

INSTANT PAYMENT NOTIFICATION (IPN) API SPECIFICATION DOCUMENT

Version 1.0.4

1. INTRODUCTION

1.1. OVERVIEW

This Interface specification document describes the integration points between a third-party system and the KCB API Gateway. This document describes in detail the payload structures for the Payment Notification service for payments done to a KCB Till.

1.2. API SECURITY

KCB system will sign all data sent from KCB to the 3rd party system and its **REQUIRED** that the 3rd party system verifies the signature sent in the **HTTP** headers using the **PUBLIC KEY** that will be provided by KCB.

This is to ensure that the data has not been tampered with on transit and that it comes from KCB, the issuer of the public key.

NB: This will be verified during UATs to ensure compliance by 3rd party systems.

The expected signature type for verification is **SHA256withRSA**.

The signature field will be sent in the **HTTP headers** of the request with field name **signature** as shown in the below curl request.

```
curl --location --request POST 'http://3rpartyurl.com' \
--header 'signature:
69EJ7+KmfkYHCu7+2mtAks5aFXyQUcEvuZjlpRMEbNszApUymF9eFt25QDb/r0bFP9ZmTNK1hlzdU3cjfBXqs
8Oto9uYcnSsSatxjNhtD21DmAqzYoikJy6zEge2uRaVPzfkm9C8eUwlgSA5mxLdjWSSib2o8u7WcOTOhpuY8
e6Rk2ydZF3Xuq5e1U9iS6+B+Dw+jqr7a6xTrSHpNQc1BD8FRrKvEK+FtwBARbK9ANt9AD7kQ+AQfJZtIjfpzPQ
XnEngOHpt1U1/OstD7I88PrXh9ikeapgqr6/2/t98GxJWABXNjdk8pUMY2SpnsCyoU2BvrNriWoms+YUp3CR
m4g==' \
--header 'Content-Type: application/json' \
```

2 API FUNCTIONS

2.1 PAYMENT NOTIFICATION API

When the 3rd Party's account receives a payment, KCB sends a notification of the payment. The 3rd Party is required to provide a secure endpoint to which the notification is sent.

Payment Notificaton Request to 3rd Party

Request Parameter Definition

FIELD NAME	TYPE	(M) / (O)	DESCRIPTION
HEADER			
messageID	String	Mandatory	Unique Request ID generated from our end.
originatorConversationID	String	Optional	The original conversation ID that is the unique identifier of the request message generated by 3 rd party
channelCode	String	Mandatory	Channel initiating the transaction from KCB system
timeStamp	String	Mandatory	yyyyMMddHHmmss
PRIMARYDATA			
businessKey	String	Mandatory	Biller Code eg 520520 for KWS (constant)
businessKeyType	String	Mandatory	BillerID (Constant)
NOTIFICATIONDATA			
businessKey	String	Mandatory	Invoice Number or the bill reference eg PINV-001
businessKeyType	String	Mandatory	BillReferenceNumber
debitMSISDN	String	Mandatory	Mobile number transacting
transactionAmt	String	Mandatory	Amount transacted by the customer
transactionDate	String	Mandatory	
transactionID	String	Mandatory	Unique receipt number for the transaction
firstName	String	Mandatory	
middleName	String	Optional	
lastName	String	Optional	
currency	String	Mandatory	

narration	String	Optional	Transaction narration if provided on the channel.
transactionType	String	Optional	The transaction type
balance	String	Optional	Account Balance after account credit

Sample Request

```
{
  "header": {
    "messageID": "uniqueMessageId",
    "originatorConversationID": "",
    "channelCode": "202",
    "timeStamp": "20201117101010"
  },
  "requestPayload": {
    "primaryData": {
      "businessKey": "000000",
      "businessKeyType": "queryBiller"
    },
    "additionalData": {
      "notificationData": {
        "businessKey": "P-INV-001",
        "businessKeyType": "BillReferenceNumber",
        "debitMSISDN": "254722520441",
        "transactionAmt": "100.00",
        "transactionDate": "20201102",
        "transactionID": "FT235373",
        "firstName": "James",
        "middleName": "Jay",
        "lastName": "Armstrong",
        "currency": "KES",
        "narration": "ticket payment",
        "transactionType": "vooma",
        "balance": "0.00"
      }
    }
  }
}
```

Payment Notification Response from 3rd Party

FIELD NAME	TYPE	(M) / (O)	DESCRIPTION
HEADER			
messageID	String	Mandatory	Unique Request ID generated from our end.
originatorConversationID	String	Optional	The original conversation ID that is the unique identifier of the request message generated by 3 rd party
statusCode	String	Mandatory	0 - success 1 - failure

statusMessage	String	Mandatory	Status message
TRANSACTION INFO			
transactionId	String	Mandatory	Unique transaction id generated by your system

Sample Response

```
{
  "header": {
    "messageID": "123456789",
    "originatorConversationID": "214ea73ca36c426b99920aed42fa390c",
    "statusCode": "0",
    "statusMessage": "Notification received"
  },
  "responsePayload": {
    "transactionInfo": {
      "transactionId": "38212940",
    }
  }
}
```