

# Partner Integration API Details



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**Document Location****TIGO Tanzania****DOCUMENT DESCRIPTION**

<b>Document Name:</b>	TIGOPESA – PartnerIntegration API (A2W & W2A) Document
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**REVISION HISTORY**

<b>Version</b>	<b>Date</b>	<b>Change Description</b>
1.0	25/06/2014	Baseline Initial version created.
1.2	04/05/2016	More clarity of request formats and error codes as per new platform
1.3	08/10/2018	Added SENDERNAME element for sharing the person who is doing a transfer to receiver for both B2C and C2B as well as BRAND_ID for B2C

**Approvals**

Approval refers to the approver's acceptance of the content and overall intention of this document, including acceptance of any commitments described in order to successfully deliver the initiative. The approver, where relevant, also confirms that this document complies with relevant strategies, policies and regulatory requirements.

<b>Name</b>	<b>Role</b>	<b>Approved</b>	<b>Date</b>

The transport protocol of this interface is XML over HTTP.

The expected HTTP method is always POST.

The expected headers in the request & response are 'Content-type' & 'Connection'.

## 1.2 Request XML

The response to a request to perform a function uses the COMMAND element.

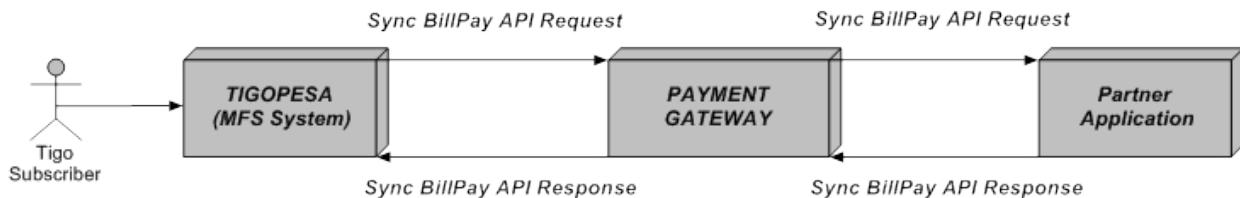
```
POST <URL> HTTP
Content-type: text/xml
Connection: keep-alive
<?xml version="1.0"?>
<COMMAND>
-----
-----
-----
</COMMAND>
```

## 1.3 Response XML

The response to a request to perform a function uses the COMMAND element.

```
HTTP/1.1 200 OK
Content-type: text/xml
Connection: close
<?xml version="1.0"?>
<COMMAND>
-----
-----
-----
</COMMAND>
```

## 2.1 Use Case1: Wallet to Account/ TIGO to Partner(Payamountfrom Subscriber's TIGOPESAwallet to PartnerCollectionaccount through Payment Gateway)-Synchronous



### 2.1.1 Input to the Partner Application from the Payment Gateway – SYNC\_BILLPAY\_API Request

Field name	Max-length	Description
TYPE	NA	The request type of the transaction. The value will be constant in all the request. Ex - SYNC_BILLPAY_REQUEST
TXNID	20	Alphanumeric-This field will be Tigo transaction ID. It will be unique for all transactions. Ex - BP140218.1240.B01530
MSISDN	10/12	Payer MSISDN should be without country code. Ex – 0721777777 or 255721777777
AMOUNT	NA	Numeric, Ex - 1000
COMPANYNAME	6	Numeric. This is the business number, or biller code Ex – 12345
CUSTOMERREFERENCEID	50	Bill pay reference number, normally generated/shared by partner application. This is used by partner application to validate payments. Alphanumeric characters. Ex – T1234ABC
SENDERNAME	50	The name of Payer/Sender Ex. James Kaparata

Sample request message from the Payment Gateway to Partner Application 'SYNC\_BILLPAY\_API' is attached here.

```

<?xml version="1.0"?>
<COMMAND>
    <TYPE>SYNC_BILLPAY_REQUEST</TYPE>
    <TXNID>tigo_txnid</TXNID>
    <MSISDN>255713123999</MSISDN>
    <AMOUNT>1000</AMOUNT>
    <COMPANYNAME>100100</COMPANYNAME>
    <CUSTOMERREFERENCEID>123456</CUSTOMERREFERENCEID>
    <SENDERNAME>James Kaparata</SENDERNAME>
</COMMAND>

```

### 1.1.1 Output from the Partner Application to the Payment Gateway System

#### - SYNC\_BILLPAY\_API Response

Field name	Max-length	Description
TYPE	NA	The response type of the transaction. The value will be constant in all the response. Ex – SYNC_BILLPAY_RESPONSE
TXNID	20	Tigo Transaction ID sent in the request. Ex - BP140218.1240.B01530
REFID	50	Partner Application generated Transaction ID. It should be unique for all transaction. Ex - 000217605331
RESULT	2	Status of the transaction. String value. Ex – Either TS or TF
ERRORCODE	20	Particular Error Code returned in the transaction. Will be Alphanumeric. Ex - error000 for success
ERRORDESCRIPTION	NA	Error Description (String). Ex- Transaction Successful
MSISDN	10	Numeric - Subscriber (Payer) phone number Ex – 0656856028
FLAG	1	String value. Ex – Either Y or N
CONTENT	NA	Alphanumeric field may be present under this field. Maximum 140 characters No special characters like pipe(' ') Ex - Dear Subscriber your Transaction has been submitted successfully.

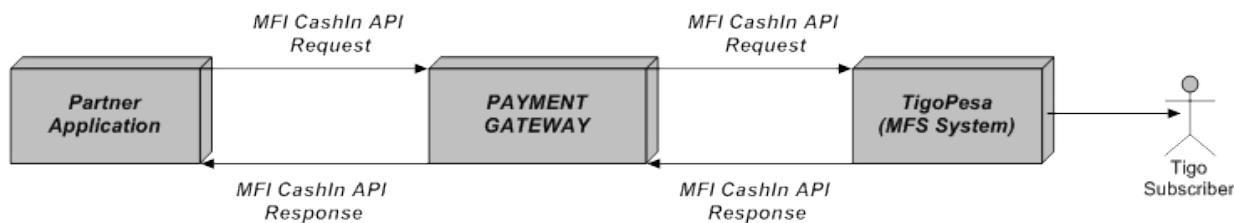
Sample response message from the Partner Application to the Payment Gateway 'SYNC\_BILLPAY\_API' is attached here.

```
<?xml version="1.0"?>
<COMMAND>
  <TYPE>SYNC_BILLPAY_RESPONSE</TYPE>
  <TXNID>BP140218.1240.B01530</TXNID>
  <REFID>000217605331</REFID>
  <RESULT>TS</RESULT>
  <ERRORCODE>error000</ERRORCODE>
  <ERRORDESC/>
  <MSISDN>0714405395</MSISDN>
  <FLAG>Y</FLAG>
  <CONTENT>message_content.</CONTENT>
</COMMAND>
```

The following are the list of expected **ERRORCODE** and its description from Partner Application:

Error Code	Description
error000	Successful transaction
error001	Service not available
error010	Invalid Customer Reference Number
error011	Customer Reference Account locked
error012	Invalid Amount
error013	Amount insufficient
error014	Amount too high. Try a smaller amount
error015	Amount too low. Try a larger amount
error016	Invalid payment
error100	General Error
error111	Retry condition. No response
Other Error	As per agreement with partner, during integration

## 1.2 Use Case 2: Account to Wallet / Partner to TIGO (Transfer amount from Partner's TigoPesa Disbursement account to subscriber's TIGOPESA wallet through Payment Gateway) – Synchronous



### 1.2.1 Input to the Payment Gateway System from the Partner Application – 'MFI CashIn' API Request

Field name	Max-length	Description
TYPE	10	The request type of the transaction. The value will be constant in all the request. Ex - REQMFICI
REFERENCEID	20	A value consisting of combination of alphanumeric characters that uniquely identifies each request made by the MFI Server. This value has to be provided by the MFI Server and a combination of the TYPE and REFERENCEID field has to be unique. Ex - CI0000000000000000000001 Note: Maximum allowed length for this element is restricted to '20'.
MSISDN	12	Payer MSISDN. This can should be with country code. Ex – 255721777777 Note: The MSISDN of Partner disbursement account in TIGOPESA has to be passed in the request.
PIN	4	Numeric or alphanumeric. Ex – 1456 Note: The PIN of the Partner disbursement account in TIGOPESA has to be passed in the request.
MSISDN1	10/12	Payee MSISDN should be with/without country code. Ex – 0721151515 Note: The MSISDN of the subscriber's account in TIGOPESA has to be passed in the request.
AMOUNT	10	Numeric Only. Should not accept amount in decimal points because there is no support for cents. Ex - 1000
SENDERNAME	50	The sender/payer full name Ex. James Kaparata
BRAND_ID	10	Numeric id of a brand attached to the service. This will be shared during integration Ex. 1232
LANGUAGE1	2	Payer Language Ex - en

Sample request message from the Partner application to the Payment Gateway (MFI CashIn API) is attached here.

```
<?xml version="1.0"?>
<COMMAND>
<TYPE>REQMFICI</TYPE>
<REFERENCEID>GGC-72727725522</REFERENCEID>
<MSISDN>25571300011</MSISDN>
<PIN>MFI---PIN</PIN>
<MSISDN1>SUBS---MSISDN</MSISDN1>
<AMOUNT>AMOUNT</AMOUNT>
<SENDERNAME>James Kaparata</SENDERNAME>
<BRAND_ID>2356</BRAND_ID>
<LANGUAGE1>LANGUAGE---CODE</LANGUAGE1>
</COMMAND>
```

### **1.2.2 Output from the Payment Gateway System to the Partner Application – ‘MFI CashIn’ API Response**

Field name	Max-length	Description
TYPE	10	Response Type. The value will be constant in all the response. Ex - RESMFICI
REFERENCEID	20	The same value that is contained in the REFERENCEID tag of the Request XML. Partner Application generated Transaction ID. Ex - C100000000000000000000001 Note: Maximum allowed length for this element is restricted to '20'.
TXNID	20	Tigo Pesa Transaction ID for the Cash-In Transaction. Ex - 42326232
TXNSTATUS	5	Various transaction status Failed, Success etc. Ex – 200 or 0 for success
MESSAGE	NA	Response message. Ex - Success

Sample response message from the Payment Gateway System to Partner Application ‘MFI CashIn’ API is attached here.

```
<?xml version="1.0"?>
<COMMAND>
<TYPE>RESMFICI</TYPE>
<REFERENCEID>REFERENCEID</REFERENCEID>
<TXNID>42326232</TXNID>
<TXNSTATUS>200</TXNSTATUS>
<MESSAGE>Success</MESSAGE>
</COMMAND>
```

Note:

1. In case of Fail response from Tigo Pesa, TXNID (Tigo Transaction ID) element in the response will be empty.

The following are the list of possible **TXNSTATUS** codes and description:

<b>TXNSTATUS</b>	<b>MESSAGE</b>
00026	PIN expired. Please change your PIN.
00031	Requested amount more than allowed in the network
00042	Requested amount not in multiple of allowed value
317	Unable to complete transaction as recipient A/c is barred. Error code 00317.
410	Unable to complete transaction as amount is more than the maximum limit. Error code: 00410.
2117	Unable to complete transaction as sender A/c is barred. Error code 02117.
200 or 0	Success
60014	Unable to complete transaction as maximum transaction value per day for payer reached. Error code 60014.
60017	Unable to complete transaction as transaction amount is less than the minimum txn value for sender. Error code 60017.
60018	Unable to complete transaction as amount is more than the maximum limit. Error code 60018.
60019	Unable to complete transaction as account would go below minimum balance. Error code 60019.
60021	Unable to complete transaction as maximum number of transactions per day for Payee was reached. Error code 60021.
60024	Unable to complete transaction as maximum transaction value per day reached. Error code 60024.
60028	Unable to complete transaction as transaction amount is more than the maximum txn value for recipient. Error code 60028.
60030	Unable to complete transaction as the Payee account would go above maximum balance. Error code: 60030.
60074	Payee Role Type Transfer Profile not defined
100	This is generic error, which is returned if problem happens during transaction processing. Partner should put transaction amount in HOLD state to avoid risk of rollback while amount was disbursed. This is the same case for any kind of timeout as well.
Other Error	As may be added & agreed during integration



