



Mobile Money Payment API Documentation

Version : **S0F50**
Date : 07-Janv-23
FALL Awa

--

Diffusion		
controlle		2
d internal		1
external	x	0

Table des matières

1	Service Providers access to Bizao APIs.....	4
2	<mobilemoney> API.....	6
2.1	Principles.....	6
2.2	Description	6
2.2.1	“mobilemoney” API query syntax	6
2.2.2	“mobilemoney” API response.....	8
2.3	Notification flow.....	9
3	“getstatus” API.....	11
3.1	Principales	11
3.2	Description	11
3.2.1	“getstatus” API query syntax :	11
3.2.2	Getstatus API response	11
4	Payment status	13
5	Available Country and Operator	14
6	Bizao payment API common error code.....	15

Document update log

Date	Authors	Scope updated/add
10-Sept 2019	AIT IKHLEF Mohamed	Doc creation
14-oct 2019	AIT IKHLEF Mohamed	Orange Money Web payment page workflow & Set the countrycode to alpha-2 code instead of alpha-3 code (“CI” instead of “CIV” for Ivory Coast for example
29-Oct 2019	AIT IKHLEF Mohamed	Add the OCI & OSN configuration

14-Avril 2020	AIT IKHLEF Mohamed	Add multi-Channel, multi-MNO flow Add the new Northbound call format
14-Avril 2020	AIT IKHLEF Mohamed	Add OBF, Moov and Free configuration

13-Mai 2020	AIT IKHLEF Mohamed	SOF4.2: Update the context of <getstatus> API the new context is : <mobilemoney/v1/getstatus>
20-Oct- 2020	Awa FALL	Update GetStatus URL API
04-02- 2021	Salif KA	notif_url enlevé de la body
25-02- 2021	Salif KA	Notification Update: A new field is added on the notification and the getstatus
29/03/20 21	Salif K A	Update the acces token url
03/09/20 21	Salif KA	<ul style="list-style-type: none"> • Ajout MSISDN sur la requête nord et sur la réponse du getStatus • Changement du endpoint du getStatus: https://api.bizao.com/mobilemoney/v1/getStatus/{orderid}
07/12/202 1	Awa FALL	Revue de la documentation
28/07/20 22	Salif KA	<ul style="list-style-type: none"> • Ajout wave SN • Ajout liste de nouveaux statuts
25/01/2023	Awa FALL	Revue de la documentation
28/03/2023	Samba Lo	Addition of operators on the DRC (orange, afrimoney, mpesa, airtel)

1 Service Providers access to Bizao APIs

Bizao gateway gives you access to a large panel of services through REST APIs. Mobile Money is one of these services.

This service is based on a <mobilemoney> northbound API that aggregates and covers **multiple countries, operators, and payment channels**.

Right now, our <mobilemoney> API manages the payment channels below:

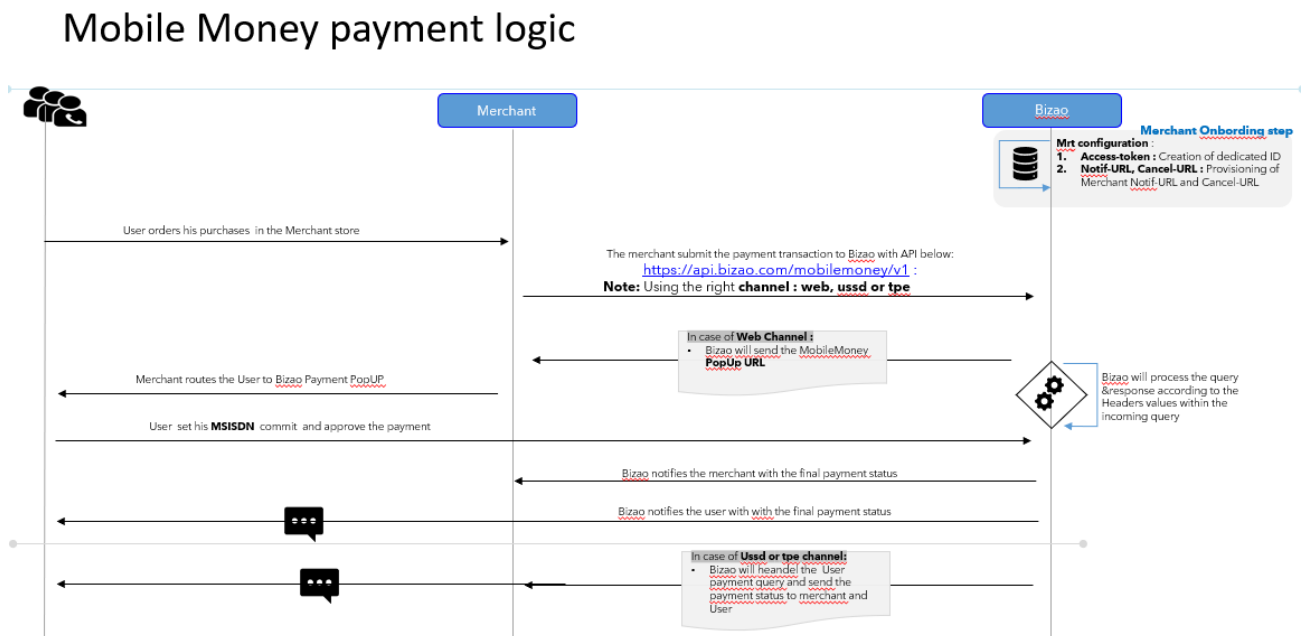
- **Web:** channel dedicated to all payment traffic using our PopUp UI
- **TPE:** channel dedicated to all payment traffic coming from integrated merchant-TPE devices.
- **USSD:** channel dedicated to all payment traffic coming from USSD channel

This API lets you target the right **country, operator, and channel** by using the dedicated Header for that.

To grant access to the service, our Integration team will onboard you on this service/API and send you your dedicate credentials/access-Token.

So far, only Orange Money **web**-payment page is available for testing via a sandbox. You can start your implementation based on this Sandbox.

Below diagram call flow:



Please note that is necessary to book a slot for an end-to-end test on our Preprod Environment.

Our Integration team is reachable : integration@bizao.com

Once your integration finished, BIZAO will generate your production access and our support team support@bizao.com will take the over.

Your ACCESS_TOKEN

The ACCESS_TOKEN is generated and must be present in the header of all your calls to our APIs.

Sample of ACCESS_TOKEN:

"4qa1bae4-3f9b-346-9f8b-c0e4d4ef"

You will find more information about how to generate and how to use your ACCESS_TOKEN here: [https://dev.bizao.com/#/get access token](https://dev.bizao.com/#/get_access_token)

2 <mobilemoney> API

2.1 Principles

This API allows you to create payment transaction on Bizao Hub based on the information provided in your request.

This API manages three categories of parameters:

- **Headers:** contains information letting Bizao to route your traffic by : *country*, *operator* and *channel* targeted.
- **Body-parameters:** contains detail on your payment transaction: *order-id*, *amount*, *currency*, ...
- **Static-parameters:** this category of parameter cover all parameter that are static per merchant for all its payment traffic (*Notification-URL*,...). These parameters will be provisioned in Bizao Hub (in SignUP step) per Merchant and will be used by Bizao-Hub in the payment traffic.

2.2 Description

Bizao <mobilemoney> is a one-time API. Below the syntax and description:

- **Api-name:** "mobilemoney/v1"
- **Based URL PREPROD:** <https://preproduction-gateway.bizao.com>
- **Based URL PROD:** <https://api.bizao.com>
- **Method:** POST

To call the "mobilemoney" service, below is the syntax:

PREPROD : <https://preproduction-gateway.bizao.com/mobilemoney/v1>

PROD : <https://api.bizao.com/mobilemoney/v1>

2.2.1 "mobilemoney" API query syntax

Your query will contain the following Headers:

Header	Description/Content	Usage
Authorization	YOUR_ACCESS_TOKEN	Mandatory
mno-name	(string) the name of the operator. example : orange, mtn. Bizao will update you regarding the new mno set in the hub	Mandatory
country-code	(string)2 characters code of the country. Use this norme : ISO 3166 alpha 2 country code, url to get the all country-code list: https://www.iban.com/country-codes (for instance : <ci> is the country-code for ivory Coast.	Mandatory
channel	The type of targeted channel using one of keyword: <web>: to target the Bizao payment PopUp <tpe>: to target the Bizao TPE payment flow <Ussd>: to target the Bizao USSD payment flow	Mandatory

lang	the abbreviation in 2 characters of targeted language for the PopUp, In ISO 639 (alpha-2) format	Mandatory
content-type	application/json	Mandatory

The body of your query will manage parameters below:

Parameter name	Description	Usage
currency	(string) currency identifier as defined in [ISO4217]. you can use this site to know the currency-code by country: https://fr.iban.com/currency-codes.html	Mandatory
order_id	(string) unique identifier of the payment request. IT MUST BE UNIQUE FOR THE SYSTEM and must follow the following format: "MyMerchantNameID" where: ID : is a unique number identifier of transaction PS: special characters should be avoided, order_id should contain only letters and numbers.	Mandatory 30 char max
amount	(decimal) amount to be charged.	Mandatory
return_url	The URL of the web site where the customer returns when the payment is completed	Mandatory
cancel_url	The URL of the web site where the customer returns when the payment is canceled by the customer	Mandatory
reference	Reference to the Merchant Name.	Mandatory 30 char max
user_msisdn	The MSISDN of the User/purchaser. To use only in : TPE and USSD channels.	Optional in case of WEB channel
otp_code	When applicable, the OTP Code is the one generated by the User to approve the transaction. To use only in : TPE and USSD channels	Optional / Mandatory based on the operator
state	Parameter up to merchant to set within any value he wants to keep over all payment transaction processing. This field must be in Encoded-URL (Bizao do not alternate/update this value and send it back within payment response/notification)	Mandatory

Payment query sample:

Note: for each new payment-query you have to provide a new value for "order_id" Parameter.

```
curl --location --request POST 'https://preproduction-gateway.bizao.com/mobilemoney/v1' \
--header 'Authorization: Bearer Token' \
--header 'country-code: sn' \
--header 'mno-name: orange' \
--header 'lang: fr' \
--header 'channel: web' \
--header 'Content-Type: application/json' \
--data-raw '{
  "currency": "XOF",
  "order_id": "MerchantOrderid4",
  "amount": 10,
  "state": "param1%3Dvalue1%26param2%3Dvalue2",
  "return_url": "https://callback.bizao.com/MM/return.html",
  "cancel_url": "https://callback.bizao.com/MM/return.html",
  "reference": "Your-reference",
  "user_msisdn": "":: it's optional
}'
```

2.2.2 "mobilemoney" API response

Bizao "mobilemoney" payment API will response in Json format.

This Json format/response has two different body according to targeted payment channel:

- **<web>** channel:

In case the merchant targets the **<web>** channel, the payment API will send/response with the URL of Bizao PopUP as below

Success query response sample

```
Content-Type: application/json
{
  "status": 201,
  "message": "OK",
  "pay_token": "v1sqjbl4cahdoonenvedipechroz9yz1agvhxoxblnvyl2kngd4dcua4qyyma2kk",
  "payment_url": "https://webpayment.orange-money.com/ci/mpayment/abstract/v1sqjbl4cahdoonenvedipechroz9yz1agvhxoxblnvyl2kngd4dcua4qyyma2kk",
  "notif_token": "ibcukkp2mgmahli4qgpig0w0hmhwbgi",
  "state": "param1%3Dvalue1%26param2%3Dvalue2",
  "user_msisdn": ""
```



```
}
```

- **pay_token**: uniquely identifies the payment page/PopUp.
- **payment_url** : URL of the Bizao PopUp payment where the user will process the payment (to display in the User device)

- **<ussd & tpe> channel**:

In case the channel is one of value: **<ussd>** or **<tpe>**. The Bizao Hub response will be json format/content below:

```
{
  "meta": {
    "type": "payment",
    "source": "orange"
    "channel": "tpe"
  }
  {
    "status": "pending",
    "amount": "xxxxxx",
    "order-id": "xxxxxx",
    "currency": "xxxxx",
    "reference": "xxxx",
    "country-code": "xxxxx",
    "state": "xxxxxxxxxxxx",
    "user_msisdn": "22575338226 ",
    "otp_code": "123467",
    "intTransaction-id": "1601372072771",
    "extTransaction-id": "MP200929.0935.A64320"
  }
}
```

2.3 Notification flow

Bizao "mobilemoney" API also manages a Notification flow. For each user payment transaction, Bizao makes two type of notification:

- **B2C-Notif**: this category of notification is for the User/purchaser. For each successful payment, Bizao will send him a SMS. The format and wording of this SMS message depends on the Southbound/operator backend that Bizao uses.
- **B2B-Notif**: this category of notification is for the merchant backend. For each payment transaction, Bizao will notify the merchant backend (using the merchant-Callback) with the final status of the payment transaction.

Note: In case of timeout or any technical issues, "getStatus" API is another alternative to get the transaction details.

Below a sample of notification content:

```
{
  "meta": {
    "type": "payment-notif",
    "source": "orange",
    "channel": "web"
  }
  {
    "status" : "successful",
    "amount" : "xxxxxx",
    "order-id" : "xxxxxx",
    "currency": "xxxxx",
    "reference" : "xxxx",
    "date": "2022-01-24 15:25:11.0",
    "country-code": "xxxxx",
    "state": "xxxxxxxxxxxx",
    "user_msisdn": "075338226 ",
    "intTransaction-id": "1601372072771",
    "extTransaction-id ": "MP200929.0935.A64320",
    "statusDescription": ""
  }
}
```

3 “getstatus” API

3.1 Principales

The merchant can check any transaction details via the “getStatus” service.
“getStatus” API

3.2 Description

Bizao <getStatus> is a one-time API. Below syntax and description

- **Api-name:** “mobilemoney/v1/getStatus/”
- **Order-id:** the order-id from the merchant.
- **Based URL PREPROD:** <https://preproduction-gateway.bizao.com>
- **Based URL PROD:** <https://api.bizao.com>
- **Method:** GET

3.2.1 “getStatus” API query syntax :

To call the “getStatus” service, below is the syntax:

PREPROD : <https://preproduction-gateway.bizao.com/mobilemoney/v1/getStatus/Order-id>

PROD : <https://api.bizao.com/mobilemoney/v1/getStatus/Order-id>

“getStatus” sample query :

```
curl --location --request GET 'https://preproduction-gateway.bizao.com/mobilemoney/v1/getStatus/MerchantOrderid4' \  
--header 'Authorization: Bearer Token' \  
--header 'Accept: application/json' \  
--header 'Content-Type: application/json' \  
--header 'country-code: sn' \  
--header 'mno-name: orange' \  
--header 'channel: web' \  

```

3.2.2 Getstatus API response

Bizao <getStatus> API will response in Json format.

This Json format/response has the same format as for notification flow.

```
{  
  "meta": {  
    "type": "payment",  
    "source": "sn_orange_mm",  
    "channel": "web"  
  },  
  "status": "Successful",  
  "amount": "10",  
  "order-id": "MerchantOrderid4",  
  "currency": "XOF",  
  "reference": "Your-reference",  
  "date": "2020-09-29 09:34:32.0",  
  "state": "param1%3Dvalue1%26param2%3Dvalue2",  
  "country-code": "sn",  
  "user_msisdn": "22575338226",  
}
```

```
"intTransaction-id": "1601372072771",  
"extTransaction-id": "MP200929.0935.A64320",  
"statusDescription": ""
```

```
}
```

4 Payment status

Below are the statuses that exist in the BIZAO HUB

- **INITIATED**: Status to be restored as soon as an initialization action occurs,
 - o The partner executes the North request essentially on the web channel without any other action.
- **LOADED**: Status to be returned as soon as a loading action occurs,
 - o The partner redirects his customer to the generated payment url.
 - o However his customer does not confirm the payment (submission of the transaction)
- **INPROGRESS** : Status in progress or waiting for validation
- **FAILED** : Status in failure of a transaction
- **SUCCESSFUL** : Status in success of a transaction
- **CANCELED** : Status to be restored, as soon as a cancellation action occurs.
 - o From the payment page the user clicks on the "Cancel Transaction" button on the payment page.
 - o This status only applies if the user does not submit the transaction and decides to cancel the transaction.
- **ABANDONED**: Status to be returned, as soon as an abandonment action occurs. In this use case:

Either the user closes the payment page before the transaction is submitted to the operator's backend (processing)

5 Available Country and Operator

Below the list of country and MNO where the Mobile Money service is available for Bizao
Within this table you will find the required code for country and operator to use in the mobilemoney query call (**Note** :this list should be increase depend on our extension)

	Operator (mno-name)/EME	Country (country-code)	currency
Ivory Coast	moov	ci	XOF
Ivory Coast	orange	ci	XOF
Ivory Coast	mtn	ci	XOF
Burkina Faso	orange	bf	XOF
Burkina Faso	moov	bf	XOF
Sénégal	orange	sn	XOF
Sénégal	Free	sn	XOF
Caméroun	orange	cm	XAF
Caméroun	mtn	cm	XAF
Togo	togocom	tg	XOF
Togo	moov	tg	XOF
Sénégal	wave	sn	XOF
Ivory Coast	wave	ci	XOF
Democratic Republic of the Congo	orange	cd	CDF, USD
Democratic Republic of the Congo	airtel	cd	CDF, USD
Democratic Republic of the Congo	mpesa	cd	CDF, USD
Democratic Republic of the Congo	afrimoney	cd	CDF, USD

6 Bizao payment API common error code

ErrorCode	Exception Message Text	Description / Comments	HTTP Response Code
50	Forbidden access to the API	Access denied by ACL. 'Unauthorized Access Layer' or 'Unauthorized applicationId' or 'Unauthorized country'	403 Forbidden
1201	Forbidden access to the API	Forbidden transaction	403 Forbidden
1202	Forbidden access to the API	Invalid merchant key	403 Forbidden
1203	Forbidden access to the API	Unauthorized currency for this country	403 Forbidden
1204	Forbidden access to the API	Order Already exists. The order_id must be unique in the system. Only one Token per order_id	403 Forbidden