



MOBILE CONTENT LTD

DOCUMENT INFORMATION

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SERVICE OVERVIEW

The debit API service is used by a third-party Merchant's applications to collect payment for goods and services by initiating a USSD push to the subscriber (mobile money user) to authorize the payment by entering his/her PIN or initiate an SMS push to the subscriber to follow steps in approving the payment for the service rendered. This service creates an entry of the transaction in the MCC database and respond to the calling application with an acknowledgment. It sends a request to the USSD push application which externally handles USSD push to the subscriber for transaction approval with PIN and fulfilment of payment on the payment platform (Mobiquity) MSF platform for MCC. In the event of no successful subscriber authorization with PIN, the service sends a SMS notification to the subscriber's MSISDN with the USSD string to dial to approve/decline the pending transaction.

DEFINITIONS AND ABBREVIATIONS

SMS	Short Message Service
USSD	Unstructured Supplementary Service Data
MSISDN	Mobile Station International Subscriber Directory Number
SOA	Service Oriented Architecture.
API	Application Program Interface
MCC	Mobile Content.Com
OSB	Oracle Service Bus

API USAGE AND REQUIRED PARAMETERS

To access and use the API successfully, few parameters must be provided.

PARAMETERS	MANDATORY LEVEL	DESCRIPTION
CustomerMsisdn	Mandatory	Msisdn of the initiator of the service in a format (233546789364)
Amount	Mandatory	Amount to payable for the service
Product	Mandatory	What the payment is for, and should be very short ei (Vote, book, bill-paid) etc
PaymentReference	Optional	A unique code/id for each request submitted
AuthorizationCode	Mandatory	An access code for mcc users to be included in each request, this is a database define code. Details will be shared by head of the department.
Network	Mandatory	The value required is AIRTEL-TIGO-GH

A **POST** request with the above parameters should be sent to the MOMO Debit url/endpoint below.

http://139.162.242.100/adri/payments/tigo/debit/process_initiate_request.php

Example of postman request:

The screenshot shows a Postman interface for a POST request to `http://139.162.242.100/adri/payments/tigo/debit/process_initiate_request.php`. The 'Body' tab is selected, and 'form-data' is chosen as the body type. A table lists the form data parameters:

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> AuthorizationCode	MskwHaW9(2021028Mc	
<input checked="" type="checkbox"/> CustomerMsisdn	233273593525	
<input checked="" type="checkbox"/> Amount	1.0	
<input checked="" type="checkbox"/> Product	Testing	
<input checked="" type="checkbox"/> PaymentReference	298998877665	
<input checked="" type="checkbox"/> Network	AIRTEL-TIGO-GH	

The API will first check for the authorization for the incoming request and if all is good, it then process the request. Should the user not authorized to access the API or request coming from a wrong guest, the API will throw the below json response:

```
{
  "Success": "Failed",
  "Data": {
    "ResponseCode": "2001",
    "Description": "Non authorized request"
  }
}
```

Example of response from postman when authorization failed:

A screenshot of the Postman interface showing a JSON response. The top bar has tabs for 'Pretty', 'Raw', 'Preview', and 'Visualize', with 'JSON' selected. A refresh icon is on the right. The JSON body is displayed in a code editor with line numbers 1 through 7 on the left. The response is a JSON object with 'Success' set to 'Failed', and a 'Data' object containing 'ResponseCode' as '2001' and 'Description' as 'Non authorized request'.

```
1 {  
2   "Success": "Failed",  
3   "Data": {  
4     "ResponseCode": "2001",  
5     "Description": "Non authorized request"  
6   }  
7 }
```

Should the request be processed successfully, a json response will be sent to the calling application to acknowledged the request as shown below:

```
{  
  "Success":true,  
  "ResponseCode":"purchaseinitiate-3022-0001-S",  
  "Data":  
  {  
    "Network": "AIRTEL-TIGO-GH",  
    "CorrelationId":"23324860299815202102161036192431294",  
    "TransactionId":"H4YhZ9v16134717794d5e9475ef11e1583dd79c914d2e24c3",  
    "ExternalTransactionId":"c3694618-ccc4-45ad-bf65-8cff4c1c8c2e",  
    "Amount":"1.0",  
    "Status":"OK",  
    "Description":"Your payment request has been initiated.",  
    "PaymentId":"6480551",  
    "PaymentReference":"123408989877855652413456"  
  }  
}
```

Example of success response from postman is request was initiated successfully:

```

1  {
2    "Success": true,
3    "ResponseCode": "purchaseinitiate-3022-0001-S",
4    "Data": {
5      "CorrelationId": "23324940577321202102171133381835019",
6      "TransactionId": "cnrQ0yg16135616188c85cf4ff5d6f2fcd2b6463daf50bad1",
7      "ExternalTransactionId": "b42447e6-9b89-4379-aaf8-3cabe27cb67f",
8      "Amount": "1.0",
9      "Status": "OK",
10     "Description": "Your payment request has been initiated.",
11     "PaymentId": "6484579",
12     "PaymentReference": "23324940577321202102171133381835019"
13   }
14 }
```

SUCCESS STATUS CODES

On successful operation execution the API will return the success code below.

Code	Description
Purchaseinitiate-3022-0001-S	Your payment has been initiated.

ERROR CODES

This operation could return errors or failures in the process. The error codes and short descriptions are listed below.

Error Code	Error Category	Error Description
purchaseinitiate-3022-3001-E	Any unmapped backend error would be returned under this error code.	<Backend error description> or Request was not successful. Backend error has occurred.
purchaseinitiate-3022-4502-V	When an invalid ISD (Country) code is sent in the MSISDN.	Invalid ISD code passed in the MSISDN.
purchaseinitiate-3022-4001-V	When the amount value in the request is not greater than zero (0).	Invalid amount value passed in the request. Amount should be a positive number.
purchaseinitiate-3022-2506-F	When a valid consumer is trying to access this API for whom there is no authorization	Consumer is not authorized to use the service.

purchaseinitiate-3022-3602-E	OSB service error	Internal service error
purchaseinitiate-3022-4507-V	When the payment reference id passed in the request has already been used by the same Merchant.	Duplicate payment reference id passed in the request

GENERAL RESPONSE STRUCTURE AND DESCRIPTION

Element Name	Element Type	Description
ResponseCode	String	Code number agreed to identify the success or fail event in the transaction
CorrelationId	Integer	Unique identifier of the transaction by the calling application.
TransactionId	String	Transaction id is generated by the calling application to tigo.
ExternalTransactionId	String	Unique transaction id from tigo platform
Amount	Double	An amount to be deducted for the service/product
Status	String	State of the transaction Enumeration values ➤ OK ➤ ERROR
Description	String	Technical and brief description of the error/success
PaymentId	Integer	The unique ID that identifies the transaction in the MW platform
PaymentReference	Integer	This will be the unique payment reference sent by the consuming application

CALLBACK REQUEST

On completion of the calling application's debit transaction on Mobiquity (the payment platform) by Middleware, a callback response will be sent to the calling application with the results as updated in Middleware DB.

There is a need to store a unified callback url in BD (primary_callback_url) where all various momo debit callback response will be sent to.

A sample callback and description is below for reference.

Element Name	Description
UtibaTransactionId	TransactionId from the Payment Platform (Comviva Mobiquity)
CorrelationId	The unique paymentreference passed in the PurchaseInitiate request.
Status	OK
ResponseCode	purchase-3008-0000-S
Description	The request has been processed successfully.
Product	Product/Item/Service provided in the request.
Amount	The amount of the Product/Item/Service provided in the request.
CustomerMsisdn	Momo msisdn provided in the request.
ClientReference	The unique paymentreference passed in the debit request.
ExternalTransactionId	Unique id (SoaTransactionId) generated from tigo payment platform that previously came with the acknowledged response to the user's request.

Sample expected json response below:

```
{
  "ResponseCode": "purchase-3008-0000-S",
  "Data": {
    "Network": "AIRTEL-TIGO-GH",
    " UtibaTransactionId ":" MM210217.1356.D04781 ",
    "CorrelationId": "23324860299815202102161036192431294",
    "ExternalTransactionId": "c3694618-ccc4-45ad-bf65-8cff4c1c8c2e",
    "Amount": "1.0",
    "Status": "OK",
    "Description": "Your payment request has been initiated."
  }
}
```

```
    "Product": "Testing",  
    "CustomerMsisdn": "233569565608",  
    "ClientReference": "123408989877855652413456"  
  }  
}
```

MCC TIGO MOMO API