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## 1. REFERENCES

- [1] *Hypertext Transfer Protocol – HTTP/1.1*. R. Fielding, J. Gettys, J. Mogul, H. Frystyk, L. Masinter, P. Leach, and T. Berners-Lee. (RFC 2616) Network Working Group, June 1999.  
<http://tools.ietf.org/html/rfc2616>.
- [2] *3rd Generation Partnership Project; Technical Specification Group Core Network and Terminals; Technical realization of the Short Message Service (SMS)*. (3GPP TS 23.040) 3GPP.
- [3] *This message is rejected by the CELLIP SMSC. An example could be trying to send a SMS to an invalid number. Contact Cellip's support for assistance.*

## 2. HTTP ACCOUNT DETAILS

Host	Smsapi1.cellip.com
Post	5000 SSL
URL	/sms/sendsms.html
User	<user>
Password	<password>

## 3. CGI VARIABLES

[M] = Mandatory

[O] = Optional

Variable	Description	Type	O / M
Username	Username or account name	String	[M]
Password	Password associated with given username	String	[M]
From	Phone number of the sender Short number max length is 16 Alphanumeric sender is limited to GSM default alphabet with max length 11 MSISDN sender max length is 18	String	[M]
To	Phone number of the received. Plus signs (+) must be URL encoded	MSISDN	[M]
Text	Contents of the message, URL encoded as necessary	String	[M]
Charset	Charset of text message. Used to convert to a format suitable for 7-bit or UCS2. Defaults to ISO-8859-1 if coding is 7-bit and UTF16BE if coding is UCS2	String	[O]
UDH	Optional User Data Header (UDH) part of the message. Must be URL encoded	String	[O]

Date: 2013-02-02

Version: 1.4

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MClass	Sets the Message Class in DCS Field. Accepts values between 0 and 3. 0 = Sends the message directly to display 1 = Sends to mobile 2 = Sends to SIM 3 = Sends to SIM Toolkit	Number	[O]
MWI	Sets Message Waiting Indicator bits in the DCS field. If given, the message will be encoded as Message Waiting Indicator. The accepted values are 0, 1, 2, 3 for activating the voice, fax, e-mail and other indicator. Or 4, 5, 6, 7 for deactivating respectively	Number	[O]
Coding	Sets the coding scheme bits in DCS field. Accepts values between 0 and 2. 0 = 7-bit 1 = 8-bit 2 = UCS2  If unset, defaults to 7-bit unless a UDH is defined, which sets coding to 8-bit	Number	[O]
Validity	If given, CELLIP will only try to send the message for this many minutes. If the destination mobile is unreachable the SMSC discards the message	Number (Minutes)	[O]
Deferred	If given, the message will be postponed to be delivered at now plus this many minutes	Number (Minutes)	[O]
PID	Sets the PID value [2]. For example, a SIM Toolkit message would use something like the following:  &pid=127&coding=2&alt-dcs=1&mclass=3	Number	[O]
Alt-DCS	If unset, 0X per default. 1= uses FX. 2 = force 0X	Number	[O]

## 4. RESPONSE FORMAT

### 4.1 MESSAGE ACCEPTED

All requests that are correct will be accepted and the SMS server responds with status HTTP/1.1 202 and a message ID as content.

Test case with correct settings:

```
$ curl -v
"https://smsapi1.cellip.com:5000/sms/sendsms.html?username=user&password=pass
&from=CELLIP&to=46700 123456&text=Test"
* About to connect() to smsapi1.cellip.com port 5000 (#0)
*   Trying 193.105.226.49... connected
* Connected to smsapi1.cellip.com (193.105.226.49) port 5000 (#0)
> GET
/sms/sendsms.html?username=user&password=pass&from=CELLIP&to=46700123456&text
=Test HTTP/1.1
> User-Agent: curl/7.19.7 (universal-apple-darwin10.0) libcurl/7.19.7
OpenSSL/0.9.8l zlib/1.2.3
> Host: smsapi1.cellip.com:5000
> Accept: */*
>
```

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```
< HTTP/1.1 202 Accepted
< Date: Tue, 9 Nov 2010 12:38:58 +0100
< Content-Length: 32
< Content-Type: text/plain; charset=ISO-8859-1
* Connection #0 to host smsapil.cellip.com left intact
* Closing connection #0
12c306e85bc5d9e4e52211c741e21277
```

## 4.2 MESSAGE REJECTED

All requests that are failing get a corresponding HTTP status code and also a fail message as content.

Test case with wrong settings - "mClass=123"

```
$ curl -v
"https://smsapil.cellip.com:5000/sms/sendsms.html?username=user&password=pass
&from=&to=46700 123456&mclass=123&text=Test"
* About to connect() to smsapil.cellip.com port 5000 (#0)
*   Trying 193.105.226.49... connected
* Connected to smsapil.cellip.com (193.105.226.49) port 5000 (#0)
> GET
/sms/sendsms.html?username=user&password=pass&from=CELLIP&to=46700123456&mcla
ss=123&text=Test HTTP/1.1
> User-Agent: curl/7.19.7 (universal-apple-darwin10.0) libcurl/7.19.7
OpenSSL/0.9.8l zlib/1.2.3
> Host: smsapil.cellip.com:5000
> Accept: */*
>
< HTTP/1.1 400 Bad Request - server could not understand request
< Date: Tue, 9 Nov 2010 12:42:41 +0100
< Content-Length: 20
< Content-Type: text/plain; charset=ISO-8859-1
<
* Connection #0 to host smsapil.cellip.com left intact
* Closing connection #0
Invalid mclass value
```

Error Message (as content)	HTTP Status <sup>1</sup>	Code
Not acceptable <sup>3</sup>	NOT_ACCEPTABLE	406
Method not allowed, use GET	METHOD_NOT_ALLOWED	405
Query missing	BAD_REQUEST	400
Syntax error	BAD_REQUEST	400
User/Password parameter missing in the request (Basic Authorization is NOT used)	NON_AUTHORITATIVE_INFORMATION	203
Account not found	UNAUTHORIZED	401
Originator IP address is not authorized	UNAUTHORIZED	401
Account blocked	PAYMENT_REQUIRED	402

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Incorrect password	UNAUTHORIZED	401
Account throttled	TEMPORARY_REDIRECT	307
From number missing	BAD_REQUEST	400
Charset not supported	BAD_REQUEST	400
From number blocked	FORBIDDEN	403
To number missing	BAD_REQUEST	400
To number blocked	FORBIDDEN	403
User data header incorrectly formatted	BAD_REQUEST	400
User data header too long	BAD_REQUEST	400
Message ID parameter not found	BAD_REQUEST	400
Invalid coding	BAD_REQUEST	400
Invalid coding value	BAD_REQUEST	400
Invalid mClass	BAD_REQUEST	400
Invalid mClass value	BAD_REQUEST	400
Invalid alt-DCS	BAD_REQUEST	400
Invalid alt-DCS value	BAD_REQUEST	400
Invalid parameter combination, alt-DCS can only be set to 1 in conjunction with mClass	BAD_REQUEST	400
Invalid parameter combination, alt-DCS cannot be set to 1 when coding is UCS2	BAD_REQUEST	400
Invalid MWI	BAD_REQUEST	400
Invalid MWI value	BAD_REQUEST	400
Invalid parameter combination, MWI can only be set with 7bit coding	BAD_REQUEST	400
Invalid parameter combination, mClass and MWI cannot coexist	BAD_REQUEST	400
Invalid validity	BAD_REQUEST	400
Invalid validity value	BAD_REQUEST	400
Invalid deferred	BAD_REQUEST	400
Invalid deferred value	BAD_REQUEST	400
Invalid PID	BAD_REQUEST	400
Invalid PID value	BAD_REQUEST	400
Invalid DLR-mask	BAD_REQUEST	400
Invalid DLR-mask value	BAD_REQUEST	400
Invalid parameter combination, DLR-URL set but no DLR-mask	BAD_REQUEST	400
Invalid DLR-URL length	BAD_REQUEST	400

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Invalid DLR-URL, cannot find / after domain	BAD_REQUEST	400
Invalid DLR-URL, invalid port value	BAD_REQUEST	400
Invalid DLR-URL, unknown host	BAD_REQUEST	400
Invalid parameter combination, DLR-mask set but no DLR-URL	BAD_REQUEST	400
Text too long to fit in one SMS and auto concat not allowed	BAD_REQUEST	400
Text and UDH too long to fit in one SMS	BAD_REQUEST	400
Incorrect binary coding of text, should be e.g. %01%a0%34	BAD_REQUEST	400
Binary text plus IDH too long to fit in one SMS	BAD_REQUEST	400
Charset UTH-16BE not supported	BAD_REQUEST	400
UCS2 text plus UDH too long to fit in one SMS	BAD_REQUEST	400
Unknown error	BAD_REQUEST	400

## 5. TIME ZONE

CELLIP SMSC is located in Europe/Stockholm and use time zone: CET - Central European Time

CET is 1 hour ahead of Coordinated Universal Time (UTC)

Note that during summer daylight saving time is observed, and CEST is used instead.

## 6. MO SPECIFICATION

### 6.1 DESTINATION URI

To receive the MO message Cellip needs an URL that specifies where the messages should be sent. The URL will be passed as HTTP1.1 GET request.

Cellip needs:

- Hostname
- Port
- URL: Use escape codes when construct the URL

### 6.2 URL ESCAPE CODES

Escape Codes	
%t	The time the message was sent, formatted as "YYYY-MM-DD HH:MM"
%T	The time the message was sent, in UNIX epoch timestamp format

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%p	The phone number of the sender of the SMS message
%P	The phone number of the received of the SMS message
%q	Like %p, but a leading '00' is replaced with '+'
%Q	Like %P, but a leading '00' is replaced with '+'
%A	The short message content

### 6.3 EXAMPLE

This URI will pass the MO message to http server "mo.yourdomain.net" on TCP port 5000.

The example script to receive and pars the request is "yourGetMo.php". Cellip will escape the destination MSISDN to variable "msisdn", originator address to variable "originator" and the message to variable "msg".

The USI to use:

```
https:// mo.yourdomain.net:5000/yourGetMo.php?originator=%q&msisdn=%P&msg=%A
```

## 7. EXAMPLES

### 7.1 BASIC CONFIGURATION

Variable	Value
http-API URL	https://smsapi1.cellip.com:5000/sms/sendsms.html?
From	Test
To	123456
Message	"Hello world"

### 7.2 EXAMPLE 1 - SUBMIT TEXT MESSAGE

```
https://smsapi1.cellip.com:5000/sms/sendsms.html?username=userX&password=passX&from=test&to=123 456&text=Hello+world
```

*(Content of the message must be URL encoded)*

Variables/Values	Comment
https://smsapi1.cellip.com:5000/sms/sendsms.html	http-API URL
username=userX	Set username to userX
password=passX	Set password to passX
from=test	Set originator to test

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to=123456	Set MSISDN to 123456
text=Hello+world	Set message content to "Hello world"

### 7.3 EXAMPLE 2 – SUBMIT FLASH MESSAGE

`https://smsapi1.cellip.com:5000/sms/sendsms.html?username=userX&password=passX&from=test&to=123456&text=Hello+world&alt-dcs=1&mclass=0`

Variable/Values	Comment
<code>https://smsapi1.cellip.com:5000/sms/sendsms.html</code>	http-API URL
<code>username=userX</code>	Set username to userX
<code>password=passX</code>	Set password to passX
<code>from=test</code>	Set originator to test
<code>to=123456</code>	Set MSISDN to 123456
<code>text=Hello+world</code>	Set message content to "Hello world"
<code>alt-dcs=1</code>	Uses FX
<code>mClass=0</code>	Sends the message directly to display

#### 7.3.1 INFORMATION ABOUT "MCLASS"

Parameter "mClass" sets the Message Class in DCS field.

- `mClass=0` Sends the message directly to display
- `mClass=1` Sends to mobile
- `mClass=2` Sends to SIM
- `mClass=3` Sends to SIM Toolkit

Parameter "alt-DCS":

- If unset, 0X per default
- If equals to 1, uses FX
- If equals to 2, force 0X

### 7.4 EXAMPLE 3 – SUBMIT BINARY MESSAGE

`https://smsapi1.cellip.com:5000/sms/sendsms.html?username=userX&password=passX&from=test&to=123456&udh=%83%0e%81%00%00%00%3f%fe%40%01%4f%f9%50%05%53%e5%54%15%55%d5%55%55%54%55%53%95%50%15%4f%e5%40%05%3f%f9%00%01%3f%ff%40%00%4f%fc%50%02%53%f2%54%0a%55%ca%55%2a%55%aa%54%2a%53%ca%50%0a%4f%f2%40%02%3f%fc%00%00%80%00%9f%fc%a0%02%a7%f2%a8%0a%a9%ca%aa%2a%aa%aa%ab%aa%a8%2a%a7%ca%a0%0a%9f%f2%80%02%7f%fc%00%00%00%00%3f%fc%40%02%4f%f2%50%0a%53%ca%54%2a%55%aa%54%aa%53%aa%50%2a%4f%ca%40%0a%3f%f2%00%02%ff%fc&text=%ab%ab`

