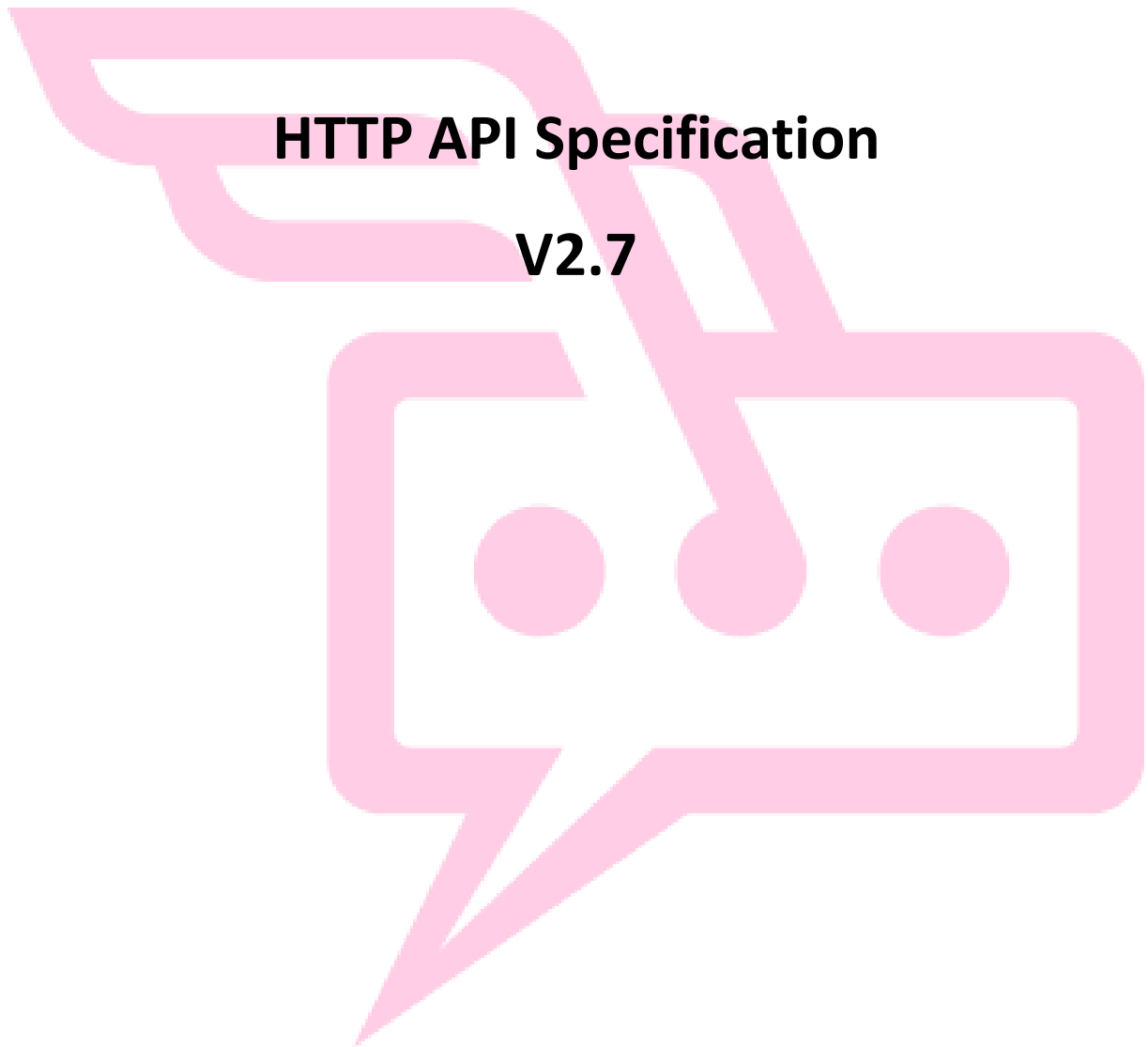




HTTP API Specification

V2.7



Version information

Version	Comment	Date
V2.7	Added testsms call	2017-08-09
V2.6	HTTPS information added Added error code 4007	2016-12-10
V2.5	Changed endpoints Added HLR API call	2016-12-09
V2.4	Changed the checkoperator response	2014-02-21
V2.3	Added new API call to fetch the account pricing with the last modifications	2014-02-18
V2.2	Added information about price, number of messages and mccmnc after sending SMS	2014-02-09
V2.1	New call to check message status Added new error code 2017	2013-03-23
V2.0	Rebuilt of the API, UTF-8 support	2013-03-21
V1.4.2	Added Error code 2016 - Invalid UTF-8 encoding	2012-09-21
V1.4.1	Added DLR status code 13 – No status update from SMSC after 72 hours	2012-01-31
V1.4	Removed Fixed line support The Netherlands (deprecated)	2011-12-29
V1.3	Added Fixed line support The Netherlands	2011-06-20
V1.2	Enhanced Error detection	2011-05-04
V1.1	Added custom messageID support	2011-04-09
V1.0	Added HTTP API IP restriction Added error messages Complete overhaul of this documentation	2011-04-07
V0.5	Added error messages	2011-03-31
V0.4	Added Push DLR function	2010-09-06
V0.3	Added credit check	2010-03-18
V0.2	Added operator check	2010-03-18
V0.1	Initial version	2010-03-10



Table of contents

Table of contents.....	3
1 - Introduction	4
2 - Sending SMS.....	5
3 - Extra information about the submitted SMS.....	7
Use testsms call when implementing	8
4 - Check SMS Route	10
5 - HLR	11
6 - Check credit.....	12
7 - Push DLR (Status reports)	13
8 - Pull DLR (status report)	14
9 - Get account pricing	15
10 - Error codes	16
11 - DLR Statuses.....	17
12 - Troubleshooting	18
13 – Examples.....	19
13.1 - Sending SMS message.....	19
13.2 – Check credit.....	19



1 - Introduction

This document describes all the functions of the BudgetSMS HTTP API. Read it carefully, as each chapter will have valuable information that can help implementation or debugging of problems.



2 - Sending SMS

To send messages through our API you need to make a HTTP GET call to our API with your account and SMS details.

The base URL to use is:

<https://api.budgetsms.net/sendsms/>

Use these variables to specify your account and SMS details

Variable	Description	Format	Mandatory	Example
username	Your BudgetSMS username	alphanumeric	yes	test
userid	Your BudgetSMS userid	numeric	yes	21547
handle	Your API handle	alphanumeric	yes	1e756dc895456f
msg	Text of your SMS message	alphanumeric	yes	This is a test
from	Senderid of your SMS message	alphanumeric	yes	BudgetSMS
to	Receiver of your SMS message	numeric	yes	31612345678
customid	Your own customMessageID	Alphanumeric, max 50 chars	no	5d3443564efab1
price	Receive price information of the submitted SMS in your response	1 or 0 (=default)	no	1
mccmnc	Receive country and network information in your response	1 or 0 (=default)	No	20416 204 = mcc 16 = mnc
Credit	Show the remaining credit in your response	1 or 0 (=default)	No	100.00

- Username
Your BudgetSMS username.
- Userid
Your BudgetSMS userid. This can be found in the control panel after the login.
- Handle
This is a unique identifier. You can find this also in the control panel after the login.
- Msg
This is the actual message of the SMS. There is not really a maximum number of characters, but it is considered safe to use up to 612 characters (4 SMSparts).
Please consult this URL with the allowed characters in a normal SMS:
http://en.wikipedia.org/wiki/GSM_03.38
- From
This is the sender that will appear in the inbox of the receiver of the SMS. This can be numeric as well as alphanumeric
 - o Alphanumeric: maximum length 11 characters (allowed: [a-z], [A-Z] and [0-9])



- Numeric: maximum length 16 numbers (allowed: [0-9])
This must be a valid MSISDN
Consult this link for more information: <http://en.wikipedia.org/wiki/MSISDN>
- To
Receiver number of the SMS message. No spaces, do not use the + before the international countrycode. Omit the first 0 from the number. Example: 31612345678
This must also be a valid MSISDN: <http://en.wikipedia.org/wiki/MSISDN>
- Customid
You can add your own customid when sending SMS. This is an unique id that can only be used once. When you use this ID on more messages you will get an error. If omitted this function is not used.
- Price
You can add price=1 to your SMS submit. This will give you the total price of the submitted SMS and the total number of message parts. (*check chapter 2 for extra information*)
- Mccmnc
You can add mccmnc=1 to your SMS submit. This will give you the mcc (=Mobile Country Code) and the mnc (=Mobile Network Code) of the SMS message. These are based on mobile prefixes (so the number can still be ported) (*check chapter 2 for extra information*)

Be sure to always use URL encoding before making the HTTP call. Use UTF-8 encoding, without this it can lead to unexpected results (errors, missing text in SMS, etc).

Sending a message could result in the following responses:

OK 12345678

Or

ERR 3001

Please note

When an "OK xxxxx" response is received, we have successfully submitted the message to 1 of our uplink connections. This means that SMS credit will be deducted from your SMS credit with BudgetSMS. It is still possible that the message will not be delivered, due to network issues, blocked routes and other possible problems.

If this happens we can analyze the problem in most cases. So be sure that you always save SMSid's and receiver numbers, as we need those to analyze any possible issue with delivery.

When you have received an "ERR xxxx" code, no credit is deducted from your BudgetSMS credit. This is because there was a problem with the submitted data. Please consult the received error code for a hint of the problem and a possible solution.



3 - Extra information about the submitted SMS

It is now possible to receive extra information of the SMS details and the receiver operator. In the SMS submit URL you can add parameters that will give you extra information in the server response about SMS price, number SMS parts and/or mcc & mnc information of the receiver.

If price information is selected you will receive the total price of the submitted message and the number of SMS parts.

If (also) mccmnc information is selected you will receive the mcc and mnc codes of the receiver of the message, determined by the operator prefix.

It is possible to only select 1 of these 2, none (default) or both. The selected information will be added to the SMS submit response.

For example, if price information is selected you will receive a response like this:

OK 1234567 0.055 1

OK = successful submitted
1234567 = SMSid
0.055 = SMS price
1 = Number of SMS parts

If mccmnc information is selected, the response will look like this:

OK 1234567 20416

Ok = Successful submitted
1234567 = SMSid
20416 = mcc & mnc code combined (204 = Netherlands, 16 = T-Mobile)

If both are selected, the response will look like this:

OK 1234567 0.055 1 20416

OK = successful submitted
1234567 = SMSid
0.055 = SMS price
1 = Number of SMS parts
20416 = mcc & mnc code combined (204 = Netherlands, 16 = T-Mobile)



4 - Use testsms call when implementing

It is possible to do a request to the API to implement the API in your application without actually sending any SMS. This request fakes SMS delivery, enabling you to make the implementation. This call will simulate the sendsms call, without actually sending SMS/reducing your credit.

The base URL to use is:

<https://api.budgetsms.net/testsms/>

Use these variables to specify your account and SMS details

Variable	Description	Format	Mandatory	Example
username	Your BudgetSMS username	alphanumeric	yes	test
userid	Your BudgetSMS userid	numeric	yes	21547
handle	Your API handle	alphanumeric	yes	1e756dc895456f
msg	Text of your SMS message	alphanumeric	yes	This is a test
from	Senderid of your SMS message	alphanumeric	yes	BudgetSMS
to	Receiver of your SMS message	numeric	yes	31612345678
customid	Your own customMessageID	Alphanumeric, max 50 chars	no	5d3443564efab1
price	Receive price information of the submitted SMS in your response	1 or 0 (=default)	no	1
mccmnc	Receive country and network information in your response	1 or 0 (=default)	No	20416 204 = mcc 16 = mnc
Credit	Show the remaining credit in your response	1 or 0 (=default)	No	100.00

- Username
Your BudgetSMS username.
- Userid
Your BudgetSMS userid. This can be found in the control panel after the login.
- Handle
This is a unique identifier. You can find this also in the control panel after the login.
- Msg
This is the actual message of the SMS. There is not really a maximum number of characters, but it is considered safe to use up to 612 characters (4 SMSparts).
Please consult this URL with the allowed characters in a normal SMS:
http://en.wikipedia.org/wiki/GSM_03.38



- From
This is the sender that will appear in the inbox of the receiver of the SMS. This can be numeric as well as alphanumeric
 - o Alphanumeric: maximum length 11 characters (allowed: [a-z], [A-Z] and [0-9])
 - o Numeric: maximum length 16 numbers (allowed: [0-9])
This must be a valid MSISDN
Consult this link for more information: <http://en.wikipedia.org/wiki/MSISDN>
- To
Receiver number of the SMS message. No spaces, do not use the + before the international countrycode. Omit the first 0 from the number. Example: 31612345678
This must also be a valid MSISDN: <http://en.wikipedia.org/wiki/MSISDN>
- Customid
You can add your own customid when sending SMS. This is an unique id that can only be used once. When you use this ID on more messages you will get an error. If omitted this function is not used.
- Price
You can add price=1 to your SMS submit. This will give you the total price of the submitted SMS and the total number of message parts. (*check chapter 2 for extra information*)
- Mccmnc
You can add mccmnc=1 to your SMS submit. This will give you the mcc (=Mobile Country Code) and the mnc (=Mobile Network Code) of the SMS message. These are based on mobile prefixes (so the number can still be ported) (*check chapter 2 for extra information*)

Be sure to always use URL encoding before making the HTTP call. Use UTF-8 encoding, without this it can lead to unexpected results (errors, missing text in SMS, etc).

Sending a message could result in the following responses:

OK 12345678

Or

ERR 999X

Please note

When an "OK xxxxx" response is received, no SMS is sent. No credit is deducted from your account. This is just a test call.



5 - Check SMS Route

It is possible to check the country and the operator based on the mobile number prefix. Please be advised: this is NOT an HLR service (for that see chapter 6). If a number is ported to another operator, it will not show up in this API call. It is only able to determine the original operator.

The URL to this call is

<https://api.budgetsms.net/checkoperator/>

Use these variables to specify your account and MSISDN details

Variable	Description	Format	Mandatory	Example
username	Your BudgetSMS username	alphanumeric	yes	test
userid	Your BudgetSMS userid	Numeric	yes	21547
handle	Your API handle	alphanumeric	yes	1e756dc895456f
check	The number to check operator	numeric	yes	31612345678

When the call was successful, expect a result similar to this:

OK:20416:T-Mobile Netherlands BV:0.0450

OK:[MccMnc]:[OperatorName]:[MessageCost]

Or when it was not successful:

ERR [errorcode]



6 - HLR

Chapter 5 describes a cheap way to determine the original operator, with HLR you can check the actual operator. When a number is ported from 1 operator to another, this call will allow you to know the current operator.

The URL to this call is

<https://api.budgetsms.net/hlr/>

Use these variables to specify your account and MSISDN details

Variable	Description	Format	Mandatory	Example
username	Your BudgetSMS username	alphanumeric	yes	test
userid	Your BudgetSMS userid	Numeric	yes	21547
handle	Your API handle	alphanumeric	yes	1e756dc895456f
to	The number to check operator	numeric	yes	31612345678

When the call was successful, expect a result similar to this:

OK:20416:T-Mobile Netherlands BV:0.0450

OK:[MccMnc]:[OperatorName]:[MessageCost]

Or when it was not successful:

ERR [errorcode]



7 - Check credit

To check your remaining credit use this URL

<https://api.budgetsms.net/checkcredit/>

Use these variables to specify your account details

Variable	Description	Format	Mandatory	Example
username	Your BudgetSMS username	alphanumeric	yes	test
userid	Your BudgetSMS userid	numeric	yes	21547
handle	Your API handle	alphanumeric	yes	1e756dc895456f

Result with correct account details will be:

OK 123.12

When not correct:

ERR [errorcode]



8 - Push DLR (Status reports)

It is possible to receive DLR information about the messages you have sent. Our system will push these updates to your server so you can process these updates in your software.

To enable this service for your account please login at the control panel and enter an URL where you want to receive the status updates. When we detect that you have entered an URL we will push the updates there.

Please make sure this URL accepts GET requests from BudgetSMS with these variables

Parameter	Explanation
id	SMS messageid
status	New status code
date	Timestamp of the DLR change (this can be a non local timestamp)

Every GET request to your URL consists of one (1) status update. So expect at least one GET request for every SMS submitted



9 - Pull DLR (status report)

It is possible to manually request the SMS status of sent messages. If somehow the push DLR messages do not fit your application.

Please check the error code table and the DLR statuses table for use with this API call.

We do recommend to use the push DLR, instead of manually checking each SMS.

<https://api.budgetsms.net/checksms/>

Use these variables to specify your account details

Variable	Description	Format	Mandatory	Example
username	Your BudgetSMS username	alphanumeric	yes	test
userid	Your BudgetSMS userid	numeric	yes	21547
handle	Your API handle	alphanumeric	yes	1e756dc895456f
smsid	The SMSid generated at sending	numeric	yes	25487134

Result with correct account details will be:

OK [DLR status]

When not correct:

ERR [errorcode]



10 - Get account pricing

To get the pricing that has been setup in your account make the following API call. You will receive a response with the full pricing to all operators as a JSON object. Each operator has the last_modified parameter, datetime value in GMT+1.

<https://api.budgetsms.net/getpricing/>

Use these variables to specify your account details

Variable	Description	Format	Mandatory	Example
username	Your BudgetSMS username	alphanumeric	yes	test
userid	Your BudgetSMS userid	numeric	yes	21547
handle	Your API handle	alphanumeric	yes	1e756dc895456f

If the credentials are not correct you will receive:

ERR xxxx

When the request is successful you will get a JSON object with all the details of the pricing in your account. In this object you can find:

Field	Description	Example
countryprefix	This is the prefix for telephone numbers in this specific country	31
countryname	This is the name of the country	The Netherlands
mcc	This is the mcc code (mobile country code) in this specific country	204
operatorname	The name of the operator	Tele2
mnc	This is the mnc code (mobile network code) in this specific country	02
price	The price per smspart in euro	0.04
old_price	The old price before the change	0.045
last_modified	This is the last date the price has changed (GMT+1)	2014-02-18 12:05:55



11 - Error codes

Error codes with explanation when sending a SMS message returns an error.

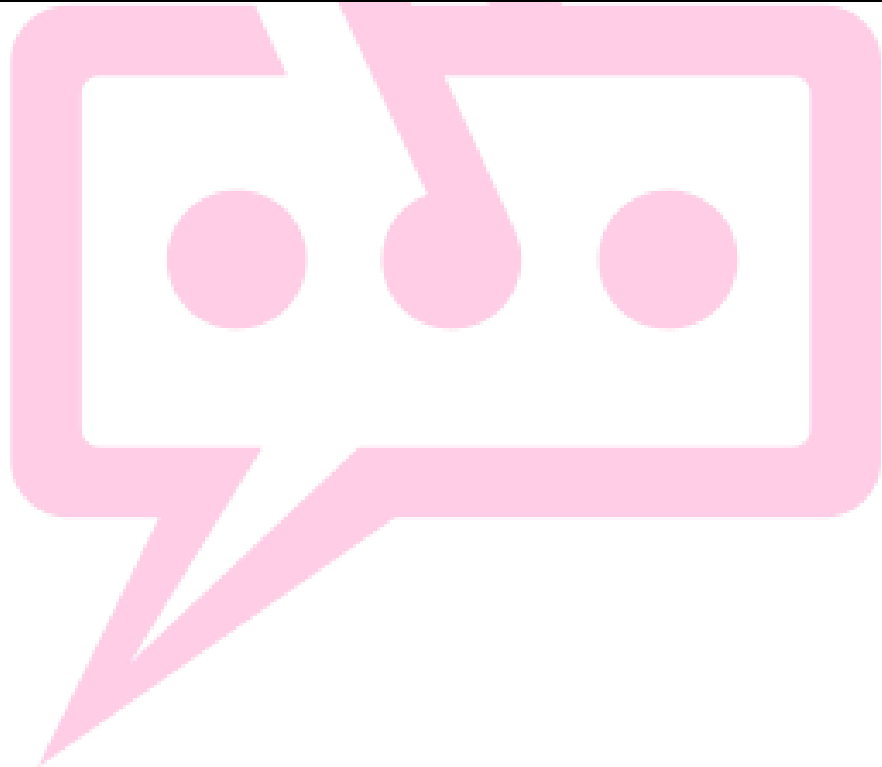
Error code	Description
1001	Not enough credits to send messages
1002	Identification failed. Wrong credentials
1003	Account not active, contact BudgetSMS
1004	This IP address is not added to this account. No access to the API
1005	No handle provided
1006	No UserID provided
1007	No Username provided
2001	SMS message text is empty
2002	SMS numeric senderid can be max. 16 numbers
2003	SMS alphanumeric sender can be max. 11 characters
2004	SMS senderid is empty or invalid
2005	Destination number is too short
2006	Destination is not numeric
2007	Destination is empty
2008	SMS text is not OK (check encoding?)
2009	Parameter issue (check all mandatory parameters, encoding, etc.)
2010	Destination number is invalidly formatted
2011	Destination is invalid
2012	SMS message text is too long
2013	SMS message is invalid
2014	SMS CustomID is used before
2015	Charset problem
2016	Invalid UTF-8 encoding
2017	Invalid SMSid
3001	No route to destination. Contact BudgetSMS for possible solutions
3002	No routes are setup. Contact BudgetSMS for a route setup
3003	Invalid destination. Check international mobile number formatting
4001	System error, related to customID
4002	System error, temporary issue. Try resubmitting in 2 to 3 minutes
4003	System error, temporary issue.
4004	System error, temporary issue. Contact BudgetSMS
4005	System error, permanent
4006	Gateway not reachable
4007	System error, contact BudgetSMS
5001	Send error, Contact BudgetSMS with the send details
5002	Wrong SMS type
5003	Wrong operator
6001	Unknown error
7001	No HLR provider present, Contact BudgetSMS.
7002	Unexpected results from HLR provider
7003	Bad number format
7901	Unexpected error. Contact BudgetSMS
7902	HLR provider error. Contact BudgetSMS
7903	HLR provider error. Contact BudgetSMS



12 - DLR Statuses

When a DLR callback to your server is done, expect the following possible status codes

Status code	Status
0	Message is sent, no status yet (default)
1	Message is delivered
2	Message is not sent
3	Message delivery failed
4	Message is sent
5	Message expired
6	Message has a invalid destination address
7	SMSC error, message could not be processed
8	Message is not allowed
11	Message status unknown, usually after 24 hours without status update SMSC
12	Message status unknown, SMSC received unknown status code
13	Message status unknown, no status update received from SMSC after 72 hours after submit



13 - Troubleshooting

Always make sure the data is URL encoded before sending. There can be some strange results when not decoding the data.

Also use the UTF-8 character set when encoding SMS messages. If you use other character encoding schemas it might lead to unexpected results.

If you have questions about new SMS routes or are experiencing problems with our HTTP API don't hesitate to contact us with your questions. If you have questions about SMS delivery of SMS related problems, make sure you include information that allows us to inspect your issue. This means SMSid's, receivernumbers and/or userid's. Omitting these will result in delayed investigation.



14 - Examples

Each example shown below uses the following fictional user details. To be able to perform the same API calls, these values need to be replaced with the account values for it to work properly.

```
username = test  
handle = 1234ef2354238dac2  
userid = 25135
```

14.1 - Sending SMS message

The following URL needs to be constructed and submitted. The API will then return an SMSid or an error code.

<https://api.budgetsms.net/sendsms/?username=test&handle=1234ef2354238dac2&userid=25135&msg=This%20is%20a%20test%20message&from=BudgetSMS&to=31612345678>

When successful will give this output:
OK XXXXXXXX

where XXXXXXXX is the messageID. Save this message ID when you receive status information, as this messageID is your only way of identifying this SMS.

If there was an error (no credit, wrong login information, etc) it will be something like this:

ERR XXXX

(Where XXXX is the actual error code, please consult the list of possible errors)

Tip:

Please also consult chapter 2 for additional response options, that may be different than the responses in the above example

14.2 - Check credit

To fetch the remaining credit the following URL can be constructed

<https://api.budgetsms.net/checkcredit/?username=test&handle=1234ef2354238dac2&userid=25135>



When successful it will return:

OK 100.00

Or when something was not right:

ERR XXXX

XXXX represents an error code. Please consult the list with possible error codes to know what happened.

