



USSD API Documentation

APRIL, 2020



When you dial *920# on your mobile phone, you will definitely be using a USSD (Unstructured Supplementary Service Data) application. USSD allows the transport of small data volumes over the signaling channel. It does not need an active data connection nor does it incur SMS costs. Processing USSD requests using our API is very fluid once your account is set up.

Our USSD API allows developers to create their own menu structure with the use of HTTP/S.

Why Use a USSD?

It is accessible on all cellular networks and mobile handsets

WAP browsing, prepaid callback service

Mobile money services

Location-based content services

Menu-based information services (Balance Enquiry, etc)

Serves as a part of configuring the phone on the network.

Prerequisite

To successfully complete the integration the following details are required as described in table 1.0 below:

TABLE 1.0

REQUIREMENT	DESCRIPTION
1. User ID	This is a unique identification created by Nalo for third parties doing the integration
2. Endpoint URL	This is the URL where all requests from the mobile handset will be terminated. This should be provided by the third party
3. Method	POST
4. Data format	JSON
5. Content type:	Application/json



Receiving Mobile Requests

The request from the mobile user will be forwarded to the third party via the endpoint URL already given by the client. The data is JSON formatted and contains the following as described in the table 2.0 below:

TABLE 2.0

1.	ELEMENT	DESCRIPTION	FORMAT (length)
2.	USERID	This is the ID provided by NALO to the client. This is the third Party's unique id	STRING (8)
3.	MSISDN	The mobile number of the user	STRING (12)
4.	USERDATA	The value entered by the user on user handset device.	STRING (120 max.)
5.	MSGTYPE	This indicates whether the request is an initiating request or not	BOOLEAN 1/0 1:true 0:false

Sample request format:

```
{  
"USERID": "nalotest",  
"MSISDN": "233xxxxxxxx",  
"USERDATA": "3",  
"MSGTYPE": false,  
"NETWORK": "MTN"  
}
```

Note:

"MSGTYPE" has a value of true for the first time dials of the user. The value is false for subsequent dials during the same session.

Sending Response To User

This is the response to the user's request. The third party should provide a response to the request in the same format. The response body should have the following elements as described in table 2.1 below

TABLE 2.1

ELEMENT	DESCRIPTION	FORMAT (length)
1. USERID	This is the ID provided by NALO to the client. This is the third Party's unique id	STRING (8) - mandatory
2. MSISDN	The mobile number of the user	STRING (12)
3. MSG	This is a mandatory parameter that holds the message to be displayed on the user's phone	STRING (120 max.) - mandatory
4. MSGTYPE	This indicates whether the session should continue or be terminated	BOOLEAN: true/false - defaults to 'True'

Sample request format:

```
{  
  "USERID": "nalotest",  
  "MSISDN": "233xxxxxxxx",  
  "MSG" : "Welcome to NALO USSD test",  
  "MSGTYPE" : false  
}
```

Note:

"MSGTYPE" has a value of false to indicate the end of the USSD session. The USSD session is terminated when the MSGTYPE is false, continues and allows for user input when true.

Click here for more details and sample codes on the USSD development
<https://documenter.getpostman.com/view/3709759/SzYaVxgQ?version=latest>



USSD FAQ'S

What is a ussd?

USSD(Unstructured Supplementary Service Data) is an interactive technology that serves to send text between a mobile phone and an application programme in a network. Some of these services are:

- Airtime top-ups
- Balance checking
- Mini statements delivery

The format is confined by * and # at the beginning and end of the series of digits.

How do I get a USSD shortcode?

Kindly sign up if you have no account and make a request [here](#).

How much does a USSD shortcode cost?

Refer to this [page](#) to view our pricing list.

How do I pay for the USSD code?

You can make payment via mobile money or bank transfer

Are there different types of USSD code?

Yes. We have a dedicated and and shared USSD code.

A dedicated code is a code that is owned by one client only. For example, Bank A has a dedicated short code *999#. This means no other client can operate under this code because it is dedicated specifically to bank A.

A shared USSD code is rented out to multiple clients. For example, Bank A may use *999*12# and Bank B will have access to *999*13#

A dedicated code is more expensive than a shared code.

