmPay and acknowledged.

If the “PaymentNotification” API for example timed out and no response was received by source bank, or PalmPay not respond with a final status response code that will trigger source Bank to do a re-query of the transaction.

If the “PaymentNotification” API was successful the first time it was initiated on PalmPay, response code “00” will be sent and there will be no need for source Bank to do a re-query of the transaction.

If the transaction exceeds 72 hours, PalmPay will returned the code 25.

2.1.2 Sample Payload

Method: POST

Header:

Authorization: To be advised by PalmPay to source bank (Subscription key)

Plain Sample Request:


```
{
    "sessionId": "10003323032219055598765432 1234"
}
```


Encrypted Sample Request:


```
{
    "request": "iUnburH2b6jynmVTwq54CXpRMvNU6zgr8kZ4kM4GTlc0XGlZf5EV8U9rXf1Xqc3T+3ovt25A2s/v2E5US1Wc0Y1o5GVQZaX3yH//KkSNkr28uPp9+tcUCN/8cf+JlVKQM
KVRqr2+2Xk2TWV5IEZIUhNbpasGfSpyVZpSuP0gUSPrbLf7eUmSptF6szd1kiho5MHvKk9Bq107Y9T3faBINwWMzI3gphS+aUgG791rsRJga2kA2QT841u+Nfu2R9jl9i8k7J6hGuny3pcs/V
g8LqXI9ILAVUD5x2Yo8cmOINReLg9lCM6svQoSDNyEhLOyXRfIY3s6wvnfDmlqZGErrw=="
}
```


Plain Successful Response:


```
{
    "responseMessage": "Approved or completed successfully",
    "responseCode": "S00",
    "sessionId": "10003323032219055598765432 1234"
}
```


OR

Plain Failed Response:


```
{
     "responseMessage": "Invalid Amount",
     "responseCode": "F09",
     "sessionId": "10003323032219055598765432 1234"
 }
```


Encrypted Sample Response:


```
{
    "response": "psF5lEr1LTmDFzGBd52gNhEOA62NXtlnf8edjnktqHox1/tqRRvbBIw7cftD+up7wIMO8so/5gzhvVDfoXWFhvbZXrCB/NUiyQBtvZOGgvy1J6nrWlTA/GykX82c4hJN
/ipZUoUDot5XlPDDQayIQ4+MARkdFdthfQz3XFdT/4jj5LmBdYrFlJt1v5c3Mz0IECIWL4TafjssHcjQNzCS0f4jQbvg8zZ/xZoieqcuPS+WU3g3aQ4FyFyqbitjy E+w7ijzIHtHuPcwuxK1d
7/LuAZ7hqmVIZSkNATuiDue3tSNpxjDS/FBYm0x0sxFuwpuIhHZBRmuoWWxJwDEb9BP8Q=="
}
```


3.1 NameEnquiry

API Url: https://${base_url}/pip/v1.0/direct/transfer/nameEnquiry

3.1.1 Description

The NameEnquiry API will be developed and hosted at PalmPay and called by source bank for the purpose of doing account name enquiry using the PalmPay's beneficiary account number. If the name enquiry API was successful, PalmPay will return response code as "00" .

3.1.2 Sample Payload

Method: POST

Header:

Authorization: To be advised by PalmPay to Bank (Subscription key)

Plain Sample Request:


```
{
    "accountNumber": "1234567890",
    "sessionId": "10003323032219055598765432 1234",
}
```


Encrypted Sample Request:


```
{
    "request": "j1HoZNpLMUxhJEBx51/4/0pZCGYmRbiJ+WIDvjpgkztzjrQh6GSqHYIuPaKeWpR/RVKtkzS2y01epwIkgFuxqr74zZkxvwwNeMGuaOAZP/LE4izJvwcKmwjF6QFR17GF7tK0xCMIfXtFI8kGgdi0w9RW9PY08fVKCjAMipmXrQ6fmQaQdefw5fc6FzmmUk4I8iCiLkWIh0INM8T4Mff+7VQUHUIgfhoaAOvL7jrcbhMDVm/5mQ8NvUFphTYwsKbMQuEJJ+7KCwkji4GI2fhBDc/1ukMVuFY7lwqLWN0RRP82loJZaAN8MQDKYwaAhwSbyIwLSsE9YCk0A3bCSOYb2Q=="
}
```


Plain Successful Response:


```
{
     "responseCode": "S00",
     "sessionId": "10003323032219055598765432 1234",
     "responseMessage": "Approved or completed successfully",
     "data": {
              "accountName": "jack",
              "accountNumber": "1234567890",
              "kycLevel": "1"
         }
 }
```


OR

Plain Failed Response:


```
 {
     "responseCode": "F07",
     "responseMessage": "Format error",
     "sessionId": "10003323032219055598765432 1234"
 }
```


Encrypted Sample Response:


```
{
    "response": "pCppc/1pNEccsrnpfxgfXGDZa+TH5FcZGN4Z3yOQU/6PPWUVa2HYbBlJzWGuVOWPB+AUXFhvPiYHerv8hk2u5d2ctoe4Dwg3q9LT3QFnQfHKHd40aUMcQRtZyOIogb3078ITAIXa8yKwQYnmsef1TQRNInGrxCIu0JODFFy1E9ObNeftbrhyOgCNPCoruFXy1/m4xGCPu9zhksKYGhYRmzSsn9Q5OD3KFW/lMO8gn4lfvVJFm+ii0YgQafcIADHbDZw3DjqkAzBrxV9cfdSOGSCaeo9yhsvRCgtYs9OcPiIY1oS5m+jsYLaxGVHbRybUiOq8WOG1V1lO184Dd/bafQ=="
}
```


4.1 FundsSettlement

API Url: https://${base_url}/pip/v1.0/direct/transfer/fundsSettlement

4.1.1 Description

The FundsSettlement API will be developed and hosted at PalmPay and called by source bank for the funds settlement .

If the transaction exceeds 72 hours, PalmPay will returned the status 0.

4.1.2 Sample Payload

Method: POST

Header:

Authorization: To be advised by PalmPay to Bank (Subscription key)

Sample Request:


```
{
    "sessionId": "100033230322190555987654321234",
}
```


Successful Response:


```
{
    "sessionId": "100033230322190555987654321234",
    "responseCode": "S00",
   "responseMessage": "Approved or completed successfully",
   "data": {
         "status": 1
     }
}
```


OR

Plain Failed Response:


```
{
    "responseCode": "07",
    "responseMessage": "Format error",
   "sessionId": "100033230322190555987654321234"
}
```


5. Filed Definition

S/N	Field	Description	Length/Type	Presence Indicator
1.	sessionId	Unique number that identifies transactions in the following format: Char 1 – 6: Senders bank's code Char 7 – 18: Date and time (in the format yymmddHHmmss – HH is 24 hour clock) Char 19 – 30: 12 – character unique number (either serial # or random number)	30	Mandatory
2.	sourceBankCode	Code for identifying source Institution	6	Mandatory
3.	accountNumber	Account Number of financial institution's customer.	Maximum of 32	Mandatory
4.	responseCode	Code showing the status of transaction	2	Mandatory
5.	nameEnquiryRef	Session ID of the name enquiry done prior to a fund transfer	30	Optional
6.	beneficiaryAccountName	Beneficiary Account Name of financial institution's customer	Maximum of 128	Mandatory

7.	beneficiaryAccountNumber	Beneficiary Account Number of financial institution's customer	Maximum of 32	Mandatory
8.	originatorAccountName	Originator Account Name of financial institution's customer	Maximum of 128	Mandatory
9.	originatorAccountNumber	Originator Account Number of financial institution's customer	Maximum of 32	Mandatory
10.	originatorBankVerificationNumber	Originator Bank Verification Number	Maximum of 32	Mandatory
11.	originatorKYCLevel	Originator's Know Your Customer Level	1	Optional
12.	transactionLocation	GPS location of channel of transaction	Longitude and latitude	Optional
13.	narration	Description of transaction	Maximum of 128	Optional
14.	paymentReference	Reference of Payment	Maximum of 64	Optional
15.	amount	Value of fund in naira	Decimal up to	Mandatory
16.	responseMessage	Response Description	Maximum of 64	Optional
17.	status	Settlement status, 0:not found,1: successful, 2: failed, 3: in process, 4: unknown	1	Mandatory

6. Response Codes

Codes	Descriptions	Status
S00	Approved or completed successfully	success
P01	Request processing in progress	pending
P02	Unable to locate record	pending
F01	Invalid Sender	failed
F02	Unknown Bank Code	failed
F03	Invalid Account	failed
F04	Invalid transaction	failed
F05	Invalid Amount	failed
F06	Invalid Session	failed
F07	Format error	failed
F08	Transaction not permitted to sender	failed
F09	Transfer limit Exceeded	failed
F10	Duplicate transaction	failed