Integration Requirement Specification Document

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**Change Record**

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Name | Version | Change Reference |
| 15/01/2019 | Nguyen Van Ngoc | 1.0 | New create |
| 20/02/2019 | Khoand | 1.1 | - Edit 1. API List, edit 10. SmartSavings?action=verify Service and 12. SmartSavings?action=confirm Service to Modify |
| 27/02/2019 | Khoand | 1.2 | Add 1.14 GetMaturityDate Service  Edit Sequence |
| 06/03/2019 | Khoand | 1.3 | Edit endpoint 1.3 GetListSavingType , 1.4 GetFromAccountSmartSaving |
| 07/03/2019 | Khoand | 1.4 | Edit Integration Specification 1.10 SmartSaving?action=verify,request |
| 08/03/2019 | Khoand | 1.5 | Edit Integration Specification 1.10 SmartSaving?action=verify, response  Add InterestContemplated field in action=verify and action=confirm  Edit Sequence |
| 18/03/2019 | Khoand | 1.6 | Add 1.15. GetMaxRateAndTermOnlineSaving Service |

**Reviewers**

|  |  |  |
| --- | --- | --- |
| Date | Name | Position |
|  |  |  |
|  |  |  |

**Distribution**

|  |  |  |
| --- | --- | --- |
| Copy No. | Name | Location |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |

# Document Overview

## Document Purpose

*Provide a high level overview of project*.

## Reference Document

|  |  |  |  |
| --- | --- | --- | --- |
| Reference Document | Attachment | Version | Description |
| BRD | Savi002\_Settle Saving.docx | xx.yy |  |
| BRD | Settle Online Saving.docx | 1.0 |  |
| BRD | Settlle secure ovedraft account.docx | 1.2 |  |
| API Document | Open Secured Overdraft.docx. | 1.5 |  |
| API Document | Open Unsecured Overdraft.docx | 1.4 |  |

## Definitions and Acronyms

|  |  |
| --- | --- |
| Term / Acronym | Description / Definition |
| BRD |  |
|  |  |

# 1. API List

New integration services description table for epic requirement

|  |  |  |
| --- | --- | --- |
| **No.** | **Integration Requirement** | **Existing/Modify/New** |
|  | Accounts Service |  |
|  | SmartSavings Service |  |
|  | GetListSavingType Service |  |
|  | GetFromAccountSmartSaving Service |  |
|  | GetTerms Service |  |
|  | GetRequestAccountODInsuanse Service |  |
|  | GetOnlineSavingRatesBySearchCriteria Service |  |
|  | GetIntroducerInfo Service |  |
|  | GetContractOverdraft Service |  |
|  | SmartSavings?action=verify Service | **Modify** |
|  | MultifactorInfos Service |  |
|  | SecureUsers?action=authenticateMFA Service |  |
|  | SmartSavings?action=confirm Service | **Modify** |
|  | GetMaturityDate Service |  |
|  | GetMaxRateAndTermOnlineSaving Service | **New (Under developing)** |

Note:

Some Fields whose value = "O" (Optional) are default fields of OCB core and up to now they have been used for these services, so description columns are blank.

Row have Algae Green color : this row edit , have field but not value.

Row have Yellow color : this row added .

## Accounts Service

### Description

* Reference to **Accounts Service in Account and Account details-v1.2.docx**

## SmartSavings?action=init Service

### Description

1. Description smart saving init
2. Endpoint: “cb/odata/services/onlinesavingservice/SmartSavings ?action=init
3. Http Method: POST
4. ChannelType: Mobile
5. Accept: application/json
6. Request sample:

{"Id":""}

1. Responses sample:

{

"d": {

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/SmartSavings('23154778034963500')",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/SmartSavings('23154778034963500')",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.SmartSaving"

},

"Id": " 50154806223983100 ",

"CustomerId": " 4288502 ",

"Customer": "NGUYEN VAN THANH ",

"CategorySaving": null,

"CategoryOD": null,

"Currency": null,

"Dao": null,

"DaoName": null,

"AllInOneProduct": null,

"Principal": null,

"ValueDateSaving": "/Date(1523466000000)/",

"MaturityDateSaving": null,

"RepayAccount": null,

"RepayAccountDisplayText": null,

"SettleAccount": null,

"SettleAccountDisplayText": null,

"NominatedAccount": null,

"NominatedAccountDisplayText": null,

"InterestRate": null,

"MaturityInstr": "AUTOMATIC ROLLOVER",

"MaturityInstrDisplayText": null,

"ContactNum": "0988361301",

"ContactEmail": "hoarica@gmail.com",

"Address": "51N-CU XA NGAN HANG-QUAN 7",

"ApprovalDateOD": "/Date(1523466000000)/",

"LimitAmt": null,

"MaximumSecure": null,

"MaximumTotal": null,

"AccountNo": null,

"OverdraftType": "Thau chi SavOnline",

"InterestRateOD": null,

"InterestType": "Co dinh",

"ServiceRef": null,

"BranchID": "VN0010005",

"Passport": "089078005901",

"SavingType": null,

"Purpose": null,

"FeeOD": null,

"PaymentMethod": null,

"PaymentMethodName": null,

"TncSaving": null,

"TncOverdraft": null,

"TncVerify": null,

"Term": null,

"TermDisplayText": null,

"Status": null,

"SavingNumber": null,

"DirectoryId": "5973",

"GlobalLimit": null,

"ProductLimit": null,

"Collateral": null,

"Collateral\_Right": null,

"TypeDetail": "OPEN",

"Description": null,

"ProductCodeSaving": null,

"Cust\_Qualify\_Id": null,

"RESULTCODE": "68",

"AMOUNTMINPRODUCT": "12500000",

"CONTRACT": "camco.pdf",

"INTERESTMARGIN": "2.5",

"RATEOFBORROWING": "80",

"TOTALFINANCIAL": null,

"OWNEREQUITY": null

}

}

### Business rules

* Customer is allowed to register smart combo if he/she meets these following conditions:

+ CIF is not in blacklist/ warning list of VPBank

+ CIF has not overdued debt

### Integration Specification

**Request message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Id | String |  |  | "” |

**Response message:**

| **No.** |  | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Id | String |  |  | ”50154806223983100” |
|  | CustomerId | String |  | Customer Id | ”4288502” |
|  | Customer | String |  | Customer Name | ”NGUYEN VAN THANH” |
|  | CategorySaving | String |  |  |  |
|  | CategoryOD | String |  |  |  |
|  | Currency | String |  |  |  |
|  | Dao | String |  |  |  |
|  | DaoName: null | String |  |  |  |
|  | AllInOneProduct | String |  |  |  |
|  | Principal | String |  |  |  |
|  | ValueDateSaving | String |  |  | "/Date(1523552400000)/" |
|  | MaturityDateSaving | String |  |  |  |
|  | RepayAccount | String |  |  |  |
|  | RepayAccountDisplayText | String |  |  |  |
|  | SettleAccount | String |  |  |  |
|  | SettleAccountDisplayText | String |  |  |  |
|  | NominatedAccoun | String |  |  |  |
|  | NominatedAccountDisplayText | String |  |  |  |
|  | InterestRate | String |  | * will show the highest VND interest rate of each saving product |  |
|  | MaturityInstr | String |  |  | "AUTOMATIC ROLLOVER" |
|  | MaturityInstrDisplayText | String |  |  |  |
|  | ContactNum | String |  |  | "0363058826" |
|  | ContactEmail | String |  | Email | "hoarica@gmail.com" |
|  | Address | String |  |  | “51N-CU XA NGAN HANG-QUAN 7” |
|  | ApprovalDateOD | String |  |  | "/Date(1523552400000)/" |
|  | LimitAmt | String |  |  |  |
|  | MaximumSecure | String |  |  |  |
|  | MaximumTotal | String |  |  |  |
|  | AccountNo | String |  |  |  |
|  | OverdraftType | String |  |  | "Thau chi SavOnline" |
|  | InterestRateOD | String |  |  |  |
|  | InterestType | String |  |  | "Co dinh" |
|  | ServiceRef | String |  |  |  |
|  | BranchID | String |  |  | "VN0010005" |
|  | Passport | String |  |  | "089078004633" |
|  | SavingType | String |  |  |  |
|  | Purpose | String |  |  |  |
|  | FeeOD | String |  |  |  |
|  | PaymentMethod | String |  |  | ”VPBANK4190” |
|  | PaymentMethodName | String |  |  |  |
|  | TncSaving | String |  |  |  |
|  | TncOverdraft | String |  |  |  |
|  | TncVerify | String |  |  |  |
|  | Term | String |  |  |  |
|  | TermDisplayText | String |  |  |  |
|  | Status | String |  |  |  |
|  | SavingNumber | String |  |  |  |
|  | DirectoryId | String |  |  | “5973” |
|  | GlobalLimit | String |  |  |  |
|  | ProductLimit | String |  |  |  |
|  | Collateral | String |  |  |  |
|  | Collateral\_Right | String |  |  |  |
|  | TypeDetail | String |  |  |  |
|  | Description | String |  |  |  |
|  | ProductCodeSaving | String |  |  |  |
|  | Cust\_Qualify\_Id | String |  |  |  |
|  | RESULTCODE | String |  |  | “68” |
|  | AMOUNTMINPRODUCT | String |  |  | “12500000” |
|  | CONTRACT | String |  |  | “camco.pdf” |
|  | INTERESTMARGIN | String |  |  | “2.5” |
|  | RATEOFBORROWING | String |  |  | “80” |
|  | TOTALFINANCIAL | String |  |  |  |
|  | OWNEREQUITY | String |  |  |  |

## GetListSavingType Service

### Description

1. Description Get list saving type information
2. Endpoint: cb/odata/services/onlinesavingservice/GetListSavingType?Type='7'
3. Http Method: GET
4. ChannelType: Mobile
5. Accept: application/json
6. Request sample:

{“Type”:”7”}

1. Responses sample:

{

"d": {

"results": [

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingAccountTypes(7)",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingAccountTypes(7)",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.OnlineSavingAccountType"

},

"Account\_Type\_ID": 7,

"Name\_EN": "Tiết kiệm bảo chứng thấu chi",

"Name\_VN": "Tiết kiệm bảo chứng thấu chi",

"Periodic": null,

"Tandc\_Link": "http://www.vpbank.com.vn/sites/default/files/pictures/Ti%E1%BA%BFt%20ki%E1%BB%87m%20th%C6%B0%E1%BB%9Dng.pdf",

"Status": "0"

}

]

}

}

### Business rules

### Integration Specification

**Request message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Type | String |  |  | "7” |

**Response message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Account\_Type\_ID | int |  |  | 7 |
|  | Name\_EN | String |  |  | Tiết kiệm bảo chứng thấu chi |
|  | Name\_VN | String |  |  | Tiết kiệm bảo chứng thấu chi |
|  | Periodic | String |  |  |  |
|  | Tandc\_Link | String |  |  | http://www.vpbank.com.vn/sites/default/files/pictures/Ti%E1%BA%BFt%20ki%E1%BB%87m%20th%C6%B0%E1%BB%9Dng.pdf |
|  | Status | String |  |  | “0” |

## GetFromAccountSmartSaving Service

### Description

1. Description: Get Account information
2. Endpoint: cb/odata/services/onlinesavingservice/GetFromAccountSmartSaving?Account\_Type\_ID=%277%27
3. Http Method: GET
4. ChannelType: Mobile
5. Accept: application/json
6. Request sample:

{“Account\_Type\_ID”:”7”}

1. Responses sample:

{

"d": {

"results": [

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/Accounts('ZW5je2RhMmM3N2QwMjU5ZjBjNzAxODdkNTQ5MjQzYjViYWU2fQ')",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/Accounts('ZW5je2RhMmM3N2QwMjU5ZjBjNzAxODdkNTQ5MjQzYjViYWU2fQ')",

"type": "com.sap.banking.common.endpoint.v1\_0.beans.Account"

},

"Id": "ZW5je2RhMmM3N2QwMjU5ZjBjNzAxODdkNTQ5MjQzYjViYWU2fQ",

"Number": "139403568",

"NumberMasked": "XXXXX3568",

"BankID": "1000",

"BankName": null,

"NickName": "Tài khoản thanh toán",

"Type": "NORMALACCOUNT",

"Status": "PENDING",

"CurrencyCode": "VND",

"TrackingID": null,

"AccountGroup": "DEPOSIT",

"PrimaryAccount": null,

"CoreAccount": "1",

"RoutingNum": "660110110",

"LocationID": null,

"AccountDisplayText": "Tài khoản thanh toán- 139403568 SoDu. 98,491,998,409 đ",

"PriorDayBalance": "98491998409",

"CurrentBalance": "98491998409",

"AvailableBalance": "98491998409",

"Favorite": false,

"BRANCHNO": "VN0010106",

"OPENDATE": null,

"BRANCHNAME": null,

"AVARAGEBALANCEPERMONTH": null,

"OVERDRAFTLIMIT": null,

"BALANCE": null,

"BANKNO": null,

"ACCOUNTTYPE": null,

"ACCOUNTNUMBER": null,

"CURRENCY": "VND",

"INTERESTRATE": null,

"ECOMMERCESTATUS": null,

"MATURITYDATE": null,

"ACCRUEDINTEREST": null,

"TENOR": null,

"APPROVEDAMOUNT": null,

"TERMLOAN": null,

"OUTSTANDINGAMOUNT": null,

"INTERESTFORTHISPERIOD": null,

"PRINCIPALFORTHISPERIOD": null,

"THETOTALAMOUNTDUE": null,

"NEXTPRINCIPALPAYMENTDATE": null,

"NEXTINTERESTPAYMENTDATE": null,

"THETOTALOVERDUEPAYABLEAMOUNT": null,

"OVERDUEPRINCIPAL": null,

"PENALTYINTEREST": null,

"CONTRACTNUMBER": null,

"CURRENCYTYPE": null,

"CREDITLIMIT": null,

"CARDSTATUS": null,

"CARDTYPE": null,

"OUTSTANDINGBALANCE": null,

"STATEMENTBALANCE": null,

"SUMOFOUTSTANDINGAMOUNT": null,

"BLOCKEDAMOUNT": null,

"AVAILABLEAMOUNT": null,

"CARDNUMBER": null,

"MINIMUM\_PAYMENT\_DUE": null,

"PRODUCTID": "1001",

"CITYNAME": null,

"CITYID": null,

"BRANCHID": null,

"ACCOUNTNAME": null,

"ACCOUNT\_STATUS": "ACTIVE",

"STATEMENT\_TERM": null,

"PRODUCTNAME": null,

"STATEMENTDAY": null,

"SML\_BANK\_ID": null,

"AUTO\_INACTIVE": null,

"OWNERSHIP": null,

"ECOMNICKNAME": null,

"ACCDETAILAVAILABLEBALANCE": null,

"ACCDETAILCURRENTBALANCE": null,

"LINKACCOUNT": null,

"PISACCOUNT": null,

"ISTD6017": false,

"ACCOUNT\_TYPE\_T24": "AC",

"CCCASHLIMIT": null,

"CCCASHFEE": null,

"CCCASHFEEMIN": null,

"CCBRANHCODE": null,

"PRIMARYACCTHOLDER": null,

"CARD\_TYPE": null,

"VALIDTHROUGH": null,

"CARDTYPENAME": null,

"CONTRACT\_STATUS": null,

"PRODUCT\_STATUS": null,

"PRODUCTCODE": "011001",

"OVERDRAFTLIMITREF": "58600.20",

"WORKINGBALANCE": "98419998409",

"LINK\_ACC\_NO": "",

"ISLINKDEBITCARD": "",

"LinkedDebitCards": null,

"DCLINKACCOUNTS": null,

"MINIMUM\_PAYMENT\_AMOUNT": null,

"OPENINGBALANCE": null

}

]

}

}

### Business rules

### Integration Specification

**Request message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Account\_Type\_ID | String |  |  | "7" |

**Response message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Id | String |  | Format: accountNumber-accountType. | "ZW5je2RhMmM3N2QwMjU5ZjBjNzAxODdkNTQ5MjQzYjViYWU2fQ" |
|  | Number | String |  | Unique identifier (per bank) for the customers account. (Not yet hashed) | "139403568" |
|  | NumberMasked | String |  | Unique identifier (per bank) for the customers account. (Masked) | "XXXXX3568" |
|  | BankID | String |  | ID of the Service Bureau this affiliate bank belongs to. | "1000" |
|  | BankName | String |  |  |  |
|  | NickName | String |  | User assigned name for account that is more ‘friendly’.  (Name of the saving book.  Default value is (“Account title 1” field on “Account” screen of T24.) | "Tài khoản thanh toán" |
|  | Type | String |  | Account type abbr.  Example: NORMALACCOUNT, VPSTAFFACCOUNT, ONLINEEASYSAVING, … | "NORMALACCOUNT" |
|  | Status | String |  | Not in use (dicefault “PENDING”) | "PENDING" |
|  | CurrencyCode | String |  | Currency type the account should use. | "VND" |
|  | TrackingID | String |  |  |  |
|  | AccountGroup | String |  | Account group | "DEPOSIT" |
|  | PrimaryAccount | String |  |  |  |
|  | CoreAccount | String |  | Flag to determine if this account is the user’s core account. Valid values are:  1: same CIF  2: different CIF | "1" |
|  | RoutingNum | String |  | Account routing number is an identification of a bank. | “660110110” |
|  | LocationID | String |  |  |  |
|  | AccountDisplayText | String |  | Name of account type + account number + amount (format: ##,###,### đ) | "Tài khoản thanh toán - 139403568 SoDu. 98,491,998,409 ₫ |
|  | PriorDayBalance | String |  | + being assigned as WorkingBalance for current account  + being assigned as principal amount for normal saving account  format : ##### (number) | "98491998409" |
|  | CurrentBalance | String |  | + being assigned as WorkingBalance for current account  + being assigned as principal amount for normal saving account  format : ##### (number) | "98491998409" |
|  | AvailableBalance | String |  | Available Balance, format : ##### (number) | "98491998409" |
|  | Favorite | String |  | true: Favorite, false: Not favorite | false |
|  | BRANCHNO | String |  | Code of branch holding the account | "VN0010106" |
|  | OPENDATE | String |  |  |  |
|  | BRANCHNAME | String |  |  |  |
|  | AVARAGEBALANCEPERMONTH | String |  |  |  |
|  | OVERDRAFTLIMIT | String |  |  |  |
|  | BALANCE | String |  |  |  |
|  | BANKNO | String |  |  |  |
|  | ACCOUNTTYPE | String |  |  |  |
|  | ACCOUNTNUMBER | String |  |  |  |
|  | CURRENCY | String |  | Account currency | "VND" |
|  | INTERESTRATE | String |  |  |  |
|  | ECOMMERCESTATUS | String |  |  |  |
|  | MATURITYDATE | String |  |  |  |
|  | ACCRUEDINTEREST | String |  |  |  |
|  | TENOR | String |  |  |  |
|  | APPROVEDAMOUNT | String |  |  |  |
|  | TERMLOAN | String |  |  |  |
|  | OUTSTANDINGAMOUNT | String |  |  |  |
|  | INTERESTFORTHISPERIOD | String |  |  |  |
|  | PRINCIPALFORTHISPERIOD | String |  |  |  |
|  | THETOTALAMOUNTDUE | String |  |  |  |
|  | NEXTPRINCIPALPAYMENTDATE | String |  |  |  |
|  | NEXTINTERESTPAYMENTDATE | String |  |  |  |
|  | THETOTALOVERDUEPAYABLEAMOUNT | String |  |  |  |
|  | OVERDUEPRINCIPAL | String |  |  |  |
|  | PENALTYINTEREST | String |  |  |  |
|  | CONTRACTNUMBER | String |  |  |  |
|  | CURRENCYTYPE | String |  |  |  |
|  | CREDITLIMIT | String |  |  |  |
|  | CARDSTATUS | String |  |  |  |
|  | CARDTYPE | String |  |  |  |
|  | OUTSTANDINGBALANCE | String |  |  |  |
|  | STATEMENTBALANCE | String |  |  |  |
|  | SUMOFOUTSTANDINGAMOUNT | String |  |  |  |
|  | BLOCKEDAMOUNT | String |  |  |  |
|  | AVAILABLEAMOUNT | String |  |  |  |
|  | CARDNUMBER | String |  |  |  |
|  | MINIMUM\_PAYMENT\_DUE | String |  |  |  |
|  | PRODUCTID | String |  |  |  |
|  | CITYNAME | String |  |  |  |
|  | CITYID | String |  |  |  |
|  | BRANCHID | String |  |  |  |
|  | ACCOUNTNAME | String |  |  |  |
|  | ACCOUNT\_STATUS | String |  | Current account (card) status.  For accoutn: ACTIVE, DORMART, INACTIVE  For Card: Card OK, Card Closed, Call Issuer, Pin Blocked, Pickup L41 | "ACTIVE" |
|  | STATEMENT\_TERM | String |  |  |  |
|  | PRODUCTNAME | String |  |  |  |
|  | STATEMENTDAY | String |  |  |  |
|  | SML\_BANK\_ID | String |  |  |  |
|  | AUTO\_INACTIVE | String |  |  |  |
|  | OWNERSHIP | String |  |  |  |
|  | ECOMNICKNAME | String |  |  |  |
|  | ACCDETAILAVAILABLEBALANCE | String |  |  |  |
|  | ACCDETAILCURRENTBALANCE | String |  |  |  |
|  | LINKACCOUNT | String |  |  |  |
|  | PISACCOUNT | String |  |  |  |
|  | ISTD6017 | String |  | true : if product code of account equal TD6017  false: if product code of account not equal TD6017 | false |
|  | ACCOUNT\_TYPE\_T24 | String |  | Account type (AC : account, Debit Card, CC: Credit card) | "AC" |
|  | CCCASHLIMIT | String |  |  |  |
|  | CCCASHFEE | String |  |  |  |
|  | CCCASHFEEMIN | String |  |  |  |
|  | CCBRANHCODE | String |  |  |  |
|  | PRIMARYACCTHOLDER | String |  |  |  |
|  | CARD\_TYPE | String |  |  |  |
|  | VALIDTHROUGH | String |  |  |  |
|  | CARDTYPENAME | String |  |  |  |
|  | CONTRACT\_STATUS | String |  |  |  |
|  | PRODUCT\_STATUS | String |  |  |  |
|  | PRODUCTCODE | String |  |  | 011001 |
|  | OVERDRAFTLIMITREF | String |  |  | 58600.20 |
|  | WORKINGBALANCE | String |  |  | 98419998409 |
|  | LINK\_ACC\_NO | String |  |  |  |
|  | ISLINKDEBITCARD | String |  |  |  |
|  | LinkedDebitCards | String |  |  |  |
|  | DCLINKACCOUNTS | String |  |  |  |
|  | MINIMUM\_PAYMENT\_AMOUNT | String |  |  |  |
|  | OPENINGBALANCE | String |  |  |  |

## GetTerms Service

### Description

1. Description: Get terms information
2. Endpoint: cb/odata/services/onlinesavingservice/GetTerms
3. Http Method: GET
4. ChannelType: Mobile
5. Accept: application/json
6. Request sample:

**Account\_Type\_ID**: '7'

**Currency**: 'VND'

1. Responses sample:

{

"d": {

"results": [

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='1M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='1M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.OnlineSavingRate"

},

"Account\_Type\_ID": 7,

"Currency": "VND",

"Product\_ID": "",

"Product\_Code": "",

"Term": "1M",

"Rate": null,

"Date": null,

"Amount\_Min": "0",

"Amount\_Max": "0",

"TERM\_LABEL": "Tháng",

"LIST\_RATE\_PRODUCT": null,

"RateCeilingEnc": null,

"BaseRateEnc": null,

"BaseRate": null

},

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='2M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='2M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.OnlineSavingRate"

},

"Account\_Type\_ID": 7,

"Currency": "VND",

"Product\_ID": "",

"Product\_Code": "",

"Term": "2M",

"Rate": null,

"Date": null,

"Amount\_Min": "0",

"Amount\_Max": "0",

"TERM\_LABEL": "Tháng",

"LIST\_RATE\_PRODUCT": null,

"RateCeilingEnc": null,

"BaseRateEnc": null,

"BaseRate": null

},

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='3M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='3M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.OnlineSavingRate"

},

"Account\_Type\_ID": 7,

"Currency": "VND",

"Product\_ID": "",

"Product\_Code": "",

"Term": "3M",

"Rate": null,

"Date": null,

"Amount\_Min": "0",

"Amount\_Max": "0",

"TERM\_LABEL": "Tháng",

"LIST\_RATE\_PRODUCT": null,

"RateCeilingEnc": null,

"BaseRateEnc": null,

"BaseRate": null

},

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='4M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='4M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.OnlineSavingRate"

},

"Account\_Type\_ID": 7,

"Currency": "VND",

"Product\_ID": "",

"Product\_Code": "",

"Term": "4M",

"Rate": null,

"Date": null,

"Amount\_Min": "0",

"Amount\_Max": "0",

"TERM\_LABEL": "Tháng",

"LIST\_RATE\_PRODUCT": null,

"RateCeilingEnc": null,

"BaseRateEnc": null,

"BaseRate": null

},

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='6M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='6M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.OnlineSavingRate"

},

"Account\_Type\_ID": 7,

"Currency": "VND",

"Product\_ID": "",

"Product\_Code": "",

"Term": "6M",

"Rate": null,

"Date": null,

"Amount\_Min": "0",

"Amount\_Max": "0",

"TERM\_LABEL": "Tháng",

"LIST\_RATE\_PRODUCT": null,

"RateCeilingEnc": null,

"BaseRateEnc": null,

"BaseRate": null

},

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='7M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='7M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.OnlineSavingRate"

},

"Account\_Type\_ID": 7,

"Currency": "VND",

"Product\_ID": "",

"Product\_Code": "",

"Term": "7M",

"Rate": null,

"Date": null,

"Amount\_Min": "0",

"Amount\_Max": "0",

"TERM\_LABEL": "Tháng",

"LIST\_RATE\_PRODUCT": null,

"RateCeilingEnc": null,

"BaseRateEnc": null,

"BaseRate": null

},

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='9M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='9M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.OnlineSavingRate"

},

"Account\_Type\_ID": 7,

"Currency": "VND",

"Product\_ID": "",

"Product\_Code": "",

"Term": "9M",

"Rate": null,

"Date": null,

"Amount\_Min": "0",

"Amount\_Max": "0",

"TERM\_LABEL": "Tháng",

"LIST\_RATE\_PRODUCT": null,

"RateCeilingEnc": null,

"BaseRateEnc": null,

"BaseRate": null

},

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='12M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='12M',Product\_ID='',Product\_Code='',Amount\_Min=0M,Amount\_Max=0M)",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.OnlineSavingRate"

},

"Account\_Type\_ID": 7,

"Currency": "VND",

"Product\_ID": "",

"Product\_Code": "",

"Term": "12M",

"Rate": null,

"Date": null,

"Amount\_Min": "0",

"Amount\_Max": "0",

"TERM\_LABEL": "Tháng",

"LIST\_RATE\_PRODUCT": null,

"RateCeilingEnc": null,

"BaseRateEnc": null,

"BaseRate": null

}

]

}

}

### Business rules

### Integration Specification

| **No.** |  | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Account\_Type\_ID | String |  | Account type | ” 7” |
|  | Currency | String |  | Currency | ” VND” |
|  | Product\_ID | String |  |  | ”” |
|  | Product\_Code | String |  |  | “” |
|  | Term | String |  | Term | ” 1M” |
|  | Rate | String |  |  |  |
|  | Date | String |  |  |  |
|  | Amount\_Min | String |  |  | ” 0” |
|  | Amount\_Max | String |  |  |  |
|  | TERM\_LABEL | String |  | Label term | ” Tháng” |
|  | LIST\_RATE\_PRODUC | String |  |  |  |
|  | RateCeilingEnc | String |  |  |  |
|  | BaseRateEnc: null | String |  | Overdraft Purpose | ”PC” |
|  | BaseRate: null | String |  |  |  |
|  | Account\_Type\_ID: 7 | String |  | Overdraft Account | ”105305068” |

## GetRequestAccountODInsuanse Service

### Description

1. Description: Get Account ODInsuanse information
2. Endpoint: cb/odata/services/onlinesavingservice/GetRequestAccountODInsuanse
3. Http Method: GET
4. ChannelType: Mobile
5. Accept: application/json
6. Request sample:
7. Responses sample:

{

"d": {

"results": [

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/Accounts('ZW5jezU2ODk2NzExZmIyNGMzYjU1YzhkZTMzNWYyOWFiZjBkfQ')",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/Accounts('ZW5jezU2ODk2NzExZmIyNGMzYjU1YzhkZTMzNWYyOWFiZjBkfQ')",

"type": "com.sap.banking.common.endpoint.v1\_0.beans.Account"

},

"Id": "ZW5jezU2ODk2NzExZmIyNGMzYjU1YzhkZTMzNWYyOWFiZjBkfQ",

"Number": "139403568",

"NumberMasked": "XXXXX3568",

"BankID": "1000",

"BankName": null,

"NickName": "Tài khoản thanh toán",

"Type": "NORMALACCOUNT",

"Status": "PENDING",

"CurrencyCode": "VND",

"TrackingID": null,

"AccountGroup": "DEPOSIT",

"PrimaryAccount": null,

"CoreAccount": "1",

"RoutingNum": "660110110",

"LocationID": null,

"AccountDisplayText": "Tài khoản thanh toán - 139403568 SoDu. 98,491,998,409 ₫",

"PriorDayBalance": "98491998409",

"CurrentBalance": "98491998409",

"AvailableBalance": "98491998409",

"Favorite": false,

"BRANCHNO": "VN0010106",

"OPENDATE": null,

"BRANCHNAME": null,

"AVARAGEBALANCEPERMONTH": null,

"OVERDRAFTLIMIT": null,

"BALANCE": null,

"BANKNO": null,

"ACCOUNTTYPE": null,

"ACCOUNTNUMBER": null,

"CURRENCY": "VND",

"INTERESTRATE": null,

"ECOMMERCESTATUS": null,

"MATURITYDATE": null,

"ACCRUEDINTEREST": null,

"TENOR": null,

"APPROVEDAMOUNT": null,

"TERMLOAN": null,

"OUTSTANDINGAMOUNT": null,

"INTERESTFORTHISPERIOD": null,

"PRINCIPALFORTHISPERIOD": null,

"THETOTALAMOUNTDUE": null,

"NEXTPRINCIPALPAYMENTDATE": null,

"NEXTINTERESTPAYMENTDATE": null,

"THETOTALOVERDUEPAYABLEAMOUNT": null,

"OVERDUEPRINCIPAL": null,

"PENALTYINTEREST": null,

"CONTRACTNUMBER": null,

"CURRENCYTYPE": null,

"CREDITLIMIT": null,

"CARDSTATUS": null,

"CARDTYPE": null,

"OUTSTANDINGBALANCE": null,

"STATEMENTBALANCE": null,

"SUMOFOUTSTANDINGAMOUNT": null,

"BLOCKEDAMOUNT": null,

"AVAILABLEAMOUNT": null,

"CARDNUMBER": null,

"MINIMUM\_PAYMENT\_DUE": null,

"PRODUCTID": "1001",

"CITYNAME": null,

"CITYID": null,

"BRANCHID": null,

"ACCOUNTNAME": null,

"ACCOUNT\_STATUS": "ACTIVE",

"STATEMENT\_TERM": null,

"PRODUCTNAME": null,

"STATEMENTDAY": null,

"SML\_BANK\_ID": null,

"AUTO\_INACTIVE": null,

"OWNERSHIP": null,

"ECOMNICKNAME": null,

"ACCDETAILAVAILABLEBALANCE": null,

"ACCDETAILCURRENTBALANCE": null,

"LINKACCOUNT": null,

"PISACCOUNT": null,

"ISTD6017": false,

"ACCOUNT\_TYPE\_T24": "AC",

"CCCASHLIMIT": null,

"CCCASHFEE": null,

"CCCASHFEEMIN": null,

"CCBRANHCODE": null,

"PRIMARYACCTHOLDER": null,

"CARD\_TYPE": null,

"VALIDTHROUGH": null,

"CARDTYPENAME": null,

"CONTRACT\_STATUS": null,

"PRODUCT\_STATUS": null,

"PRODUCTCODE": "011001",

"OVERDRAFTLIMITREF": "58600.20",

"WORKINGBALANCE": "98419998409",

"LINK\_ACC\_NO": "",

"ISLINKDEBITCARD": "",

"LinkedDebitCards": null,

"DCLINKACCOUNTS": null,

"MINIMUM\_PAYMENT\_AMOUNT": null,

"OPENINGBALANCE": null

}

]

}

}

### Business rules

### Integration Specification

**Response message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Id | String |  | Format: accountNumber-accountType. | "ZW5jezU2ODk2NzExZmIyNGMzYjU1YzhkZTMzNWYyOWFiZjBkfQ" |
|  | Number | String |  | Unique identifier (per bank) for the customers account. (Not yet hashed) | "139403568" |
|  | NumberMasked | String |  | Unique identifier (per bank) for the customers account. (Masked) | "XXXXX3568" |
|  | BankID | String |  | ID of the Service Bureau this affiliate bank belongs to. | "1000" |
|  | BankName | String |  |  |  |
|  | NickName | String |  | User assigned name for account that is more ‘friendly’.  (Name of the saving book.  Default value is (“Account title 1” field on “Account” screen of T24.) | "Tài khoản thanh toán" |
|  | Type | String |  | Account type abbr.  Example: NORMALACCOUNT, VPSTAFFACCOUNT, ONLINEEASYSAVING, … | "NORMALACCOUNT" |
|  | Status | String |  | Not in use (dicefault “PENDING”) | "PENDING" |
|  | CurrencyCode | String |  | Currency type the account should use. | "VND" |
|  | TrackingID | String |  |  |  |
|  | AccountGroup | String |  | Account group | "DEPOSIT" |
|  | PrimaryAccount | String |  |  |  |
|  | CoreAccount | String |  | Flag to determine if this account is the user’s core account. Valid values are:  1: same CIF  2: different CIF | "1" |
|  | RoutingNum | String |  | Account routing number is an identification of a bank. | “660110110” |
|  | LocationID | String |  |  |  |
|  | AccountDisplayText | String |  | Name of account type + account number + amount (format: ##,###,### đ) | "Tài khoản thanh toán - 139403568 SoDu. 98,491,998,409 ₫ |
|  | PriorDayBalance | String |  | + being assigned as WorkingBalance for current account  + being assigned as principal amount for normal saving account  format : ##### (number) | "98491998409" |
|  | CurrentBalance | String |  | + being assigned as WorkingBalance for current account  + being assigned as principal amount for normal saving account  format : ##### (number) | "98491998409" |
|  | AvailableBalance | String |  | Available Balance, format : ##### (number) | "98491998409" |
|  | Favorite | String |  | true: Favorite, false: Not favorite | false |
|  | BRANCHNO | String |  | Code of branch holding the account | "VN0010106" |
|  | OPENDATE | String |  |  |  |
|  | BRANCHNAME | String |  |  |  |
|  | AVARAGEBALANCEPERMONTH | String |  |  |  |
|  | OVERDRAFTLIMIT | String |  |  |  |
|  | BALANCE | String |  |  |  |
|  | BANKNO | String |  |  |  |
|  | ACCOUNTTYPE | String |  |  |  |
|  | ACCOUNTNUMBER | String |  |  |  |
|  | CURRENCY | String |  | Account currency | "VND" |
|  | INTERESTRATE | String |  |  |  |
|  | ECOMMERCESTATUS | String |  |  |  |
|  | MATURITYDATE | String |  |  |  |
|  | ACCRUEDINTEREST | String |  |  |  |
|  | TENOR | String |  |  |  |
|  | APPROVEDAMOUNT | String |  |  |  |
|  | TERMLOAN | String |  |  |  |
|  | OUTSTANDINGAMOUNT | String |  |  |  |
|  | INTERESTFORTHISPERIOD | String |  |  |  |
|  | PRINCIPALFORTHISPERIOD | String |  |  |  |
|  | THETOTALAMOUNTDUE | String |  |  |  |
|  | NEXTPRINCIPALPAYMENTDATE | String |  |  |  |
|  | NEXTINTERESTPAYMENTDATE | String |  |  |  |
|  | THETOTALOVERDUEPAYABLEAMOUNT | String |  |  |  |
|  | OVERDUEPRINCIPAL | String |  |  |  |
|  | PENALTYINTEREST | String |  |  |  |
|  | CONTRACTNUMBER | String |  |  |  |
|  | CURRENCYTYPE | String |  |  |  |
|  | CREDITLIMIT | String |  |  |  |
|  | CARDSTATUS | String |  |  |  |
|  | CARDTYPE | String |  |  |  |
|  | OUTSTANDINGBALANCE | String |  |  |  |
|  | STATEMENTBALANCE | String |  |  |  |
|  | SUMOFOUTSTANDINGAMOUNT | String |  |  |  |
|  | BLOCKEDAMOUNT | String |  |  |  |
|  | AVAILABLEAMOUNT | String |  |  |  |
|  | CARDNUMBER | String |  |  |  |
|  | MINIMUM\_PAYMENT\_DUE | String |  |  |  |
|  | PRODUCTID | String |  |  |  |
|  | CITYNAME | String |  |  |  |
|  | CITYID | String |  |  |  |
|  | BRANCHID | String |  |  |  |
|  | ACCOUNTNAME | String |  |  |  |
|  | ACCOUNT\_STATUS | String |  | Current account (card) status.  For accoutn: ACTIVE, DORMART, INACTIVE  For Card: Card OK, Card Closed, Call Issuer, Pin Blocked, Pickup L41 | "ACTIVE" |
|  | STATEMENT\_TERM | String |  |  |  |
|  | PRODUCTNAME | String |  |  |  |
|  | STATEMENTDAY | String |  |  |  |
|  | SML\_BANK\_ID | String |  |  |  |
|  | AUTO\_INACTIVE | String |  |  |  |
|  | OWNERSHIP | String |  |  |  |
|  | ECOMNICKNAME | String |  |  |  |
|  | ACCDETAILAVAILABLEBALANCE | String |  |  |  |
|  | ACCDETAILCURRENTBALANCE | String |  |  |  |
|  | LINKACCOUNT | String |  |  |  |
|  | PISACCOUNT | String |  |  |  |
|  | ISTD6017 | String |  | true : if product code of account equal TD6017  false: if product code of account not equal TD6017 | false |
|  | ACCOUNT\_TYPE\_T24 | String |  | Account type (AC : account, Debit Card, CC: Credit card) | "AC" |
|  | CCCASHLIMIT | String |  |  |  |
|  | CCCASHFEE | String |  |  |  |
|  | CCCASHFEEMIN | String |  |  |  |
|  | CCBRANHCODE | String |  |  |  |
|  | PRIMARYACCTHOLDER | String |  |  |  |
|  | CARD\_TYPE | String |  |  |  |
|  | VALIDTHROUGH | String |  |  |  |
|  | CARDTYPENAME | String |  |  |  |
|  | CONTRACT\_STATUS | String |  |  |  |
|  | PRODUCT\_STATUS | String |  |  |  |
|  | PRODUCTCODE | String |  |  | 011001 |
|  | OVERDRAFTLIMITREF | String |  |  | 58600.20 |
|  | WORKINGBALANCE | String |  |  | 98419998409 |
|  | LINK\_ACC\_NO | String |  |  |  |
|  | ISLINKDEBITCARD | String |  |  |  |
|  | LinkedDebitCards | String |  |  |  |
|  | DCLINKACCOUNTS | String |  |  |  |
|  | MINIMUM\_PAYMENT\_AMOUNT | String |  |  |  |
|  | OPENINGBALANCE | String |  |  |  |

## GetOnlineSavingRatesBySearchCriteria Service

### Description

1. Description: Get Online Saving Rate information
2. Endpoint: cb/odata/services/onlinesavingservice/GetOnlineSavingRatesBySearchCriteria
3. Http Method: GET
4. ChannelType: Mobile
5. Accept: application/json
6. Request sample:

**{“Account\_Type\_ID”:** “7”,

**“Currency”:** “VND”,

**“Term”:** “12M”,

**“Amount”:** “100000000”

}

1. Responses sample:

{

"d": {

"results": [

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='6M',Product\_ID='6603',Product\_Code='01TD6018',Amount\_Min=1000000M,Amount\_Max=999999999999999999M)",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/OnlineSavingRates(Account\_Type\_ID=7,Currency='VND',Term='6M',Product\_ID='6603',Product\_Code='01TD6018',Amount\_Min=1000000M,Amount\_Max=999999999999999999M)",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.OnlineSavingRate"

},

"Account\_Type\_ID": 7,

"Currency": "VND",

"Product\_ID": "6603",

"Product\_Code": "01TD6018",

"Term": "6M",

"Rate": "6.5",

"Date": null,

"Amount\_Min": "1000000",

"Amount\_Max": "999999999999999999",

"TERM\_LABEL": "Tháng",

"LIST\_RATE\_PRODUCT": null,

"RateCeilingEnc": "",

"BaseRateEnc": "b5ecf9bf54a9e3c7",

"BaseRate": "6.5"

}

......

]

}

}

### Business rules

### Integration Specification

**Request message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Account\_Type\_ID | String |  | Account type id | “7” |
|  | Currency | String |  | Currency | “VND” |
|  | Term | String |  | Term | “12M” |
|  | Amount | String |  | Amount | “100000000” |

**Response message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Account\_Type\_ID | int |  | Unique identifier (per bank) for the customers account. (Hashed) | 7 |
|  | Currency | String |  |  | "VND" |
|  | Product\_ID | String |  |  | "6603" |
|  | Product\_Code | String |  |  | "01TD6018" |
|  | Term | String |  |  | "6M" |
|  | Rate |  |  |  | "6.5" |
|  | Date | String |  |  |  |
|  | Amount\_Min | String |  |  | "1000000" |
|  | Amount\_Max | String |  |  | "999999999999999999" |
|  | TERM\_LABEL | String |  |  | "Tháng" |
|  | LIST\_RATE\_PRODUCT | String |  |  |  |
|  | RateCeilingEnc | String |  |  | "" |
|  | BaseRateEnc | String |  |  | "b5ecf9bf54a9e3c7" |
|  | BaseRate | String |  |  | "6.5" |

## GetIntroducerInfo Service

Reference to **GetIntroducerInfo Service** in **Open Unsecured Overdraft.docx**.

## GetContractOverdraft Service

### Description

1. Description: Get Contract Overdraft information
2. Endpoint: cb/odata/services/overdraftservice/GetContractOverdraft?OverdraftType=%27camco\_vi\_VN.pdf%27
3. Http Method: GET
4. ChannelType: Mobile
5. Accept: application/json
6. Request sample:

{“ **OverdraftType”:”**camco\_vi\_VN.pdf”}

1. Responses sample:

{

"d": {

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/overdraftservice/GetContractOverdraftResults('camco\_vi\_VN.pdf')",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/overdraftservice/GetContractOverdraftResults('camco\_vi\_VN.pdf')",

"type": "com.sap.banking.custom.overdraft.endpoint.v1\_0.beans.GetContractOverdraftResult"

},

"OverdraftType": "camco\_vi\_VN.pdf",

"OverdraftContract": "JVBERi0xLjUNCiW1tbW1DQoxIDAgb2 ..............."

}

}

### Business Rule

### Integration Specification

**Request message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | OverdraftType | String |  |  | **”**camco\_vi\_VN.pdf” |

**Response message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | OverdraftType | String |  |  | "camco\_vi\_VN.pdf" |
|  | OverdraftContract | String |  | Contract (Hash) | "JVBERi0xLjUNCiW1tbW1DQoxIDAgb2 ..............." |

## SmartSavings?action=verify Service

### Description

1. Description: Verify Smart Saving
2. Endpoint: cb/odata/services/onlinesavingservice/SmartSavings?action=verify
3. Http Method: POST
4. ChannelType: Mobile
5. Accept: application/json
6. Request sample:

{

"\_\_metadata": {

"id": "https://10.37.17.30:8081/cb/odata/services/onlinesavingservice/SmartSavings('50154814980258200')",

"uri": "https://10.37.17.30:8081/cb/odata/services/onlinesavingservice/SmartSavings('50154814980258200')",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.SmartSaving"

},

"Id": "50154814980258200",

"CustomerId": "4288502",

"Customer": "NGUYEN VAN THANH",

"CategorySaving": "6603",

"CategoryOD": null,

"Currency": "VND",

"Dao": "1111",

"DaoName": "TRINH NGOC PHONG",

"AllInOneProduct": "01TD6018",

"Principal": "100000000",

"ValueDateSaving": "/Date(1523552400000)/",

"MaturityDateSaving": "\/Date(1562572028000)\/",

"RepayAccount": "139403568",

"RepayAccountDisplayText": null,

"SettleAccount": null,

"SettleAccountDisplayText": null,

"NominatedAccount": null,

"NominatedAccountDisplayText": null,

"InterestRate": "6.5",

"MaturityInstr": "AUTOMATIC ROLLOVER",

"MaturityInstrDisplayText": null,

"ContactNum": "0363058826",

"ContactEmail": "hoarica@gmail.com",

"Address": "51N-CU XA NGAN HANG-QUAN 7",

"ApprovalDateOD": "/Date(1523552400000)/",

"LimitAmt": "35000000",

"MaximumSecure": "80000000",

"MaximumTotal": "80000000",

"AccountNo": "139403568",

"OverdraftType": "Thau chi SavOnline",

"InterestRateOD": "9",

"InterestType": "Co dinh",

"ServiceRef": null,

"BranchID": "VN0010106",

"Passport": "089078004633",

"SavingType": null,

"Purpose": "Tiêu dùng cá nhân",

"FeeOD": null,

"PaymentMethod": null,

"PaymentMethodName": "Tự động tái tục",

"TncSaving": true,

"TncOverdraft": true,

"TncVerify": null,

"Term": "6M",

"TermDisplayText": "6 Tháng",

"Status": null,

"SavingNumber": null,

"DirectoryId": "5495",

"GlobalLimit": null,

"ProductLimit": null,

"Collateral": null,

"Collateral\_Right": null,

"TypeDetail": "OPEN",

"Description": "1001",

"ProductCodeSaving": "01TD6018",

"Cust\_Qualify\_Id": null,

"RESULTCODE": "03",

"AMOUNTMINPRODUCT": "12500000",

"CONTRACT": "camco.pdf",

"INTERESTMARGIN": "2.5",

"RATEOFBORROWING": "80",

"TOTALFINANCIAL": "30,000,000",

"OWNEREQUITY": "10,000,000",

“InterestContemplated”:"120000"

“NICKNAME”:”Vietnam Trip”,

“PROMOCODE”:”12345”

}

1. Responses sample:

{

"d": {

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/SmartSavings('50154814980258200')",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/SmartSavings('50154814980258200')",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.SmartSaving"

},

"Id": "50154814980258200",

"CustomerId": "4288502",

"Customer": "NGUYEN VAN THANH",

"CategorySaving": "6603",

"CategoryOD": null,

"Currency": "VND",

"Dao": "1111",

"DaoName": "TRINH NGOC PHONG",

"AllInOneProduct": "01TD6018",

"Principal": "100000000",

"ValueDateSaving": "/Date(1523552400000)/",

"MaturityDateSaving": "\/Date(1562572028000)\/",

"RepayAccount": "139403568",

"RepayAccountDisplayText": null,

"SettleAccount": null,

"SettleAccountDisplayText": null,

"NominatedAccount": null,

"NominatedAccountDisplayText": null,

"InterestRate": "6.5",

"MaturityInstr": "AUTOMATIC ROLLOVER",

"MaturityInstrDisplayText": null,

"ContactNum": "0363058826",

"ContactEmail": "hoarica@gmail.com",

"Address": "51N-CU XA NGAN HANG-QUAN 7",

"ApprovalDateOD": "/Date(1523552400000)/",

"LimitAmt": "35000000",

"MaximumSecure": "80000000",

"MaximumTotal": "80000000",

"AccountNo": "139403568",

"OverdraftType": "Thau chi SavOnline",

"InterestRateOD": "9.0",

"InterestType": "Co dinh",

"ServiceRef": null,

"BranchID": "VN0010106",

"Passport": "089078004633",

"SavingType": null,

"Purpose": "Tiêu dùng cá nhân",

"FeeOD": null,

"PaymentMethod": null,

"PaymentMethodName": "Tự động tái tục",

"TncSaving": null,

"TncOverdraft": null,

"TncVerify": null,

"Term": "6M",

"TermDisplayText": "6 Tháng",

"Status": null,

"SavingNumber": null,

"DirectoryId": "5495",

"GlobalLimit": null,

"ProductLimit": null,

"Collateral": null,

"Collateral\_Right": null,

"TypeDetail": "OPEN",

"Description": "1001",

"ProductCodeSaving": "01TD6018",

"Cust\_Qualify\_Id": null,

"RESULTCODE": "03",

"AMOUNTMINPRODUCT": "12500000",

"CONTRACT": "camco.pdf",

"INTERESTMARGIN": "2.5",

"RATEOFBORROWING": "80",

"TOTALFINANCIAL": "30,000,000",

"OWNEREQUITY": "10,000,000",

“InterestContemplated”:"120000"

“NICKNAME”:”VietNam Trip”,

“PROMOCODE”:”12345”

}

}

### Business rules

### Integration Specification

**Request message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Id | String |  | Unique identifier for the smartSaving session get from SmartSaving?action=init service | "50154814980258200" |
|  | CustomerId | String |  | Customer Id | “4288502” |
|  | Customer | String |  | Customer name | “NGUYEN VAN THANH” |
|  | CategorySaving | String |  | Category saving | “6603” |
|  | CategoryOD | String |  |  |  |
|  | Currency | String |  | Currency | “VND” |
|  | Dao | String |  | DAO code | “1111” |
|  | DaoName | String |  | DAO name | “TRINH NGOC PHONG” |
|  | AllInOneProduct | String |  | Product Code | “01TD6018” |
|  | Principal | String |  | Display Principal amount of saving books at that time | “100000000” |
|  | ValueDateSaving | String |  | Value of ValueDateSaving get from SmartSaving?action=init service | “/Date(1523552400000)/” |
|  | MaturityDateSaving | String |  | Get value from GetMaturidate service | "\/Date(1562572028000)\/", |
|  | RepayAccount | String |  | Repay account (source account ) | “139403568” |
|  | RepayAccountDisplayText | String |  |  |  |
|  | SettleAccount | String |  |  |  |
|  | SettleAccountDisplayText | String |  |  |  |
|  | NominatedAccount | String |  |  |  |
|  | NominatedAccountDisplayText | String |  |  |  |
|  | InterestRate | String |  | Interest rate saving | “6.5” |
|  | MaturityInstr | String |  | Maturity method | “AUTOMATIC ROLLOVER” |
|  | MaturityInstrDisplayText | String |  |  |  |
|  | ContactNum | String |  | Contact number | “0363058826” |
|  | ContactEmail | String |  | Contact email | “hoarica@gmail.com” |
|  | Address | String |  | Value get from SmartSaving?action=init service | “51N-CU XA NGAN HANG-QUAN 7” |
|  | ApprovalDateOD | String |  | Value get from SmartSaving?action=init service | “/Date(1523552400000)/” |
|  | LimitAmt | String |  | Amount lending | “35000000” |
|  | MaximumSecure | String |  | Max amount lending | “80000000” |
|  | MaximumTotal | String |  | Max amount lending | “80000000” |
|  | AccountNo | String |  | Account for disbursement | “139403568” |
|  | OverdraftType | String |  | Value get from SmartSaving?action=init service | “Thau chi SavOnline” |
|  | InterestRateOD | String |  | Interest rate overdraft | “9” |
|  | InterestType | String |  | Value get from SmartSaving?action=init service | “Co dinh” |
|  | ServiceRef | String |  |  |  |
|  | BranchID | String |  | Value get from SmartSaving?action=init service | “VN0010106” |
|  | Passport | String |  | Value get from SmartSaving?action=init service | “089078004633” |
|  | SavingType | String |  |  |  |
|  | Purpose | String |  | Purpose | “Tiêu dùng cá nhân” |
|  | FeeOD | String |  |  |  |
|  | PaymentMethod | String |  |  |  |
|  | PaymentMethodName | String |  | Paymen medthod name | “Tự động tái tục” |
|  | TncSaving | String |  |  | “true” |
|  | TncOverdraft | String |  |  | “true” |
|  | TncVerify | String |  |  |  |
|  | Term | String |  | Term selected | “6M” |
|  | TermDisplayText | String |  | Term text selected | “6 Tháng” |
|  | Status null | String |  |  |  |
|  | SavingNumber | String |  |  |  |
|  | DirectoryId | String |  | Directory ID | “5495” |
|  | GlobalLimit | String |  |  |  |
|  | ProductLimit nll | String |  |  |  |
|  | Collateral nll | String |  |  |  |
|  | Collateral\_Right | String |  |  |  |
|  | TypeDetail | String |  | Value get from SmartSaving?action=init service | “OPEN” |
|  | Description | String |  |  | “1001” |
|  | ProductCodeSaving | String |  | Product code Smart Saving | “01TD6018” |
|  | Cust\_Qualify\_Id | String |  |  |  |
|  | RESULTCODE | String |  |  | “03” |
|  | AMOUNTMINPRODUCT | String |  | Value get from SmartSaving?action=init service | “12500000” |
|  | CONTRACT | String |  | Value get from SmartSaving?action=init service | “camco.pdf” |
|  | INTERESTMARGIN | String |  | Value get from SmartSaving?action=init service | “2.5” |
|  | RATEOFBORROWING | String |  | Value get from SmartSaving?action=init service | “80” |
|  | TOTALFINANCIAL | String |  | Total money need lend | “30000000” |
|  | OWNEREQUITY | String |  | Equity capital | “10000000” |
|  | InterestContemplated | String |  | Get value from Service getInterestContemplated | “120000” |
|  | CUSTOMSAVINGNAME | String |  | Customer can enter a new name of saving boos with the max length is 35 characters | “Vietnam Trip” |
|  | PROMOCODE | String |  | Customers can enter the promotional code in order to enjoy better interest rates (if have) | “12345” |

**Response message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Id | String |  | Unique identifier for the smartSaving session get from SmartSaving?action=init service | "50154814980258200" |
|  | CustomerId | String |  | Customer Id | “4288502” |
|  | Customer | String |  | Customer name | “NGUYEN VAN THANH” |
|  | CategorySaving | String |  | Category saving | “6603” |
|  | CategoryOD | String |  |  |  |
|  | Currency | String |  | Currency | “VND” |
|  | Dao | String |  | DAO code | “1111” |
|  | DaoName | String |  | DAO name | “TRINH NGOC PHONG” |
|  | AllInOneProduct | String |  | Product Code | “01TD6018” |
|  | Principal | String |  | Display Principal amount of saving books at that time | “100000000” |
|  | ValueDateSaving | String |  | Value of ValueDateSaving get from SmartSaving?action=init service | “/Date(1523552400000)/” |
|  | MaturityDateSaving | String |  | Get value from GetMaturidate service | "\/Date(1562572028000)\/", |
|  | RepayAccount | String |  | Repay account (source account ) | “139403568” |
|  | RepayAccountDisplayText | String |  |  |  |
|  | SettleAccount | String |  |  |  |
|  | SettleAccountDisplayText | String |  |  |  |
|  | NominatedAccount | String |  |  |  |
|  | NominatedAccountDisplayText | String |  |  |  |
|  | InterestRate | String |  | Interest rate saving | “6.5” |
|  | MaturityInstr | String |  | Maturity method | “AUTOMATIC ROLLOVER” |
|  | MaturityInstrDisplayText | String |  |  |  |
|  | ContactNum | String |  | Contact number | “0363058826” |
|  | ContactEmail | String |  | Contact email | “hoarica@gmail.com” |
|  | Address | String |  | Value get from SmartSaving?action=init service | “51N-CU XA NGAN HANG-QUAN 7” |
|  | ApprovalDateOD | String |  | Value get from SmartSaving?action=init service | “/Date(1523552400000)/” |
|  | LimitAmt | String |  | Amount lending | “35000000” |
|  | MaximumSecure | String |  | Max amount lending | “80000000” |
|  | MaximumTotal | String |  | Max amount lending | “80000000” |
|  | AccountNo | String |  | Account for disbursement | “139403568” |
|  | OverdraftType | String |  | Value get from SmartSaving?action=init service | “Thau chi SavOnline” |
|  | InterestRateOD | String |  | Interest rate overdraft | “9” |
|  | InterestType | String |  | Value get from SmartSaving?action=init service | “Co dinh” |
|  | ServiceRef | String |  |  |  |
|  | BranchID | String |  | Value get from SmartSaving?action=init service | “VN0010106” |
|  | Passport | String |  | Value get from SmartSaving?action=init service | “089078004633” |
|  | SavingType | String |  |  |  |
|  | Purpose | String |  | Purpose | “Tiêu dùng cá nhân” |
|  | FeeOD | String |  | Free to open SmartCombo |  |
|  | PaymentMethod | String |  |  |  |
|  | PaymentMethodName | String |  | Paymen medthod name | “Tự động tái tục” |
|  | TncSaving | String |  |  | “true” |
|  | TncOverdraft | String |  |  | “true” |
|  | TncVerify | String |  |  |  |
|  | Term | String |  | Term selected | “6M” |
|  | TermDisplayText | String |  | Term text selected | “6 Tháng” |
|  | Status null | String |  |  |  |
|  | SavingNumber | String |  |  |  |
|  | DirectoryId | String |  | Directory ID | “5495” |
|  | GlobalLimit | String |  |  |  |
|  | ProductLimit nll | String |  |  |  |
|  | Collateral nll | String |  |  |  |
|  | Collateral\_Right | String |  |  |  |
|  | TypeDetail | String |  | Value get from SmartSaving?action=init service | “OPEN” |
|  | Description | String |  |  | “1001” |
|  | ProductCodeSaving | String |  | Product code Smart Saving | “01TD6018” |
|  | Cust\_Qualify\_Id | String |  |  |  |
|  | RESULTCODE | String |  |  | “03” |
|  | AMOUNTMINPRODUCT | String |  | Value get from SmartSaving?action=init service | “12500000” |
|  | CONTRACT | String |  | Value get from SmartSaving?action=init service | “camco.pdf” |
|  | INTERESTMARGIN | String |  | Value get from SmartSaving?action=init service | “2.5” |
|  | RATEOFBORROWING | String |  | Value get from SmartSaving?action=init service | “80” |
|  | TOTALFINANCIAL | String |  | Total money need lend | “30000000” |
|  | OWNEREQUITY | String |  | Equity capital | “10000000” |
|  | InterestContemplated | String |  | Get value from Service getInterestContemplated | “120000” |
|  | CUSTOMSAVINGNAME | String |  | Customer can enter a new name of saving boos with the max length is 35 characters | “Vietnam Trip” |
|  | PROMOCODE | String |  | Customers can enter the promotional code in order to enjoy better interest rates (if have) | “12345” |

## MultifactorInfos Service

### Description

1. Description: Get Multifactor information
2. Endpoint: cb/odata/services/authenticationservice/MultifactorInfos
3. Http Method: GET
4. ChannelType: Mobile
5. Accept: application/json
6. Request sample:
7. Response sample:

{

"d": {

"results": [

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/authenticationservice/MultifactorInfos('FFIHASH02GxJWszkwfSWkwybedvAV5UfOGnkAq4RbHrLmoSR0A%3D')",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/authenticationservice/MultifactorInfos('FFIHASH02GxJWszkwfSWkwybedvAV5UfOGnkAq4RbHrLmoSR0A%3D')",

"type": "com.sap.banking.authentication.endpoint.v1\_0.beans.MultifactorInfo"

},

"Challenge": null,

"Id": "FFIHASH02GxJWszkwfSWkwybedvAV5UfOGnkAq4RbHrLmoSR0A=",

"Response": null,

"RECEIVER": null,

"Type": 5

}

]

}

}

### Business rules

### Integration Specification

**Response message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Challenge | String |  |  |  |
|  | Id | String |  |  | “FFIHASH02GxJWszkwfSWkwybedvAV5UfOGnkAq4RbHrLmoSR0A” |
|  | Response | String |  |  |  |
|  | RECEIVER | String |  |  |  |
|  | Type | String |  |  | 5 |

## SecureUsers?action=authenticateMFA Service

### Description

1. Description: authenticate OTP
2. Endpoint: /cb/odata/services/authenticationservice/SecureUsers?action=authenticateMFA
3. Http Method: POST
4. ChannelType: Mobile
5. Accept: application/json
6. Request sample:

{

"MultifactorInfo": [

{

"\_\_metadata": {

"id": "https:// s149.online.vpbank.com.vn:8080/cb/odata/services/authenticationservice/MultifactorInfos('FFIHASH02GxJWszkwfSWkwybedvAV5UfOGnkAq4RbHrLmoSR0A%3D')",

"uri": "https:// s149.online.vpbank.com.vn:8080/cb/odata/services/authenticationservice/MultifactorInfos('FFIHASH02GxJWszkwfSWkwybedvAV5UfOGnkAq4RbHrLmoSR0A%3D')",

"type": "com.sap.banking.authentication.endpoint.v1\_0.beans.MultifactorInfo"

},

"Challenge": null,

"Id": "FFIHASH02GxJWszkwfSWkwybedvAV5UfOGnkAq4RbHrLmoSR0A=",

"Response": "869953",

"RECEIVER": null,

"Type": 5

}

]

}

1. Responses sample:

{

"d": {

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/authenticationservice/SecureUsers('4288502')",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/authenticationservice/SecureUsers('4288502')",

"type": "com.sap.banking.common.endpoint.v1\_0.beans.SecureUser"

},

"AffiliateID": "1",

"AppType": "Consumers",

"BankID": "1000",

"BaseCurrency": "VND",

"BusinessCIF": null,

"BusinessCustId": null,

"BusinessID": 0,

"BusinessName": null,

"ChannelType": "Mobile",

"CurrentMfaType": "1",

"EntitlementID": 11359,

"Id": "4288502",

"NeedToAcceptTerms": false,

"CarrierTermsAccepted": true,

"Password": "FFIHASHZG7Auis8be6Ha5aBue530HP3BEtrGO9jLW9KZJypw1I=",

"TokenID": null,

"LoginType": null,

"UserProfileID": "ZW5jezQ4MThiN2NlOTNiMjIyN2F9",

"ProfileID": 0,

"SmallBusinessUser": false,

"UserLocale": {

"\_\_metadata": {

"type": "com.sap.banking.common.endpoint.v1\_0.beans.UserLocale"

},

"Country": "VN",

"DateFormat": "MM/dd/yyyy",

"DateFormatName": "MM/dd/yyyy",

"DateTimeFormat": "MM/dd/yyyy/H:mm",

"DateTimeFormatName": "MM/dd/yyyy/H:mm",

"Language": "vi",

"Locale": "vi\_VN",

"LocaleName": null,

"TimeFormat": "H:mm",

"TimeFormatName": "H:mm",

"ZoneFormat": "z",

"ZoneFormatName": null

},

"UserName": "thanhnv",

"UserType": 1,

"BPWFIID": "1000",

"DeviceId": null,

"MacId": null,

"AUTHENTICATE": null,

"MultifactorInfo": {

"\_\_deferred": {

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/authenticationservice/SecureUsers('4288502')/MultifactorInfo"

}

}

}

}

### Business rules

### Integration Specification

## SmartSavings?action=confirm Service

### Description

1. Description: Confirm Smart Saving
2. Endpoint: cb/odata/services/onlinesavingservice/SmartSavings?action=confirm
3. Http Method: GET
4. ChannelType: Mobile
5. Accept: application/json
6. Request body sample:

{

"\_\_metadata": {

"id": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/SmartSavings('50154815103238100')",

"uri": "https://s149.online.vpbank.com.vn:8080/cb/odata/services/onlinesavingservice/SmartSavings('50154815103238100')",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.SmartSaving"

},

"Id": "50154815103238100",

"CustomerId": "4288502",

"Customer": "NGUYEN VAN THANH",

"CategorySaving": "6603",

"CategoryOD": null,

"Currency": "VND",

"Dao": "1111",

"DaoName": "TRINH NGOC PHONG",

"AllInOneProduct": "01TD6018",

"Principal": "100000000",

"ValueDateSaving": "/Date(1523552400000)/",

"MaturityDateSaving": null,

"RepayAccount": "139403568",

"RepayAccountDisplayText": null,

"SettleAccount": null,

"SettleAccountDisplayText": null,

"NominatedAccount": null,

"NominatedAccountDisplayText": null,

"InterestRate": "6.5",

"MaturityInstr": "AUTOMATIC ROLLOVER",

"MaturityInstrDisplayText": null,

"ContactNum": "0363058826",

"ContactEmail": "hoarica@gmail.com",

"Address": "51N-CU XA NGAN HANG-QUAN 7",

"ApprovalDateOD": "/Date(1523552400000)/",

"LimitAmt": "20000000",

"MaximumSecure": "80000000",

"MaximumTotal": "80000000",

"AccountNo": "139403568",

"OverdraftType": "Thau chi SavOnline",

"InterestRateOD": "9.0",

"InterestType": "Co dinh",

"ServiceRef": null,

"BranchID": "VN0010106",

"Passport": "089078004633",

"SavingType": null,

"Purpose": "Tiêu dùng cá nhân",

"FeeOD": null,

"PaymentMethod": null,

"PaymentMethodName": "Tự động tái tục",

"TncSaving": null,

"TncOverdraft": null,

"TncVerify": null,

"Term": "6M",

"TermDisplayText": "6 Tháng",

"Status": null,

"SavingNumber": null,

"DirectoryId": "5495",

"GlobalLimit": null,

"ProductLimit": null,

"Collateral": null,

"Collateral\_Right": null,

"TypeDetail": "OPEN",

"Description": "1001",

"ProductCodeSaving": "01TD6018",

"Cust\_Qualify\_Id": null,

"RESULTCODE": "03",

"AMOUNTMINPRODUCT": "12500000",

"CONTRACT": "camco.pdf",

"INTERESTMARGIN": "2.5",

"RATEOFBORROWING": "80",

"TOTALFINANCIAL": "30,000,000",

"OWNEREQUITY": "10,000,000”,

“InterestContemplated”:"120000"

“NICKNAME”:”Vietnam Trip”,

“PROMOCODE”:”12345”

}

1. Response body message:

{

"d": {

"\_\_metadata": {

"id": "https://10.37.17.30:8081/cb/odata/services/onlinesavingservice/SmartSavings('50154815103238100')",

"uri": "https://10.37.17.30:8081/cb/odata/services/onlinesavingservice/SmartSavings('50154815103238100')",

"type": "com.sap.banking.custom.onlinesaving.endpoint.v1\_0.beans.SmartSaving"

},

"Id": "50154815103238100",

"CustomerId": "4288502",

"Customer": "NGUYEN VAN THANH",

"CategorySaving": "6603",

"CategoryOD": null,

"Currency": "VND",

"Dao": "1111",

"DaoName": "TRINH NGOC PHONG",

"AllInOneProduct": "01TD6018",

"Principal": "100000000",

"ValueDateSaving": "/Date(1523552400000)/",

"MaturityDateSaving": null,

"RepayAccount": "139403568",

"RepayAccountDisplayText": null,

"SettleAccount": null,

"SettleAccountDisplayText": null,

"NominatedAccount": null,

"NominatedAccountDisplayText": null,

"InterestRate": "6.5",

"MaturityInstr": "AUTOMATIC ROLLOVER",

"MaturityInstrDisplayText": null,

"ContactNum": "0363058826",

"ContactEmail": "hoarica@gmail.com",

"Address": "51N-CU XA NGAN HANG-QUAN 7",

"ApprovalDateOD": "/Date(1523552400000)/",

"LimitAmt": "20000000",

"MaximumSecure": "80000000",

"MaximumTotal": "80000000",

"AccountNo": "139403568",

"OverdraftType": "Thau chi SavOnline",

"InterestRateOD": "9.0",

"InterestType": "Co dinh",

"ServiceRef": null,

"BranchID": "VN0010106",

"Passport": "089078004633",

"SavingType": null,

"Purpose": "Tiêu dùng cá nhân",

"FeeOD": null,

"PaymentMethod": null,

"PaymentMethodName": "Tự động tái tục",

"TncSaving": null,

"TncOverdraft": null,

"TncVerify": null,

"Term": "6M",

"TermDisplayText": "6 Tháng",

"Status": "4",

"SavingNumber": null,

"DirectoryId": "5495",

"GlobalLimit": null,

"ProductLimit": null,

"Collateral": null,

"Collateral\_Right": null,

"TypeDetail": "OPEN",

"Description": "1001",

"ProductCodeSaving": "01TD6018",

"Cust\_Qualify\_Id": null,

"RESULTCODE": "03",

"AMOUNTMINPRODUCT": "12500000",

"CONTRACT": "camco.pdf",

"INTERESTMARGIN": "2.5",

"RATEOFBORROWING": "80",

"TOTALFINANCIAL": "30,000,000",

"OWNEREQUITY": "10,000,000",

“InterestContemplated”:"120000"

“NICKNAME”:”Vietnam Trip”,

“PROMOCODE”:”12345”

}

}

### Business rules

### Integration Specification

**Request message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Id | String |  | Unique identifier (per bank) for the customers account | "50154814980258200" |
|  | CustomerId | String |  | Customer Id | “4288502” |
|  | Customer | String |  | Customer name | “NGUYEN VAN THANH” |
|  | CategorySaving | String |  | Category saving | “6603” |
|  | CategoryOD | String |  |  |  |
|  | Currency | String |  | Currency | “VND” |
|  | Dao | String |  | DAO code | “1111” |
|  | DaoName | String |  | DAO name | “TRINH NGOC PHONG” |
|  | AllInOneProduct | String |  |  | “01TD6018” |
|  | Principal | String |  | Display Principal amount of saving books at that time | “100000000” |
|  | ValueDateSaving | String |  |  | “/Date(1523552400000)/” |
|  | MaturityDateSaving | String |  |  |  |
|  | RepayAccount | String |  |  | “139403568” |
|  | RepayAccountDisplayText | String |  |  |  |
|  | SettleAccount | String |  |  |  |
|  | SettleAccountDisplayText | String |  |  |  |
|  | NominatedAccount | String |  |  |  |
|  | NominatedAccountDisplayText | String |  |  |  |
|  | InterestRate | String |  |  | “6.5” |
|  | MaturityInstr | String |  |  | “AUTOMATIC ROLLOVER” |
|  | MaturityInstrDisplayText | String |  |  |  |
|  | ContactNum | String |  |  | “0363058826” |
|  | ContactEmail | String |  |  | “hoarica@gmail.com” |
|  | Address | String |  |  | “51N-CU XA NGAN HANG-QUAN 7” |
|  | ApprovalDateOD | String |  |  | “/Date(1523552400000)/” |
|  | LimitAmt | String |  |  | “35000000” |
|  | MaximumSecure | String |  |  | “80000000” |
|  | MaximumTotal | String |  |  | “80000000” |
|  | AccountNo | String |  |  | “139403568” |
|  | OverdraftType | String |  |  | “Thau chi SavOnline” |
|  | InterestRateOD | String |  |  | “9” |
|  | InterestType | String |  |  | “Co dinh” |
|  | ServiceRef | String |  |  |  |
|  | BranchID | String |  |  | “VN0010106” |
|  | Passport | String |  |  | “089078004633” |
|  | SavingType | String |  |  |  |
|  | Purpose | String |  |  | “Tiêu dùng cá nhân” |
|  | FeeOD | String |  |  |  |
|  | PaymentMethod | String |  |  |  |
|  | PaymentMethodName | String |  |  | “Tự động tái tục” |
|  | TncSaving | String |  |  | “true” |
|  | TncOverdraft | String |  |  | “true” |
|  | TncVerify | String |  |  |  |
|  | Term | String |  |  | “6M” |
|  | TermDisplayText | String |  |  | “6 Tháng” |
|  | Status null | String |  |  |  |
|  | SavingNumber | String |  |  |  |
|  | DirectoryId | String |  |  | “5495” |
|  | GlobalLimit | String |  |  |  |
|  | ProductLimit nll | String |  |  |  |
|  | Collateral nll | String |  |  |  |
|  | Collateral\_Right | String |  |  |  |
|  | TypeDetail | String |  |  | “OPEN” |
|  | Description | String |  |  | “1001” |
|  | ProductCodeSaving | String |  |  | “01TD6018” |
|  | Cust\_Qualify\_Id | String |  |  |  |
|  | RESULTCODE | String |  |  | “03” |
|  | AMOUNTMINPRODUCT | String |  |  | “12500000” |
|  | CONTRACT | String |  |  | “camco.pdf” |
|  | INTERESTMARGIN | String |  |  | “2.5” |
|  | RATEOFBORROWING | String |  |  | “80” |
|  | TOTALFINANCIAL | String |  |  | “30000000” |
|  | OWNEREQUITY | String |  |  | “10000000” |
|  | InterestContemplated | String |  | Get value from Service getInterestContemplated | “120000” |
|  | CUSTOMSAVINGNAME | String |  | Customer can enter a new name of saving boos with the max length is 35 characters | “Vietnam Trip” |
|  | PROMOCODE | String |  | Customers can enter the promotional code in order to enjoy better interest rates (if have) | “12345” |

**Response message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Id | String |  | Unique identifier (per bank) for the customers account | "50154814980258200" |
|  | CustomerId | String |  | Customer Id | “4288502” |
|  | Customer | String |  | Customer name | “NGUYEN VAN THANH” |
|  | CategorySaving | String |  | Category saving | “6603” |
|  | CategoryOD | String |  |  |  |
|  | Currency | String |  | Currency | “VND” |
|  | Dao | String |  | DAO code | “1111” |
|  | DaoName | String |  | DAO name | “TRINH NGOC PHONG” |
|  | AllInOneProduct | String |  |  | “01TD6018” |
|  | Principal | String |  | Display Principal amount of saving books at that time | “100000000” |
|  | ValueDateSaving | String |  |  | “/Date(1523552400000)/” |
|  | MaturityDateSaving | String |  |  |  |
|  | RepayAccount | String |  |  | “139403568” |
|  | RepayAccountDisplayText | String |  |  |  |
|  | SettleAccount | String |  |  |  |
|  | SettleAccountDisplayText | String |  |  |  |
|  | NominatedAccount | String |  |  |  |
|  | NominatedAccountDisplayText | String |  |  |  |
|  | InterestRate | String |  |  | “6.5” |
|  | MaturityInstr | String |  |  | “AUTOMATIC ROLLOVER” |
|  | MaturityInstrDisplayText | String |  |  |  |
|  | ContactNum | String |  |  | “0363058826” |
|  | ContactEmail | String |  |  | “hoarica@gmail.com” |
|  | Address | String |  |  | “51N-CU XA NGAN HANG-QUAN 7” |
|  | ApprovalDateOD | String |  |  | “/Date(1523552400000)/” |
|  | LimitAmt | String |  |  | “35000000” |
|  | MaximumSecure | String |  |  | “80000000” |
|  | MaximumTotal | String |  |  | “80000000” |
|  | AccountNo | String |  |  | “139403568” |
|  | OverdraftType | String |  |  | “Thau chi SavOnline” |
|  | InterestRateOD | String |  |  | “9” |
|  | InterestType | String |  |  | “Co dinh” |
|  | ServiceRef | String |  |  |  |
|  | BranchID | String |  |  | “VN0010106” |
|  | Passport | String |  |  | “089078004633” |
|  | SavingType | String |  |  |  |
|  | Purpose | String |  |  | “Tiêu dùng cá nhân” |
|  | FeeOD | String |  |  |  |
|  | PaymentMethod | String |  |  |  |
|  | PaymentMethodName | String |  |  | “Tự động tái tục” |
|  | TncSaving | String |  |  | “true” |
|  | TncOverdraft | String |  |  | “true” |
|  | TncVerify | String |  |  |  |
|  | Term | String |  |  | “6M” |
|  | TermDisplayText | String |  |  | “6 Tháng” |
|  | Status null | String |  |  |  |
|  | SavingNumber | String |  |  |  |
|  | DirectoryId | String |  |  | “5495” |
|  | GlobalLimit | String |  |  |  |
|  | ProductLimit nll | String |  |  |  |
|  | Collateral nll | String |  |  |  |
|  | Collateral\_Right | String |  |  |  |
|  | TypeDetail | String |  |  | “OPEN” |
|  | Description | String |  |  | “1001” |
|  | ProductCodeSaving | String |  |  | “01TD6018” |
|  | Cust\_Qualify\_Id | String |  |  |  |
|  | RESULTCODE | String |  |  | “03” |
|  | AMOUNTMINPRODUCT | String |  |  | “12500000” |
|  | CONTRACT | String |  |  | “camco.pdf” |
|  | INTERESTMARGIN | String |  |  | “2.5” |
|  | RATEOFBORROWING | String |  |  | “80” |
|  | TOTALFINANCIAL | String |  |  | “30000000” |
|  | OWNEREQUITY | String |  |  | “10000000” |
|  | InterestContemplated | String |  | Get value from Service getInterestContemplated | “120000” |
|  | CUSTOMSAVINGNAME | String |  | Customer can enter a new name of saving boos with the max length is 35 characters | “Vietnam Trip” |
|  | PROMOCODE | String |  | Customers can enter the promotional code in order to enjoy better interest rates (if have) | “12345” |

## GetMaturityDate Service

Reference  **1.5. GetMaturityDate Service** in **Open Secured Overdraft.docx**.

## GetMaxRateAndTermOnlineSaving Service

### Description

1. Description: get max rate of Online saving product and term correspond
2. Endpoint: cb/odata/services/onlinesavingservice/ GetMaxRateAndTermOnlineSaving?SavingProductCode=SAVING\_PRODUCT\_CODE’&Currency=CURRENCY&AppliedDate=’APPLIED\_DATE'&BranchId='BRANCH\_ID'
3. Http Method: GET
4. ChannelType: Mobile
5. Accept: application/json
6. Request body sample: cb/odata/services/onlinesavingservice/ GetMaxRateAndTermOnlineSaving?SavingProductCode='TD6018'&Currency='VND'&AppliedDate='2018-01-01'&BranchId='VN0010106'
7. Response body message:

{

"d": {

"Rate": "6.3",

"Term": "36M"

}

}

### Business rules

### Integration Specification

**Request message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | SavingProductCode | String |  | Saving Product Code | "TD6018" |
|  | Currency | String |  | Currency | “VND” |
|  | AppliedDate | String |  | Applied date | “2018-01-01” |
|  | BranchId | String |  | Branch Id | “VN0010106” |
|  | CategoryOD | String |  |  |  |
|  | Currency | String |  | Currency | “VND” |
|  | Dao | String |  | DAO code | “1111” |

**Response message:**

| **No.** | **NAME** | **TYPE** | **REQ** | **DESCRIPTION** | **REMARKS** |
| --- | --- | --- | --- | --- | --- |
|  | Rate | String |  | Max Rate | "6.3" |
|  | Term | String |  | Max Term corresponds to max Rate | “36M” |

# 2. Sequence

Call APIs from the api list above (based on Number Order)

### Open Saving Screen

Call 1.2, Call 1.3, Call 1.4 ->Call 1.15,Call 1.5, Call 1.6 -> Call 1.7

### Saving configurations Screen

Call 1.5, Call 1.6 -> Call 1.7

Choose term Call 1.14 GetMaturityDate Service

### Product Introduction Screen

Call 1.9

### Overdraft configurations Screeen

Call 1.8 -> Call 1.11

### Confirmation Screen

Call 1.10

### Success Screen

Call 1.13 -> Input OTP Call 1.12->Call 1.13