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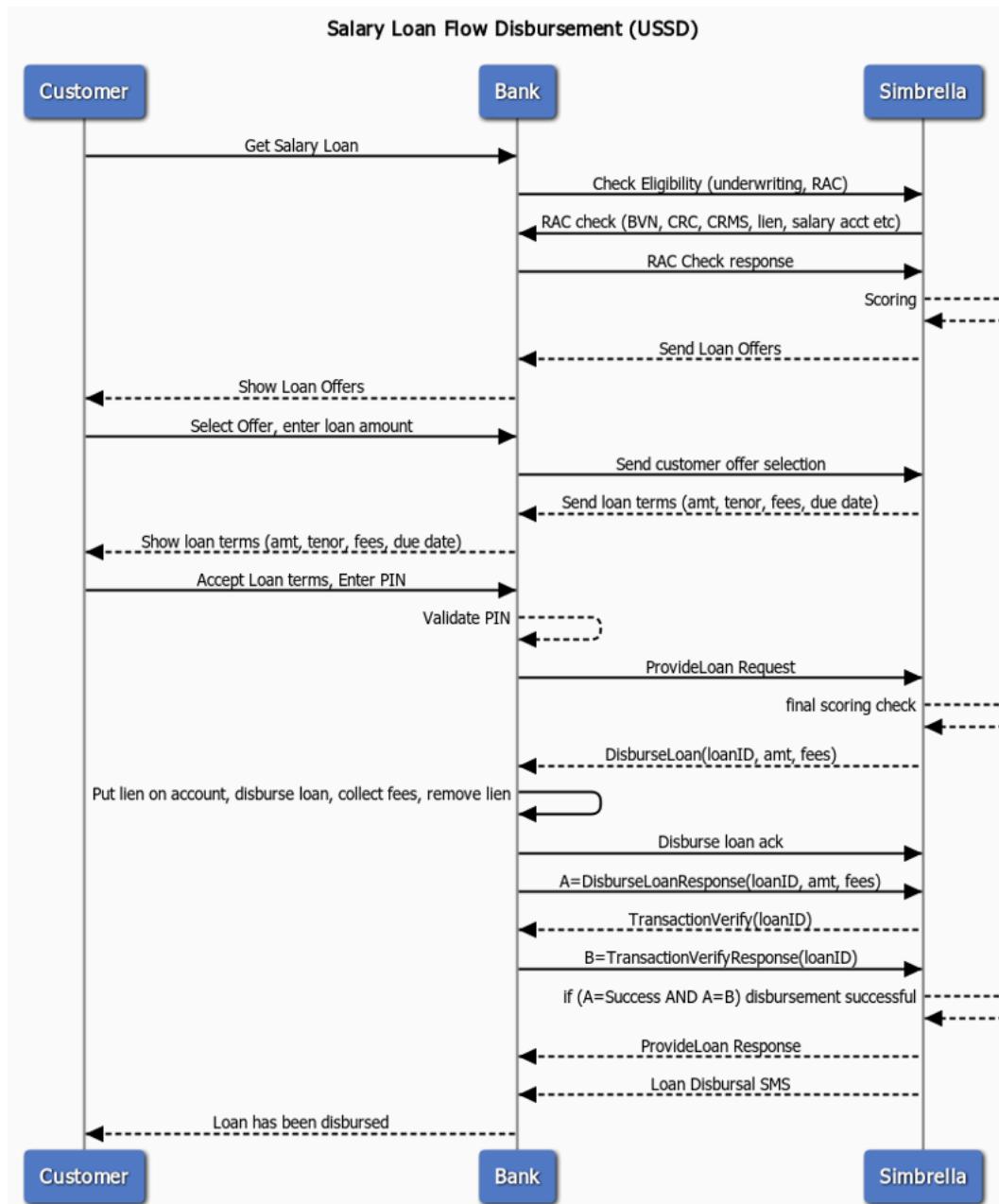
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## Introduction

This document is intended to describe API that is used for integration between Simbrella and FIRSTBANK systems for First Advance Service. API is designed based on Web Service. Each system should act as client and as a server to be able to send and receive web service requests and responses. All web service requests and responses are synchronous.

# 1. Flows

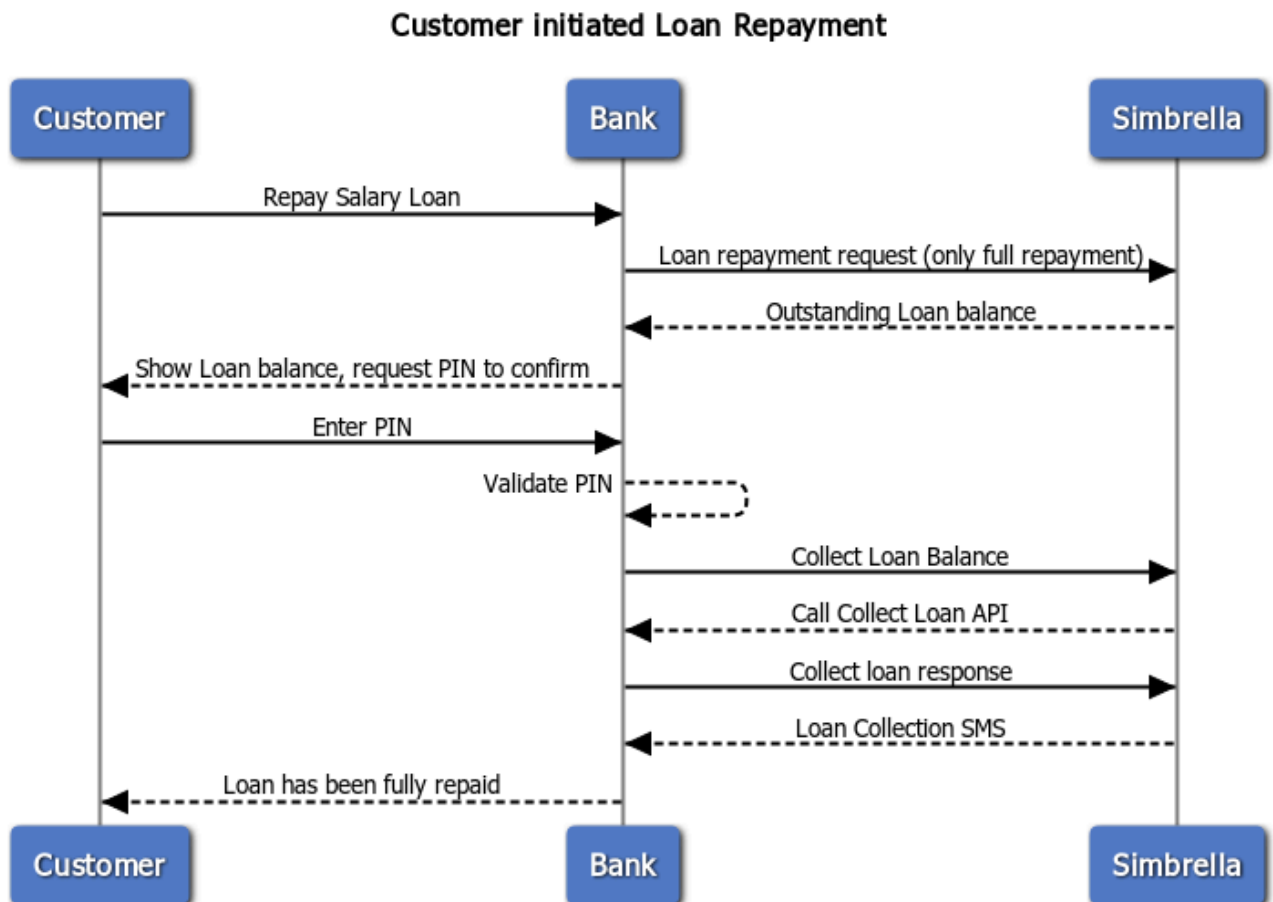
## 1.1 Loan disbursement flow



## 1.2 ASAP Loan collection flow

### 1.3 Due Date Loan collection flow

## 1.4 Repayment



## 2. FirstBank to Simbrella APIs

This chapter describes four main methods that should be used by FIRSTBANK when user requests available options via USSD channel.

### Authorization

Basic Authentication method is implemented. Each request should contain next header:

Header	Value
<b>Authorization</b>	"Basic " + Base64 encoded "username:password"

### Credentials

Parameter	Value
<b>Username</b>	Will be shared privately during integration process

<b>Password</b>	<i>Will be shared privately during integration process</i>
-----------------	--

## 2.1 EligibilityCheckRequest

<b>Direction</b>	FirstBank -> Simbrella
<b>Type</b>	SYNC
<b>Function name</b>	EligibilityCheckRequest
<b>Test Endpoint</b>	TBD
<b>Request Type</b>	POST

### Request Parameters:

Parameter	Description	Type	Mandatory
<b>\$type</b>	value is fixed to "EligibilityCheckRequest"	String	M
<b>transactionId</b>	Unique identifier of transaction in FIRSTBANK system	String	M
<b>"countryCode"</b>	Unique country code. Please refer to "Country Codes" table	String	M
<b>customerId</b>	Unique identifier of a customer	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>msisdn</b>	User's mobile number in an international format	String	O
<b>lienAmount</b>	Amount of lien placed on user's account	Decimal	M
<b>channel</b>	Request channel: "USSD" or "MobApp" or "Web"	String	M

### **Sample JSON Request:**

```
{
  "$type": "EligibilityCheckRequest",
  "transactionId": "Tr201712RK9232P115",
  "countryCode": "NGR",
  "customerId": "CN621868",
  "accountId": "ACN8263457",
  "msisdn": "3451342",
  "lienAmount": 4.0,
  "channel": "USSD"
}
```

## Eligibility Check Response

Parameter	Description	Type	Mandatory
<b>customerId</b>	Unique identifier of a customer	String	M
<b>transactionId</b>	Unique identifier of transaction in FIRSTBANK system	String	M
<b>msisdn</b>	User's mobile number in an international format	String	O
<b>eligibleOffers</b>	Offer	String	M
	ProductId	String	
	Minamount	Decimal	
	Maxamount	Decimal	
	Tenor	Integer	
<b>resultCode</b>	Result code of executed transaction, e.g. (00 - Success etc.) see <a href="#">result codes table</a>	String	M
<b>resultDescription</b>	Textual description of provided result code. In case if customer is not eligible (where resultCode is «05») this parameter contains end-user message that can be show directly to the customer.	String	M

## Sample JSON Response:

```
{
  "customerId": "CN621868",
  "transactionId": "Tr201712RK9232P115",
  "msisdn": "3451342",
  "eligibleOffers": {
    [
      {
        "minamount": 5000,
        "maxamount": 20000,
        "productId": 101,
        "offerid": 101,
        "Tenor": 30,
      },
    ],
  },
}
```



```

{
  {
    "minamount":20000,
    "maxamount":50000,
    "productID":102,
    "offerid":102,
    "Tenor":60,
  }
],
},
"resultCode":"00",
"resultDescription":"Successful"
}

```

## 2.2. SelectOffer

This method is used to send the offer the customer selected to Simbrella.

<b>Direction</b>	Bank -> Simbrella
<b>Type</b>	ASYNCR
<b>Function name</b>	SelectOfferRequest
<b>Production Endpoint</b>	<i>Will be provided by Simbrella</i>
<b>Test endpoint</b>	<a href="#">TBD</a>
<b>HTTP Method</b>	POST

### SelectOffer Request (from Bank to Simbrella)

Parameter	Description	Type	Mandator y
<b>requestId</b>	Unique identifier of request	String	M
<b>transactionId</b>	Unique ID of customer's USSD session. Must be consistent throughout whole USSD journey	String	M
<b>customerId</b>	Unique identifier of a customer	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>msisdn</b>	User's mobile number in an international format	String	M
<b>requestedAmount</b>	Amount of loan requested by user	Decimal	M
<b>productID</b>	Product ID	String	M

<b>channel</b>	Channel of incoming request: • USSD	String	M
----------------	--	--------	---

### Sample JSON Request:

```
{
  "requestId": "202111170001371256908",
  "transactionId": "1231231321232",
  "customerId": "1256907",
  "accountId": "5948306019",
  "msisdn": "123456789",
  "requestedAmount": 10000.0,
  "productid": "101",
  "channel": "USSD"
}
```

### SelectOffer Response:

When a suitable amount is selected by customer, Simbrella responds with loan offer details for the product type and amount input by customer

Parameter	Description	Type	Mandatory
<b>requestId</b>	Unique identifier of request	String	M
<b>transactionId</b>	Unique ID of customer's USSD session. Must be consistent throughout whole USSD journey	String	M
<b>customerId</b>	Unique identifier of a customer	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>offers.amount</b>	Amount of loan customer is eligible for	Decimal	M
<b>offers.upfrontPayment</b>	Amount to be deducted upfront	Decimal	M
<b>offers.interestRate</b>	% of interest rate	Decimal	M
<b>offers.interest</b>	Amount of Interest	Decimal	M
<b>offers.ManagementRate</b>	% of Management Fee	Decimal	M

<b>offers.ManagementFee</b>	Amount of Management Fee	Decimal	M
<b>offers.InsuranceRate</b>	% of Amount of Insurance	Decimal	M
<b>offers.Insurance</b>	Amount of Insurance	Decimal	M
<b>Offers.VATRate</b>	% of Amount of VAT	Decimal	M
<b>Offers.VAT</b>	Amount of VAT	Decimal	M
<b>offers.recommendedRepaymentDates</b>	Array of recommended payment dates for all installments in yyyy-mm-dd format	String[]	M
<b>offers.installmentAmount</b>	Amount to be paid each month (upfrontPayment not included)	Decimal	M
<b>offers.totalRepaymentAmount</b>	Total amount to be paid by customer. All installment amounts + upfront payment	Decimal	M
<b>resultCode</b>	Result code of executed transaction, e.g. (00 – Success etc.) see <a href="#">result codes table</a>	String	M
<b>resultDescription</b>	Description of provided result code	String	M

### Sample JSON Response:

```
{
  "outstandingDebtAmount": 0,
  {
    "requestId": "202111170001371256908",
    "transactionId": "1231231321232",
    "customerId": "1256907",
    "accountId": "5948306019",

    "offers": [
      {
        "offerId": "14451",
        "productId": "2030",
        "amount": 10000.0,
        "upfrontPayment": 1000.0,
        "interestRate": 3.0,
```

```
"ManagementRate": 1.0,  
"ManagementFee": 1.0,  
"InsuranceRate": 1.0,  
"InsuranceFee": 100.0,  
"VATRate": 7.5,  
"VATamount": 100.0,  
"recommendedRepaymentDates": ["2022-11-30"],  
"installmentAmount": 11000.0,  
"totalRepaymentAmount": 11000.0  
},  
{  
  "offerId": "16645",  
  "productId": "2060",  
  "amount": 10000.0,  
  "upfrontPayment": 0.0,  
  "interestRate": 3.0,  
  "ManagementRate": 1.0,  
  "ManagementFee": 1.0,  
  "InsuranceRate": 1.0,  
  "InsuranceFee": 100.0,  
  "VATRate": 7.5,  
  "VATamount": 100.0,  
  "recommendedRepaymentDates": ["2022-11-30", "2023-12-30"],  
  "installmentAmount": 5761.9,  
  "totalRepaymentAmount": 11523.8  
},  
{  
  "offerId": "122212",  
  "productId": "2090",  
  "amount": 10000.0,  
  "upfrontPayment": 0.0,  
  "interestRate": 3.0,  
  "ManagementRate": 1.0,  
  "ManagementFee": 1.0,  
  "InsuranceRate": 1.0,
```

```

    "InsuranceFee": 100.0,
    "VATRate": 7.5,
    "VATamount": 100.0,
    "interestRate": 10.0,
    "recommendedRepaymentDates": ["2022-11-30", "2022-12-30", "2023-01-29"],
    "installmentAmount": 4021.15,
    "totalRepaymentAmount": 12063.45
  },
  "resultCode": "00",
  "resultDescription": "Successful"
}

```

## 2.2 ProvideLoanRequest

<b>Direction</b>	FirstBank -> Simbrella
<b>Type</b>	SYNC
<b>Function name</b>	ProvideLoanRequest
<b>Test Endpoint</b>	TBD
<b>Request Type</b>	POST

### Request Parameters:

Parameter	Description	Type	Mandatory
<b>\$type</b>	value is fixed to "ProvideLoanRequest"	String	M
<b>transactionId</b>	Unique ID of customer's USSD session. Must be consistent throughout whole USSD journey	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>customerId</b>	Unique identifier of a customer	String	M
<b>msisdn</b>	User's mobile number in an international format	String	O
<b>productId</b>	Identifier of a product chosen by user	String	M
<b>requestedAmount</b>	Amount of loan that requested by user	Decimal	M
<b>collectionType</b>	Type of collection that user is preferred. 0 - as soon as salary inflow occurs; 1- as soon as any new inflow occurs, 1 - collection after XX days.	Int	M
<b>loanType</b>	Type of loan. 0 - simple; 1 - refinance.	Int	M

<b>channel</b>	Request channel: "USSD" or "MobileApp" or "Web"	String	M
----------------	---	--------	---

### Sample JSON Request:

```
{
  "$type": "ProvideLoanRequest",
  "requestId": "202111170001371256908",
  "transactionId": "Tr201712RK9232P115",
  "customerId": "CN621868",
  "accountId": "ACN8263457",
  "msisdn": "3451342",
  "productId": "101",
  "lienAmount": 400,
  "requestedAmount": 900,
  "collectionType": 1,
  "loanType": 0,
  "channel": "USSD"
}
```

### Provide Loan Response

Parameter	Description	Type	Mandatory
<b>requestId</b>	Unique identifier of request	String	M
<b>transactionId</b>	Unique ID of customer's USSD session. Must be consistent throughout whole USSD journey	String	M
<b>customerId</b>	Unique identifier of a customer	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>msisdn</b>	User's mobile number in an international format	String	O
<b>resultCode</b>	Result code of executed transaction, e.g. (00 - Success etc.) see <a href="#">result codes table</a>	String	M
<b>resultDescription</b>	Description of provided result code	String	M

### Sample JSON Response:

```
{
  "requestId": "202111170001371256908",
  "transactionId": "Tr201712RK9232P115",
  "customerId": "CN621868",
  "accountId": "ACN8263457",
  "msisdn": "3451342",
  "resultCode": "00",
  "resultDescription": "Successful"
}
```

## 2.3 LoanInformationRequest

<b>Direction</b>	FirstBank -> Simbrella
------------------	------------------------

<b>Type</b>	SYNC
<b>Function name</b>	LoanInformationRequest
<b>Test Endpoint</b>	TBD
<b>Request Type</b>	POST

### Request Parameters:

Parameter	Description	Type	Mandatory
<b>\$type</b>	value is fixed to "LoanInformationRequest"	String	M
<b>transactionId</b>	Unique identifier of transaction in FIRSTBANK system	String	M
<b>customerId</b>	Unique identifier of a customer	String	M
<b>msisdn</b>	User's mobile number in an international format	String	O
<b>channel</b>	Request channel: "USSD" or "MobileApp" or "Web"	String	M

### *Sample JSON Request:*

```
{
  "$type": "LoanInformationRequest",
  "transactionId": "Tr201712RK9232P115",
  "customerId": "CN621868",
  "msisdn": "3451342",
  "channel": "USSD"
}
```

### Loan Information Response

Parameter		Description	Type	Mandatory
customerId		Unique identifier of a user	String	M
Array of items	debtId	Unique identifier of a debt of a user	String	M
	loanDate	Date and time of provided loan	DateTime	M
	dueDate	Due date of provided loan	DateTime	M
	currentLoanAmount	Outstanding debt amount of the user	Decimal	M
	initialLoanAmount	Initial loan amount	Decimal	M
	defaultFee	Penalty fee amount	Decimal	M
	continiousFee	Interest fee charged continuously. First occurs when payment is delayed. Continuous	Decimal	M

		fee is equal to Service Fee divided into 30 days. Service fee is equal to 5%, Continuous Interest is $5\%/30 = 0,0016\%$ daily.		
	<b>productId</b>	Identifier of a provided product to a user	String	M
	<b>totalDebtAmount</b>	Sum amount of all existing debts of a user	Decimal	M
	<b>resultCode</b>	Result code of executed transaction, e.g. (00 – Success etc.) see <a href="#">result codes table</a>	String	M
	<b>resultDescription</b>	Description of provided result code	String	M

**Note:** “loans” structure is array of loan entities. If customer doesn’t have a loan, “loans” array will be empty and length of this array will be zero. However, if customer has a loan, the “currentLoanAmount” parameter will be an outstanding loan amount that customer is currently owing by customer and “initialLoanAmount” contains an initial loan amount provided to a customer.

#### Sample JSON Response:

```
{
  "customerId": "CN621868",
  "loans": [
    {
      "debtId": "123456789",
      "loanDate": "2019-10-18 14:26:21.063",
      "dueDate": "2019-11-20 14:26:21.063",
      "currentLoanAmount": 8500.0,
      "initialLoanAmount": 10000.0,
      "defaultFee": 0.0,
      "continiousFee": 0.0,
      "productId": "101"
    }
  ],
  "resultCode": "00",
  "resultDescription": "Successful"
}
```

## 2.4 RepaymentRequest

<b>Direction</b>	FirstBank -> Simbrella
<b>Type</b>	SYNC
<b>Function name</b>	RepaymentRequest
<b>Test Endpoint</b>	
<b>Request Type</b>	POST

#### Request Parameters:

Parameter	Description	Type	Mandatory
-----------	-------------	------	-----------



<b>\$type</b>	value is fixed to "RepaymentRequest"	String	M
<b>transactionId</b>	Unique identifier of transaction in FIRSTBANK system	String	M
<b>customerId</b>	Unique identifier of a customer	String	M
<b>msisdn</b>	User's mobile number in an international format	String	O
<b>debtId</b>	Debt identifier provided in "Current Loans" response	String	M
<b>productId</b>	Identifier of a product that user is repaying for	String	M
<b>channel</b>	Request channel: "USSD" or "APP"	String	M

### Sample JSON Request:

```
{
  "$type": "RepaymentRequest",
  "msisdn": "3451342",
  "debtId": "273194670",
  "productId": "101",
  "transactionId": "20171209232115",
  "customerId": "CN621868",
  "channel": "USSD"
}
```

### Repayment Response

Parameter	Description	Type	Mandatory
<b>customerId</b>	Unique identifier of a user	String	M
<b>productId</b>	Identifier of a product that user is paid for	String	M
<b>debtId</b>	Unique identifier of an existing debt of a user	String	M
<b>resultCode</b>	Result code of executed transaction, e.g. (00 - Success etc.) see <a href="#">result codes table</a>	String	M
<b>resultDescription</b>	Description of provided result code	String	M

### Sample JSON Response:

```
{
  "customerId": "CN621868",
  "productId": "101",
  "debtId": "273194670",
  "resultCode": "00",
  "resultDescription": "Successful"
}
```

## 2.5 CustomerConsentRequest

<b>Direction</b>	FirstBank -> Simbrella
<b>Type</b>	SYNC
<b>Function name</b>	CustomerConsentRequest
<b>Test Endpoint</b>	
<b>Request Type</b>	POST

### Request Parameters:

Parameter	Description	Type	Mandatory
<b>\$type</b>	value is fixed to "CustomerConsentRequest"	String	M
<b>transactionId</b>	Unique identifier of transaction in FIRSTBANK system	String	M
<b>customerId</b>	Unique identifier of a customer	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>requestTime</b>	Date and time of consent request	DateTime	M
<b>consentType</b>	"Enable" or "Revoke"	String	M
<b>channel</b>	Request channel: "USSD" or "APP"	String	M

### **Sample JSON Request:**

```
{
  "$type": "CustomerConsentRequest",
  "transactionId": "20171209232177",
  "customerId": "CN621868",
  "accountId": "ACN8263457",
  "requestTime": "2019-10-18 14:26:21.063",
  "consentType": "Revoke",
  "channel": "USSD"
}
```

### CustomerConsent Response

Parameter	Description	Type	Mandatory
<b>resultCode</b>	Result code of executed transaction, e.g. (00 - Success etc.) see <a href="#">result codes table</a>	String	M
<b>resultDescription</b>	Description of provided result code	String	M

### **Sample JSON Response:**

```
{
  "resultCode": "00",
```

```
"resultDescription":"Request is received"  
}
```

## 2.6 NotificationCallback

This new feature will be used for informing Simbrella about status of the transactions that FBN have processed. Retry mechanism should be implemented by FirstBank in case of connection issues, sending notification should be repeated for 5 minutes in case of there is connection issues, after which Simbrella will try to check the status of transaction with [New Transaction Check](#) endpoint. FBN should provide a list of Response Codes with corresponding Response Descriptions for notifications.

**Please note that AmountCollected field will equal to 0 when transaction type is Disbursement.**

**AmountProvided field will equal to 0 when transaction type is Collection or PenalCharge.**

<b>Direction</b>	FirstBank -> Simbrella
<b>Type</b>	SYNC
<b>Function name</b>	NotificationCallback
<b>Production Endpoint</b>	TBD
<b>Test Endpoint</b>	TBD
<b>Request Type</b>	POST

### Request Parameters:

Parameter	Description	Type	Mandatory
<b>FbnTransactionId</b>	Unique id of the transaction received from FBN in Eligibility or Provision requests	String	M
<b>transactionId</b>	Unique identifier of transaction in FIRSTBANK system	String	M
<b>customerId</b>	Unique identifier of a customer	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>DebtId</b>	Unique identifier of providing loan in Simbrella system	String	M
<b>TransactionType</b>	Type of transaction initiated by Simbrella <ul style="list-style-type: none"> <li>Disbursement</li> <li>Collection</li> <li>PenalCharge</li> </ul>	String	M
<b>AmountProvided</b>	Amount provided to customer within Disbursement operation.	Decimal	M
<b>AmountCollected</b>	Amount collected during execution of operation	Decimal	M

	<ul style="list-style-type: none"> <li>In case of <b>Disbursement</b> this value <b>will be equal to 0</b></li> <li>In case of <b>Collection</b> this value will represent amount successfully collected from customers account.</li> <li>In case of <b>Penal charge</b> this value will represent penalty amount collected from customer's account.</li> </ul> <p>Amount should always be equal to zero if operation is unsuccessful and responseCode and responseDescription should indicate that operation was unsuccessful.</p>		
<b>ResponseCode</b>	Result code of the notification, e.g. (00 - Success etc.) see <a href="#">result codes table</a>	String	M
<b>ResponseDescription</b>	Result description of the notification, detailing status of the transaction.	String	M

*Disbursement notification successful example:*

```
{
  "fbnTransactionId": "123456789",
  "transactionId": "123456789",
  "customerId": "CN621868",
  "accountId": "ACN8263457",
  "debtId": "987654321",
  "transactionType": "Disbursement",
  "amountProvided": 1000.00,
  "amountCollected": 0.00,
  "responseCode": "00",
  "responseDescription": "Successful",
}
```

*Disbursement notification unsuccessful example:*

```
{
  "fbnTransactionId": "123456789",
  "transactionId": "123456789",
  "customerId": "CN621868",
  "accountId": "ACN8263457",
```

```
"debtId": "987654321",
"transactionType": "Disbursement",
"amountProvided": 0.00,
"amountCollected": 0.00,
"responseCode": "01",
"responseDescription": "Unsuccessful",
}
```

*Collection notification successful example:*

```
{
  "fbnTransactionId": "123454321",
  "transactionId": "123456789",
  "customerId": "CN621868",
  "accountId": "ACN8263457",
  "debtId": "123454321",
  "transactionType": "CollectLoan",
  "amountProvided": 0.00,
  "amountCollected": 1000.00,
  "responseCode": "00",
  "responseDescription": "Successful",
}
```

*Collection notification unsuccessful example:*

```
{
  "fbnTransactionId": "123454321",
  "transactionId": "123456789",
  "customerId": "CN621868",
  "accountId": "ACN8263457",
  "debtId": "123454321",
  "transactionType": "CollectLoan",
  "amountProvided": 0.00,
  "amountCollected": 0.00,
  "responseCode": "01",
  "responseDescription": "Unsuccessful",
}
```

#### Penal Charge notification successful example:

```
{
  "fbnTransactionId": "123455432",
  "transactionId": "123456789",
  "customerId": "CN621868",
  "accountId": "ACN8263457",
  "debtId": "234554321",
  "transactionType": "PenalCharge",
  "amountProvided": 0.00,
  "amountCollected": 1000.00,
  "responseCode": "00",
  "responseDescription": "Successful",
}
```

#### Penal Charge notification unsuccessful example:

```
{
  "fbnTransactionId": "123455432",
  "transactionId": "123456789",
  "customerId": "CN621868",
  "accountId": "ACN8263457",
  "debtId": "234554321",
  "transactionType": "PenalCharge",
  "amountProvided": 0.00,
  "amountCollected": 0.00,
  "responseCode": "01",
  "responseDescription": "Unsuccessful",
}
```

#### NotificationCallback Response

Parameter	Description	Type	Mandatory
<b>resultCode</b>	Result code of successful request. see <a href="#">Simbrella Result Codes</a>	String[2]	M
<b>resultDescription</b>	Description of provided result code	String[100]	M

#### Sample JSON Response:

```
{
  "resultCode": "00",
  "resultDescription": "Successful"
}
```

### 3. Simbrella to FirstBank API

This chapter describes interaction between Simbrella system and billing channel of FIRSTBANK. FIRSTBANK provides several functions to interact with a user's account to provide loan, collect funds and retrieve balance information.

Authorization:

Each request should contain following parameters in the request header:

Parameter	Value
<b>appID</b>	https://bitwarden.simbrella.pro/#/vault?folderId=251b6f2c-d532-4ffa-a655-9e643511a2b3&itemId=0440c6b0-97c9-4e9e-9c38-c26d241eb01b
<b>apiKey</b>	https://bitwarden.simbrella.pro/#/vault?folderId=251b6f2c-d532-4ffa-a655-9e643511a2b3&itemId=0440c6b0-97c9-4e9e-9c38-c26d241eb01b

#### 3.1 RAC Check

This request is used to check if a customer passes the Risk Acceptance Criteria defined by the bank.

<b>Direction</b>	Simbrella -> FirstBank
<b>Type</b>	SYNC
<b>Function name</b>	RAC Check
<b>Test Endpoint</b>	TBD
<b>Production Endpoint</b>	
<b>Request Type</b>	POST

#### Request Parameters:

Parameter	Description	Type	Mandatory
<b>transactionId</b>	Unique identifier of transaction in Simbrella system	String	M



<b>fbnTransactionId</b>	Unique id of the transaction received from FBN in Eligibility or Provision requests	String	M
<b>customerId</b>	Unique identifier of a user	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>RAC_Array</b>	Array of RAC items to check (BVN, CRC, CRMS, Salary account, lien, whitelist, lien, account status, no bounced check and existing loan)	Decimal	M
	Salary account		
	BVN		
	BVN attached to account		
	CRC		
	CRMS		
	Account status		
	Lien		
	No bounced check		
	Existing loan??		
	Whitelist		
	No Past Due Salary Loan		
	No Past Due Other Loans		

### Sample JSON Request:

```
{
  "transactionId": "T001",
  "fbnTransactionId": "Tr201712RK9232P115",
  "customerId": "CN621868",
  "accountId": "2017821799",
  "RAC_Array": XXX,
}
```

### RAC Check Response

Parameter	Description	Type	Mandatory
<b>RACResponse</b>	Salary account	Has Salary account or Not	Binary
	BVN	BVN Ok	Binary

	BVN attached to account	BVN attached to account	Binary	M
	CRC	No Delinquent loan	Binary	M
	CRMS	No Delinquent loan	Binary	M
	Account status	Has “Regular” account status	Binary	M
	Lien	No Lien on account	Binary	M
	No bounced check	No Bounced (Ever?)	Binary	M
	Whitelist	False if blacklisted	Binary	M
	No Past Due Salary Loan	No Past Due Salary Loan	Binary	M
	No Past Due Other Loans	No Past Due Other Loans	Binary	M
resultCode		Result code of executed transaction, e.g. (00 – Success etc.) see <a href="#">result codes table</a>	String	M
resultDescription		Description of provided result code	String	M

### Sample JSON Response:

```
{
  "resultCode": "00",
  "RACResponse": {
    "Salary account": "1",
    "BVN": "1",
    "BVNAttachedtoAccount": "1",
    "CRMS": "1",
    "CRC": "1",
    "AccountStatus": "1",
    "Lien": "1",
    "NoBouncedCheck": "1",
    "Whitelist": "1",
    "NoPastDueSalaryLoan": "1",
    "NoPastDueOtherLoan": "1",
    "resultDescription": "RAC Check Successful"
  }
}
```

## 3.2 Disbursement

This request should be executed as an atomic operation. Providing a loan and collecting the upfront fees operation should be executed within the same transaction. If one of the operations is failed, the whole transaction should be rolled back. **Results of requests sent to this endpoint will be received from [NotificationCallback](#) endpoint.**

<b>Direction</b>	Simbrella -> FirstBank
<b>Type</b>	SYNC
<b>Function name</b>	disburseLoanRequest
<b>Test Endpoint</b>	TBD
<b>Production Endpoint</b>	TBD
<b>Request Type</b>	POST

### Request Parameters:

Parameter	Description	Type	Mandatory
<b>requestId</b>	Unique identifier of request	String	M
<b>debtId</b>	Unique identifier of a loan in Simbrella system that is going to be collected (it correlates with provision request)	String	M
<b>transactionId</b>	Unique ID of customer's USSD session. Must be consistent throughout whole USSD journey	String	M
<b>customerId</b>	Unique identifier of a user	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>productId</b>	Identifier of a product to be provided to a user	String	M
<b>provideAmount</b>	Amount of loan (including service fee) to be provided on a specific account of a user	Decimal	M
<b>collectAmountInterest</b>	Interest Amount to be collected immediately after loan is provided (Only for 30 days)	Decimal	0
<b>collectAmountMgtFee</b>	Management Fee Amount to be collected immediately after loan is provided	Decimal	M
<b>collectAmountInsurance</b>	Insurance Amount to be collected immediately after loan is provided	Decimal	M
<b>collectAmountVAT</b>	VAT Amount to be collected immediately after loan is provided	Decimal	M
<b>countryId</b>	Set to static value "01"	String	M

<b>comment</b>	Any additional comment for provided loan operation	String	0
----------------	--	--------	---

### Sample JSON Request:

```
{
  "transactionId": "T001",
  "TransactionId": "Tr201712RK9232P115",
  "debtId": "273194670",
  "customerId": "CN621868",
  "accountId": "2017821799",
  "productId": "101",
  "provideAmount": 100,000.0,
  "collectAmountInterest": 5,000,
  "collectAmountMgtFee": 1,000,
  "collectAmountInsurance": 1,000,
  "collectAmountVAT": 75,
  "countryId": "01",
  "comment": "Testing LoanRequest"
}
```

### Loan Response

Parameter	Description	Type	Mandatory
<b>requestId</b>	Unique identifier of request	String	M
<b>debtId</b>	Unique identifier of a loan in Simbrella system that is going to be collected (it correlates with provision request)	String	M
<b>transactionId</b>	Unique ID of customer's USSD session. Must be consistent throughout whole USSD journey	String	M
<b>customerId</b>	Unique identifier of a user	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>productId</b>	Identifier of a product to be provided to a user	String	M
<b>provideAmount</b>	Amount of loan (including service fee) to be provided on a specific account of a user	Decimal	M
<b>collectAmountInterest</b>	Interest Amount to be collected immediately after loan is provided (Only for 30 days)	Decimal	0
<b>collectAmountMgtFee</b>	Management Fee Amount to be collected immediately after loan is provided	Decimal	M
<b>collectAmountInsurance</b>	Insurance Amount to be collected immediately after loan is provided	Decimal	M

<b>collectAmountVAT</b>	VAT Amount to be collected immediately after loan is provided	Decimal	M
<b>resultCode</b>	Result code of executed transaction, e.g. (00 - Success etc.) see <a href="#">result codes table</a>	String	M
<b>resultDescription</b>	Description of provided result code	String	M

### Sample JSON Response:

```
{
  "transactionId": "T001",
  "TransactionId": "Tr201712RK9232P115",
  "debtId": "273194670",
  "customerId": "CN621868",
  "accountId": "2017821799",
  "productId": "101",
  "provideAmount": 100,000.0,
  "collectAmountInterest": 5,000,
  "collectAmountMgtFee": 1,000,
  "collectAmountInsurance": 1,000,
  "collectAmountVAT": 75,
  "countryId": "01", "resultCode": "00",
  "resultDescription": "Loan Request Completed Successfully!"
}
```

## 3.2 CollectLoanRequest

This request is to collect money from user accounts. When request is received, FIRSTBANK should check all user accounts and collect as much as possible money to cover existing loan either partially or fully. In response, FIRSTBANK should return total amount that is actually collected from user accounts. First FBN collects body amount, then penal charge. If requested amount is not collected or collected partially FBN places a lien on user account. FBN places lien for body amount and penal charge separately.

<b>Direction</b>	Simbrella -> FirstBank
<b>Type</b>	SYNC
<b>Function name</b>	CollectLoanRequest
<b>Test Endpoint</b>	TBD
<b>Production Endpoint</b>	TBD
<b>Request Type</b>	POST

### Request Parameters:

Parameter	Description	Type	Mandatory
<b>transactionId</b>	Unique identifier of transaction in Simbrella system	String	M
<b>fbnTransactionId</b>	Unique id of the transaction received from FBN in Eligibility or Provision requests	String	M
<b>debtId</b>	Unique identifier of a loan in Simbrella system that is going to be collected (it correlates with provision request)	String	M
<b>customerId</b>	Unique identifier of a user	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>productId</b>	Identifier of a product for which collection to be made	String	M
<b>collectAmount</b>	Amount to be collected from user's account (penalCharge is not included)	Decimal	M
<b>penalCharge</b>	Amount of penalty to be collected from user's account. If there is no penalty, amount is "0".	Decimal	0
<b>collectionMethod</b>	It will take the following values: 1 - on deposit of salary. the collection was triggered after a salary inflow to account; 2 - on due date. the collection was triggered on due date; 3 - initiated by user. the debtor initiated the collection from the request channel (USSD, Web or App).	Int	M
<b>lienAmount</b>	Aggregated (summed up) lien amount	Decimal	M
<b>countryId</b>	Set to static value "01"	String	M
<b>comment</b>	Any additional comment for provided loan operation	String	0

### Sample JSON Request:

```
{
  "transactionId": "T002",
  "debtId": "273194670",
  "customerId": "CN621868",
  "accountId": "2017821799",
  "productId": "101",
  "collectAmount": 80,000.00,
  "penalCharge": 0,
  "collectionMethod": 1,
  "lienAmount": 80,000.00,
  "countryId": "01",

```

```

"comment": "Testing CollectionLoanRequest"
}

```

### Collect Loan Response

Parameter	Description	Type	Mandatory
transactionId	Unique identifier of transaction in Simbrella system	String	M
debtId	Unique identifier of a loan in Simbrella system that is going to be collected (it correlates with provision request)	String	M
customerId	Unique identifier of a user	String	M
accountId	Specific identifier of a user's account	String	M
productId	Identifier of a product for which collection to be made	String	M
collectAmount	Amount to be collected from user's account (penalCharge is not included)	Decimal	M
penalCharge	Amount of penalty to be collected from user's account. If there is no penalty, amount is "0".	Decimal	O
lienAmount	Aggregated (summed up) lien amount	Decimal	M
resultCode	Result code of executed transaction, e.g. (00 - Success etc.) see <a href="#">result codes table</a>	String	M
resultDescription	Description of provided result code	String	M

### Sample JSON Response:

```

{
  "transactionId": "T002",
  "debtId": "273194670",
  "customerId": "CN621868",
  "accountId": "2017821799",
  "productId": "101",
  "collectAmount": 60,000.00,
  "penalCharge": 0,
  "lienAmount": 20,000,
  "countryId": "01",
  "comment": "Testing CollectionLoanRequest",
  "resultCode": "00",
  "resultDescription": "Loan Collection Successful"
}

```

### 3.3 TransactionVerify

This request is to double check the response received from DisburseLoan and CollectLoan Synchronous APIs. This request is required to check transaction result on FIRSTBANK.

<b>Direction</b>	Simbrella -> FirstBank
<b>Type</b>	SYNC
<b>Function name</b>	TransactionCheckRequest
<b>Test Endpoint</b>	
<b>Production Endpoint</b>	
<b>Request Type</b>	POST

#### Request Parameters:

Parameter	Description	Type	Mandatory
<b>counter</b>	Unique counter for number of attempts of the API call. Original attempt is 1.	String	M
<b>TransactionId</b>	Id of the transaction we are checking	String	M
<b>requestId</b>	Id of this transaction query	String	M
<b>customerId</b>	Unique identifier of a user	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>countryId</b>	Set to static value "01"	String	M
<b>transactionType</b>	To check state of loan disbursement transaction, value must be "Disbursement", to check state of loan collection transaction, value must be "Collection", to check state of penalty charge transaction, value must be "Penalty"	String	M

#### **Sample JSON Request:**

```
{
  "counter": "2",
  "TransactionId": "T002",
  "RequestId": "R02802",
  "customerId": "CN621868",
  "accountId": "2017821799",
}
```



```

"countryId": "01",
"transactionType": "Disbursement"
}

```

### Transaction Check Response

Parameter	Description	Type	Mandatory
\$type	value is fixed to "TransactionCheckResponse"	String	M
nativeId	Unique identifier of transaction in FIRSTBANK system	String	M
customerId	Unique identifier of a user	String	M
accountId	Specific identifier of a user's account	String	M
transactionType			
providedAmount	Amount provided to a user within loan provision operation	Decimal	M
collectedAmount	Amount collected from user's account within collection operation	Decimal	M
resultCode	Result code of executed transaction, e.g. (00 - Success etc.) see <a href="#">result codes table</a>	String	M
resultDescription	Description of provided result code	String	M

### Sample JSON Response:

```

{
  "$type": "TransactionCheckResponse",
  "nativeId": "FBN20191031104405CN621868",
  "customerId": "CN621868",
  "accountId": "2017821799",
  "providedAmount": 0.0,
  "collectedAmount": 7.50,
  "resultCode": "00",
  "resultDescription": "Collect Status retrieved successfully."
}

```

## 3.4 PenalChargeRequest

This request is used to charge customer for penalty as per existing debt. Results of requests sent to this endpoint will be received from [NotificationCallback](#) endpoint.

Direction	Simbrella -> FirstBank
Type	ASYNCR
Function name	PenalChargeRequest
Test Endpoint	TBD

<b>Production Endpoint</b>	TBD
<b>Request Type</b>	POST

#### **Request Parameters:**

Parameter	Description	Type	Mandatory
<b>transactionId</b>	Unique identifier of transaction in Simbrella system	String	M
<b>fbnTransactionId</b>	Unique id of the transaction received from FBN in Eligibility or Provision requests	String	M
<b>debtId</b>	Unique identifier of providing loan in Simbrella system	String	M
<b>customerId</b>	Unique identifier of a user	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>penalCharge</b>	Penalty amount that needs to be collected from user's account	Decimal	M
<b>lienAmount</b>	Aggregated (summed up) lien amount	Decimal	M
<b>countryId</b>	Set to static value "01"	String	M
<b>comment</b>	Any additional comment for provided loan operation	String	O

#### ***Sample JSON Request:***

```
{
  "transactionId": "T004",
  "fbnTransactionId": "Tr201712RK9232P115",
  "debtId": "273194670",
  "customerId": "CN621868",
  "accountId": "2017821799",
  "penalCharge": 1.2,
  "lienAmount": 101.2,
  "countryId": "01",
  "comment": "Testing PenalChargeRequest"
}
```

#### **PenalCharge Response**

Parameter	Description	Type	Mandatory
<b>resultCode</b>	Result code of executed transaction, e.g. (00 - Success etc.) see <a href="#">result codes table</a>	String	M
<b>resultDescription</b>	Description of provided result code	String	M

#### ***Sample JSON Response:***

```
{
  "resultCode": "00",
  "resultDescription": "Penal charge debited successfully"
}
```

### 3.5 RevokeEnableConsentRequest

<b>Direction</b>	Simbrella -> FirstBank
<b>Type</b>	SYNC
<b>Function name</b>	RevokeEnableConsentRequest
<b>Test Endpoint</b>	https://172.16.248.237/NanoLending/api/RevokeEnableConsentRequest
<b>Production Endpoint</b>	https://10.2.101.26:4433/api/RevokeEnableConsentRequest
<b>Request Type</b>	POST

#### Request Parameters:

Parameter	Description	Type	Mandatory
<b>transactionId</b>	Unique identifier of transaction in Simbrella system	String	M
<b>fbnTransactionId</b>	Unique id of the transaction received from FBN in CustomerConsentRequest	String	M
<b>customerId</b>	Unique identifier of a user	String	M
<b>accountId</b>	Specific identifier of a user's account	String	M
<b>processTime</b>	Date and time when consent request was processed	DateTime	M
<b>consentType</b>	"Enable" or "Revoke"	String	M
<b>countryId</b>	Set to static value "01"	String	M
<b>comment</b>	Any additional comment for consent operation	String	0

#### **Sample JSON Request:**

```
{
  "transactionId": "T0014",
  "fbnTransactionId": "20171209232177",
  "customerId": "CN621868",
  "accountId": "2017821799",
  "processTime": "2019-10-18 14:26:21.063",
}
```

```

"consentType": "Revoke"
"countryId": "01",
"comment": "Testing RevokeEnableConsentRequest"
}

```

### Revoke/Enable Consent Response

Parameter	Description	Type	Mandatory
\$type	value is fixed to "RevokeEnableConsentResponse"	String	M
customerId	Unique identifier of a user	String	M
accountId	Specific identifier of a user's account	String	M
resultCode	Result code of executed transaction, e.g. (00 - Success etc.) see <a href="#">result codes table</a>	String	M
resultDescription	Description of provided result code	String	M

#### Sample JSON Response:

```

{
  "$type": "RevokeEnableConsentResponse",
  "customerId": "CN621868",
  "accountId": "2017821799",
  "resultCode": "00",
  "resultDescription": "Success"
}

```

## 3.6 Token Validation

This method is used while users from FBN access Customer Care Portal. User will enter soft/hard token code. This will be captured and sent to below endpoint for validation.

Direction	Simbrella -> FirstBank
Type	SYNC
Function name	ValidateToken
Test Endpoint	https://172.16.248.237/NanoLending/api/v1/token/validate-hard-token
Production Endpoint	
Request Type	POST

#### Request Parameters:

Parameter	Description	Type	Mandatory
-----------	-------------	------	-----------

<b>RequestId</b>	Unique Identifier in Simbrella system	String	M
<b>UserId</b>	Unique identifier of a user	String	M
<b>CountryId</b>	Set to static value "01"	String	M
<b>TokenCode</b>	Token code to be validated	String	M

#### Sample JSON request:

```
{
  "UserId": "TMP0840",
  "TokenCode": "32365214",
  "RequestId": "SMB1234567",
  "CountryId": "01"
}
```

#### Response Parameters:

Parameter	Description	Type	Mandatory
<b>Authenticated</b>	Boolean value describing result of validation	String	M
<b>AuthenticatedMessage</b>	Message describing authentication	String	M
<b>ResponseCode</b>	Result code of response	String	M
<b>ResponseMessage</b>	Response description	String	M
<b>RequestId</b>	Unique id that was sent in request	String	M

#### Sample JSON response:

```
{
  "Authenticated": true,
  "AuthenticatedMessage": "The user Oluwale Olusoga has successfully authenticated!",
  "ResponseCode": "00",
  "ResponseMessage": "Successful",
  "RequestId": "SMB1234567"
}
```

## 3.7 Lien Check

This method is used to get applied lien amount to the specific account

<b>Direction</b>	Simbrella -> FirstBank
<b>Type</b>	SYNC
<b>Function name</b>	Lien Check
<b>Test Endpoint</b>	<a href="#">TBD</a>
<b>Production Endpoint</b>	TBD

<b>Request Type</b>	POST
---------------------	------

#### **Request Parameters:**

Parameter	Description	Type	Mandatory
<b>transactionId</b>	Unique Identifier in Simbrella system	String	M
<b>customerId</b>	Unique identifier of customer	String	M
<b>accountId</b>	Unique identifier of account	String	M
<b>CountryId</b>	Set to static value "01"	String	M

#### ***Sample JSON request:***

```
{
  "transactionId":"SMB1234567",
  "customerId":"123456",
  "accountId":"E9F77222920BAAB1C5ACF2253C6D6113",
  "countryId":"01"
}
```

#### **Response Parameters:**

Parameter	Description	Type	Mandatory
<b>ResponseCode</b>	Result code of response	String	M
<b>ResponseMessage</b>	Response description	String	M
<b>lienAmount</b>	Lien amount applied to the account	Decimal	M

#### ***Sample JSON response:***

```
{
  "lienAmount":20000.0,
  "resultCode":"00",
  "resultDescription":"Successful"
}
```

### 3.8 NewTransactionCheck

This new Transaction Check will be utilized for checking status of transactions in new Asynchronous requests. Request will be sent by Simbrella to check the status of Transaction on FirstBank side if Simbrella doesn't receive [callback notification](#) 5 minutes after initial request. **New list of resultCode with corresponding resultDescriptions must be provided by FirstBank to notify Simbrella in which cases Simbrella should retry sending the request.**

<b>Direction</b>	Simbrella -> FirstBank
<b>Type</b>	SYNC
<b>Function name</b>	NewTransactionCheckRequest
<b>Test Endpoint</b>	<a href="#">TBD</a>
<b>Production Endpoint</b>	<i>Will be provided by FirstBank</i>
<b>Request Type</b>	POST

#### Request Parameters:

Parameter	Description	Type	Mandatory
<b>transactionId</b>	Unique identifier of request in Simbrella system	String	M
<b>debtId</b>	Unique identifier of provided loan in Simbrella system	String	M
<b>transactionType</b>	Type of Transaction Simbrella is sending Transaction Check for. <ul style="list-style-type: none"> <li>Disbursement</li> <li>Collection</li> <li>PenalCharge</li> </ul>	String	M
<b>fbnTransactionId</b>	Unique id of the transaction received from FBN in Eligibility or Provision requests	String	M
<b>origTransactionId</b>	TransactionId sent by Simbrella within initial request to Firstbank API	String	M
<b>customerId</b>	Unique identifier of a user	String	M

#### **Sample JSON Request for Disbursement Transaction Check:**

```
{
  "transactionId": "173021",
  "debtId": "173021",
  "transactionType": "Disbursement",

```

```
"fbnTransactionId":"FBN2411011411413A74960",
"origTransactionId":"2411011411413A74960",
"customerId":"CN621868"
}
```

#### Sample JSON Request Collection Transaction Check:

```
{
  "transactionId":"173022",
  "debtId":"173022",
  "transactionType":"Collection",
  "fbnTransactionId":"FBN2411011411413A74961",
  "origTransactionId":"2411011411413A74961",
  "customerId":"CN621869"
}
```

#### Sample JSON Request Penal Charge Transaction Check:

```
{
  "transactionId":"173023",
  "debtId":"173023",
  "transactionType":"PenalCharge",
  "fbnTransactionId":"FBN2411011411413A74962",
  "origTransactionId":"2411011411413A74962",
  "customerId":"CN621860"
}
```

### Transaction Check Response

Parameter	Description	Type	Mandatory
<b>transactionId</b>	Unique identifier of request in Simbrella system	String	M
<b>data</b>	Object containing details of transaction Simbrella querying	Object	M
<b>data.transactionId</b>	Unique identifier of transaction in Simbrella system that was sent for transaction check	String	M
<b>data.providedAmount</b>	Amount collected from user's account within disbursement operation Amount should always be equal to zero if operation is of any type other than Disbursement	Decimal	M
<b>data.collectedAmount</b>	Amount collected from user's account.	Decimal	M



	<ul style="list-style-type: none"> <li>In case of <b>Disbursement</b> this value <b>will be equal to 0</b></li> <li>In case of <b>Collection</b> this value will represent amount successfully collected from customers account.</li> <li>In case of <b>Penal charge</b> this value will represent penalty amount collected from customer's account.</li> </ul> <p>Amount should always be equal to zero if operation is unsuccessful and responseCode and responseDescription should indicate that operation was unsuccessful.</p>		
<b>data.resultCode</b>	Result code of the operation one sent for transaction check, e.g. (00 - Success etc.)	String	M
<b>data.resultDescription</b>	Description of provided result code that was sent for transaction check	String	M
<b>resultCode</b>	Result code of executed transaction, e.g. (00 - Success etc.)	Int	M
<b>resultDescription</b>	Description of provided result code	String	M

#### Sample JSON Response for Disbursement Transaction Check:

```
{
  "transactionId": "24110114545374721",
  "data": {
    "transactionId": "241101",
    "providedAmount": 1000.00,
    "collectedAmount": 0.00,
    "resultCode": "00",
    "resultDescription": "Loan Provision is successful"
  },
  "resultCode": "00",
  "resultDescription": "SUCCESS"
}
```

#### Sample JSON Response for Collection Transaction Check:

```
{
  "transactionId": "24110114545374722",
  "data": {
    "transactionId": "241102",
    "providedAmount": 0.00,
    "collectedAmount": 100.00,
    "resultCode": "00",
    "resultDescription": "Loan Collection is successful"
  }
}
```

```

    },
    "resultCode": "00",
    "resultDescription": "SUCCESS"
}

```

#### Sample JSON Response for Penal Charge Transaction Check:

```

{
  "transactionId": "24110114545374723",
  "data": {
    "transactionId": "241103",
    "providedAmount": 0.00,
    "collectedAmount": 100.00,
    "resultCode": "00",
    "resultDescription": "Penal Charge is successful"
  },
  "resultCode": "00",
  "resultDescription": "SUCCESS"
}

```

## 4. SMS API

This chapter describes response channel used by Simbrella to notify customer the result of the disbursement or charging. The API is hosted in FIRSTBANK and it is the HTTP wrapper for the real SMS sending interface.

Authorization:

Each request should contain following parameters in the request header:

Parameter	Value
<b>appID</b>	https://bitwarden.simbrella.pro/#/vault?folderId=251b6f2c-d532-4ffa-a655-9e643511a2b3&itemId=0440c6b0-97c9-4e9e-9c38-c26d241eb01b
<b>apiKey</b>	https://bitwarden.simbrella.pro/#/vault?folderId=251b6f2c-d532-4ffa-a655-9e643511a2b3&itemId=0440c6b0-97c9-4e9e-9c38-c26d241eb01b

### 4.1 SMSRequest

The request is used to send SMS message.

<b>Direction</b>	Simbrella -> FirstBank
<b>Type</b>	SYNC
<b>Function name</b>	SmsNotfication

<b>Endpoint</b>	https://enterprise-openbanking-test.fbn-devops-test-asenv.appservice.environment.net/api/Notification/single-sms
<b>Request Type</b>	POST

#### **Request Parameters:**

Parameter	Description	Type	Mandatory
<b>Text</b>	Message to send to customer	String	M
<b>Dest</b>	Phone Number in international format	String	M
<b>Unicode</b>	character encoding standard (set as False)	bool	M

#### ***Sample JSON Request:***

```
{
  "text": "This is a test message for SMS request method.",
  "dest": "+2348039409144",
  "unicode": false
}
```

#### **SMS Response**

Parameter	Description	Type	Mandatory
<b>data</b>	Any additional data in response	String	M
<b>statusCode</b>	Result code of executed process	Int	M
<b>IsSuccessful</b>	An Indicator that the process was successful or not	Bool	M
<b>errorMessage</b>	Description of status code if process is failed, null if successful	String	M

#### ***Sample JSON Response:***

```
{
  "data": "",
  "statusCode": 200,
  "IsSuccessful": true,
  "errorMessage": null
}
```

## 4.2 Bulk SMS request

The request is used to send Bulk SMS request. The max length of the array should equal 20.

<b>Direction</b>	Simbrella -> FirstBank
<b>Type</b>	SYNC
<b>Function name</b>	BulkSmsNotification
<b>Endpoint</b>	https://enterprise-openbanking-test.fbn-devops-test-asenv.appservice.environment.net/api/Notification/multiple-sms
<b>Request Type</b>	POST

### Request Parameters:

Parameter	Description	Type	Mandatory
<b>Text</b>	Message to send to customer	String	M
<b>Dest</b>	Phone Number in international format	String	M
<b>Unicode</b>	character encoding standard (set as True)	bool	M

### *Sample JSON Request:*

```
[{
  "text": "This is a test message for SMS request method.",
  "dest": "+2348039409144",
  "unicode": true
},
{
  "text": "This is a test message for SMS request method.",
  "dest": "+2348039409144",
  "unicode": true
},
{
  "text": "This is a test message for SMS request method.",
  "dest": "+2348039409144",
  "unicode": true
}]
```

### SMS Response

Parameter	Description	Type	Mandatory
<b>data</b>	Any additional data in response	String	M
<b>statuscode</b>	Result code of executed process	Int	M
<b>IsSuccessful</b>	An Indicator that the process was successful or not	Bool	M

<b>errorMessage</b>	Description of status code if process is failed, null if successful	String	M
---------------------	---	--------	---

**Sample JSON Response:**

```
{
  "data": "",
  "statusCode": 200,
  "IsSuccessful": true,
  "errorMessage": null
}
```

## 5. Database Integration

This chapter describes all the tables that Simbrella stores in its system. All of them are copied from Notifications that Simbrella receives through the FirstBank Oracle DB.

### 5.1 Transactions

This table contains all transactions that are copied from NANO\_TRANTABLE.

Column	Description	Mandatory
RID	Row ID	M
CUSTOMERID	Unique identifier of a user	M
ACCOUNTID	Specific identifier of a user's account	M
TRANDATE	Date and time of funding .FFF	M
TRANSTYPE	Customer induced, bank induced, clearing, standing instruction etc.	M
PARTTRANSTYPE	CREDIT or DEBIT	M
TRANAMOUNT	Amount of funding transaction	M
ORINATIONCHANNEL	Web, m-bank, ATM, remittance, On-bank transfer etc	M
BALAFETERTRAN	Balance of an account after the transaction	M
ISREVERSAL	Y if transaction was posted for the purpose to reverse a previous transaction. Otherwise - N.	M
BENPARTYTYPE	Textual narration of the transaction	M
TIMEINSERTED	Time when record is inserted	M
DATESENT	Date when transaction sent	M
STATUS	Status of transaction	M
TRANSTABLEID	Unique identifier of transaction in FBN database	M
PSTD_FLG		M

### 5.2 Customers detailed info

This table contains details of all FirstBank customers and copied from NANO\_CET\_SIM table.

Column	Description	Mandatory
CUSTOMERID	Customer ID	M

<b>MASKEDACCOUNTID</b>	Masked Account ID	M
<b>CONTENTSTATUS</b>	Status of content	M
<b>STATUSDATE</b>	Status date	M
<b>ISBVNVALID</b>	Is BVN valid	M
<b>ISCRMSVALID</b>	Is CRMS valid	M
<b>DATEBVNVALIDATED</b>	Date BVN validated	M
<b>DATECRMSVALIDATED</b>	Date CRMS validated	M
<b>ISCRSVALID</b>	Is CRS valid	M
<b>DATECRSVALIDATED</b>	Date CRS validated	M
<b>DATEROWUPDATED</b>	Date row updated	M
<b>INSERTDATA</b>	Date when the row is inserted	M

## 5.5 Blacklist

This table contains customers who is in blacklist in FIRSTBANK system.

Column	Description	Mandatory
<b>SUBSCRIBERID</b>	Unique identifier of subscriber account	M
<b>BLACKLISTID</b>	Black list identifier	M
<b>ADDDATE</b>	Date when subscriber black listed	M
<b>PRODUCTTYPE</b>	Product type	M

## 6. Notifications

This chapter describes all types of notifications that Simbrella is pulled from FBN system. Simbrella pulls notification within certain period of time (currently, frequency is one minute). Simbrella pulls notifications from FBN database by executing SELECT statement in FBN database in specific table.

### 6.1 “NANO\_CET\_SIM” tables

This table is updated daily by FbNgUpdateCustomersInfoJob.

Column	Data Type	Description
CUSTOMERID	VARCHAR2 (10 byte)	Customer ID
MASKEDACCOUNTID	RAW (35)	Masked Account ID
CONTENTSTATUS	VARCHAR2 (1 byte)	Status of content
STATUSDATE	DATE	Status date
ISBVNVALID	VARCHAR2 (1 byte)	Is BVN valid
ISCRMSVALID	VARCHAR2 (1 byte)	Is CRMS valid
DATEBVNVALIDATED	DATE	Date BVN validated
DATECRMSVALIDATED	DATE	Date CRMS validated
ISCRSVALID	VARCHAR2 (1 byte)	Is CRS valid
DATECRSVALIDATED	DATE	Date CRS validated
DATEROWUPDATED	DATE	Date row updated
INSERTDATE	DATE	Date of insertion

### 6.2 “NANO\_CAD”

This table is used on request on demand by FbNgMailEligibleCustomersJob.

Column	Data Type	Description
CUSTOMERID	VARCHAR2 (10 byte)	Customer ID
MASKEDACCOUNTID	RAW (35)	Masked Account ID
GENDER	VARCHAR2 (1 byte)	Gender



DATEOFBIRTH	DATE	Date of Birth
ACCTOPNDATE	DATE	Account top up date
ACCTPURPOSE	VARCHAR2 (91 byte)	Account purpose
PLASTICCARD	VARCHAR2 (1 byte)	Plastic card

### 6.3 “NANO\_TRANTABLE”

This table updated each day by FBN. And using by FbNgBankMappedTxDbInsertJob only.

Column	Data Type	Description
CUSTOMERID	VARCHAR2 (10 byte)	Customer ID
MASKEDACCOUNTID	RAW (35)	Masked Account ID
TRANDATE	DATE	Status of content
PARTTRANTYPE	VARCHAR2 (6 byte)	Status date
BENPARTTYPE	VARCHAR2 (100 byte)	Is BVN valid
TRANTYPE	VARCHAR2 (5 byte)	Is CRMS valid
TRANAMOUNT	NUMBER (15,2)	Date BVN validated
BALAFETERTRAN	NUMBER (15,2)	Date CRMS validated
TIMEINSERTED	DATE	Is CRS valid
DATESENT	DATE	Date CRS validated
STATUS	VARCHAR2 (1 byte)	Date row updated
TRANABLED	VARCHAR2 (25 byte)	
PSTD_FLG	VARCHAR2 (1 byte)	
ISREVERSAL	VARCHAR2 (1 byte)	
ORIGINATIONCHANNEL	VARCHAR2 (25 byte)	
TRANSACTIONINDEXID	NUMBER (38)	

## 7. Simbrella Result Codes

This section describes possible error codes

Result Code	Result Description
00	Successful operation
01	Operation is unsuccessful
03	User has an existing loan
04	Insufficient funds
05	User did not pass scoring
06	No such product identifier
08	Error occurred
10	User doesn't have debt(s)

## 8. FirstBank result codes

Response codes for provision

Response codes of collection request.

00	Loan Collection is successful
01	Loan Collection is unsuccessful: Insufficient funds
02	Collection can't be processed [Account mismatched]
03	Collection can't be processed [Unknown TraceId]
05	Invalid Account Status
06	Account status is Dormant

Response codes of Penal charge request.

00	Penal Charge Collection is successful
01	Penal Charge Collection is unsuccessful: Insufficient funds
02	Unable to debit Customer's account
05	Invalid Account Status
06	Account status is Dormant

Response codes of Both SMS requests.

200	SMS request submitted
400	Unsuccessful Response with Client Error
500	Internal Server Error

## 9. Product Identifiers

This section describes existing product identifiers. For example:

Product Id	Textual Description	Explanation
2030	SAL30	Salaried loan for 30 days
2060	SAL90	Salaried loan for 90 days

## 7. Country Codes

Code	Country
ENG	Nigeria
EGH	Ghana

## 10. Security Validations

Parameter	Input Validation
transactionId	Alphanumeric
accountId	Alphanumeric
productId	Numeric
msisdn	Alphanumeric
countryId	Numeric
loanType	Numeric