

K-SMS

Api Developer's Guide



K-SMS: API Developer's Guide

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1 Table of Contents

Table of Contents

1	Table of Contents.....	3
2	Available methods.....	4
3	Type of client accounts.....	4
4	Important information	4
5	Web Service: ksms.....	5
5.1	Soap Method.....	5
5.2	Operations.....	5
5.2.1	kchange.....	5
5.2.2	kchk.....	6
5.2.3	ksend	6
5.3	WSDL.....	7
6	Url call channel.....	8
6.1	Type description.....	8
6.2	Parameters.....	8
6.3	Methods.....	9
6.4	Sample request.....	9
6.5	Response.....	9
7	Account balance.....	10
8	SMPP.....	10
9	Delivery reports	10
10	Account management.....	11
11	Cost of SMS.....	11
12	Return messages	13
13	Glossary.....	14

2 Available methods

Our bulk SMS api offers three connectivity methods which are:

1. SOAP XML Api
2. URL Call Method (POST / GET)
3. jSON
4. SMPP connectivity

3 Type of client accounts

We offer two types of accounts,

1. Prepaid account
2. Postpaid account: requires a deposit, and a contract

Please feel free to contact us at sms@esicia.com for your order or account details.

4 Important information

A message can carry 160 characters if in the Latin alphabet and 70 if content is Unicode. Our gateway will automatically split up the message if the content exceeds the maximum character limit based on the content encoding. When sending UTF-8 encoding the gateway will try and convert to GSM7 if possible to avoid splitting at 70 characters.

The following formats are allowed for the Sender ID.

- Alphanumeric signs with upper or lower case characters (a-z, A-Z, 0-9). The maximum allowed characters are 11.
- MSISDN numbers, international format. Minimum 9 chars, max 17 chars.
- Short numbers / codes, national format. Maximum length 7 chars.

5 Web Service: ksms

Target Namespace:

<http://gateway.esicia.com/soap/ksms>

Location: <http://gateway.esicia.com/>

Protocol: SOAP

Default style: document

Transport protocol: SOAP over HTTP

5.1 Soap Method

1. kchange
2. kchk
3. ksend

5.2 Operations

5.2.1 kchange

Description:

This service is about changing the PIN of your soap account

Style: rpc

Operation type:

Request-response. The endpoint receives a message, and sends a correlated message.

SOAP action: urn:kchange

Input: kchangeRequest (soap:body, use = encoded)

account type *string*

newpin type *string*

pin type *string*

Output: kchangeResponse (soap:body, use = encoded)

reply type *string*

status type *string*

5.2.2 kchk

Description:

This service is about checking the remaining sms balance

Style: rpc

Operation type:

Request-response. The endpoint receives a message, and sends a correlated message.

SOAP action: urn:kchk

Input: kchkRequest (soap:body, use = encoded)

account type *string*

pin type *string*

Output: kchkResponse (soap:body, use = encoded)

reply type *string*

status type *string*

5.2.3 ksend

Description:

This service is about sending sms. Style: rpc

Operation type: *Request-response*. The endpoint receives a message, and sends a correlated message.

SOAP action: urn:ksend

Input: ksendRequest (soap:body, use = encoded)

#	Parameter name	Description	Severity
1	sender	The sender ID for the message	Mandatory
2	phone	The beneficiary MSISDN	Mandatory
3	message	The message content	Mandatory
4	account	The user login for the API client	Mandatory
5	pin	The password	Mandatory
	msgid	The unique system generated iD used for delivery report tracking	Mandatory
	receivedlr	Set to confirm if the system should send delivery report in asynchronous mode 1: Yes 0: No	Mandatory
	callurl	The callback url for DLR – send empty if no DLR requested	Mandatory
	messagetype	If omitted, a normal message will be sent.. - flash - binary - text	Mandatory

Output:

ksendResponse (soap:body, use = encoded)

success *string*

message *string*

msgid *string*

cost *string*

balance *string*

5.3 WSDL

<https://gateway.esicia.com/?wsdl>

6 Url call channel

You can send SMS using an URL call rather than doing the complex and complete soap action, in order to do that you need to call the gateway url <https://api.sms.rw/>

Note that this platform requires authenticating the Public Ip address of your server in order for the sms to go through.

6.1 Type description

- Address: api.sms.rw
- Protocol: HTTPS
- Path: /

6.2 Parameters

#	Parameter name	Description	Severity
1	ohereza	The sender ID for the message	Mandatory
2	kuri	The beneficiary MSISDN	Mandatory
3	ubutumwa	The message content	Mandatory
4	client	The user login for the API client	Mandatory
5	password	The password	Mandatory
6	msgid	The unique system generated iD used for delivery report tracking	Mandatory
7	receivedlr	Set to confirm if the system should send delivery report in asynchronous mode • 0 : No DLR • 1 : Send DLR	Optional
8	callurl	The callback url for DLR	Mandatory if receive DLR is set
9	messagetype	If omitted, a normal message will be sent.. • flash or • binary	Optional
10	retype	Type of return response for the call. Accepted values are: • JSON • XML • PLAIN	Optional

6.3 Methods

You can send parameters in

- POST
- GET
- JSON

For JSON a header Content Type: application/json is required

6.4 Sample request

Sample Json request with a DLR post back URL and requiring to reply in XML

```
{ "ohereza": "Esicia", "ubutumwa": "This is a sample content",  
  "msgid": "KA123455", "kuri": "250788312934", "client": "kaneza",  
  "password": "kaneza123", "receivedlr": "1",  
  "callurl": "https://gateway.esicia.com/dlr/", "messagetype": "flash",  
  "retype": "xml" }
```

To send to multiple destinations, just make to an array of addresses instead of a string.(works for Json and Post only)

```
"kuri": [ "250788312934", "250788312598", "250728312934" ]
```

6.5 Response

Case of Json response:

```
{ "success": 0, "message": "0: Accepted for delivery", "msgid": "KA123455",  
  "cost": 1, "balance": 504 }
```

7 Account balance

At any given time you can check the balance of the SMS account for prepaid accounts, this is done by sending the below API request. Note that any send sms request returns the current account balance

Request type: GET or POST

url: <https://gateway.esicia.com/smsbal.php>

Parameters:

#	Parameter name	Description	Severity
1	client	The user login for the API client	Mandatory
2	password	The password	Mandatory

8 SMPP

We support SMPP v3.4 and above.

Server: smpp.esicia.rw

Port: 2775

Source IP whitelist is required

9 Delivery reports

For all messages sent you can query our system for delivery reports using the below URL

<https://gateway.esicia.com/dlr/>

with GET/POST parameters:

- client = your username
- phone = the number you sent the message to
- msgid= unique message ID you sent while sending the message
- sdate= start date in format YYYY-MM-DD
- edate= end date in format YYYY-MM-DD

The following table shows all possible delivery report statuses:

#	Message
1	DLR: Delivered to phone
2	DLR: Non delivered to phone
3	DLR: Queued on SMSC
4	DLR: Delivered to SMSC
5	DLR: Non delivered to SMSC

The system will post back in asynchronous mode to the customer platform a delivery report in Json or XML with the following fields:

- Sender ID
- Beneficiary number
- Message ID
- Delivery report status
- Delivery report message

There is an extended delivery report status

ERROR CODE	Error Description
err:222	Network System Failure
err:206	Absent Subscriber for SM
err:21f	Subscriber Busy for MT
err:220	SM Delivery Fail
err:407	HLR/MSC Timeout
err:20d	Call Barred
err:20b	Tele Service Not Provisioned
err:307	Provider No Response from Peer

10 Account management

You can always check the status of your account from our system by visiting <https://connect.esicia.com>

11 Cost of SMS

The minimum volume an API account can purchase is 10,000 SMS. The Prices are either per bundle or per monthly.

Total SMS	10,000 - 100,000	100,000 – 300,000	300,000 – 500,000	500,000 up
Price per SMS	10 Frw (+ VAT)	8 Frw (+ VAT)	6 FRW (+ VAT)	5 Frw (+ VAT)

12 Return messages

The system responds the requests with different replies and explanation. The code is returned in the success field.

#	Message	Code	Explanation
1	0: Accepted for delivery	0	The message has been accepted and is delivered onward to a SMSC driver. Note that this status does not ensure that the intended recipient receives the message
2	3: Queued for later delivery	0	The system accepted and stored, but there was temporarily no SMSC driver to accept the message so it was queued. However, it will be delivered later.
3	Internal error	500	Internal error
4	User <client> not found	600	Trying to connect with an non existing username
5	User <client> not allowed from location <ip>	601	Trying to connect from a non-whitelisted location
6	Unauthorized action you can't connect from this location	601	Trying to connect from a non-whitelisted location
7	Invalid Password	602	The password supplied is not correct
8	Source IP blacklisted	603	The source IP is not allowed on the client account
9	Suspended Account	604	The account is suspended
10	Insufficient Balance	605	When you have a prepaid account and ran out of credit
11	Error Invalid phone - has to be numeric	606	The beneficiary phone number is invalid
12	Wrong number	606	The beneficiary number failed validation
13	No route to country	607	Country not routed – contact us
14	Error invalid sender number numeric sender IDS must be 3 to 13 chars	608	The numeric sender number is invalid
15	Error invalid sender number alphanumeric sender IDS must be 1 to 11 chars	609	The alphanumeric sender ID is not valid

13 Glossary

- **TCP/IP:** Transport Control Protocol (part of the Internet Protocol specification)
- **XML:** Extensible Markup Language
- **SOAP:** Simple Object Access Protocol
- **SOAP-XML:** a simple XML-based protocol to let applications exchange information over HTTP. Or more simply: SOAP is a protocol for accessing a Web Service.
- **WSDL:** Web Service Definition Language
- **Web Service:** Web services are typically application programming interfaces (API) or Web APIs that are accessed via Hypertext Transfer Protocol (HTTP)
- **API:** An application programming interface is a source code based specification intended to be used as an interface by software components to communicate with each other. An API may include specifications for routines, data structures, object classes, and variables.
- **HTTP:** Hypertext Transfer Protocol
- **K-SMS:** Esicia LTD's messaging platform.
- **POST:** a method used in a HTTP request
- **GET:** a method used in a HTTP request
- **M:** mandatory
- **O:** optional