



# CloudSMS API Guide

Version 6.1

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# 1 Overview

CommzGate CloudSMS provides a set of functions for mobile message sending and receiving exposed as HTTPS-based API. The API functions defined in this document are for applications or services to make use of the CommzGate CloudSMS Service over the Internet or private leased network.

To make use of the CloudSMS API, you require an account from CommzGate as well as the URL of the CommzGate CloudSMS Service on the Internet.

You can get a CloudSMS account at <https://portal.commzgate.com/app/signup.php>

Once you have logged in to your web account, click on the API tab to get your API ID. Use the link provided to create a password for your API ID as well.

The CommzGate CloudSMS URL that you call will be in the form of:  
<https://www.commzgate.net/gateway/SendMessage>

For Pro Plan customers, you have the option of using our premium reserved capacity API domain at <https://vip.commzgate.net>

This reserved domain requires that your source IP address be whitelisted. Please contact your Account Manager regarding source IP whitelisting.

## HTTP Methods:

The POST method may be used for the API unless explicitly stated otherwise.

There are two main categories in the API:

**A) MT (Mobile Terminate) API** involves sending messages from the **CommzGate CloudSMS to Mobile Device**.

**B) MO (Mobile Originate) API** involves receiving messages from the **Mobile Device to CommzGate CloudSMS**.

For MT API, HTTP POST request is initiated by your Application and directed to the CommzGate CloudSMS Service.

For MO API, HTTP POST request is initiated by the CommzGate CloudSMS Service and directed to your Application.

This document defines the API, their parameters, and return values. Note that parameter names are **case sensitive**. Also, none of the parameter values that are passed in should contain the pipe “|” character. The standard HTTP encoding rules must be used when passing text as parameters.

Please be aware that SMS messages containing up to 160 GSM characters or 70 Unicode characters will be considered as one single SMS, and when exceeding 160 GSM characters or 70 Unicode characters the number of SMS will be calculated according to the ratio of 153 GSM characters per SMS or 67 Unicode characters per SMS. The table below exemplifies the calculation rule:

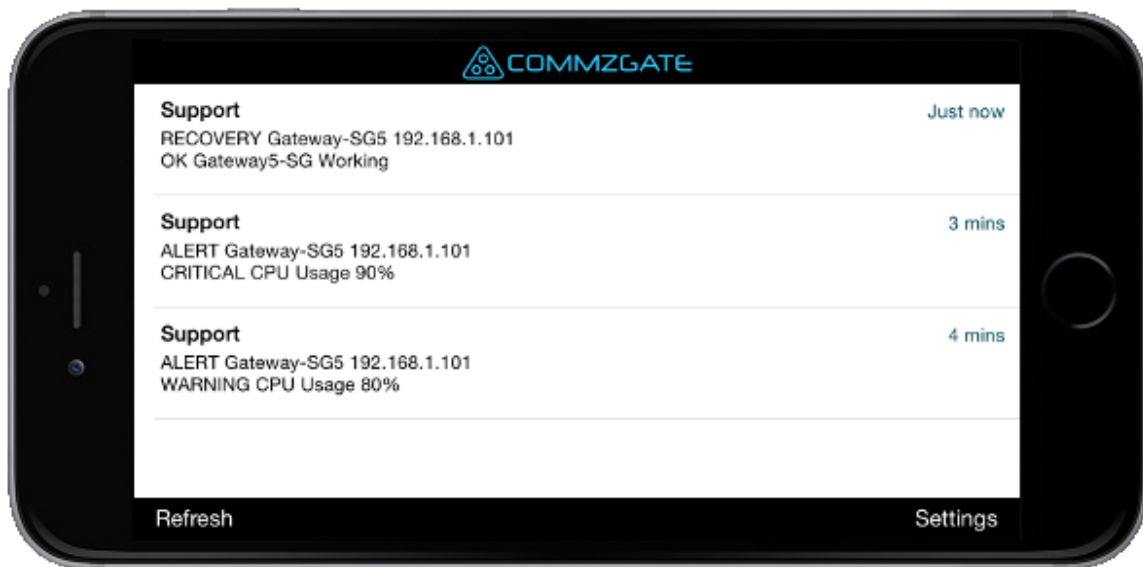
	GSM	Unicode
1	160	70
2	306	134
3	459	201
4	612	268
5	765	335
6	918	402
7	1071	469
8	1224	536
9	1377	603
10	1530	670

## 2 Extend Beyond SMS Messaging

The CommzGate CloudSMS API supports the sending of messages beyond the SMS channel. Using the same seamless API, messages can also be sent to the following channels.

### 2.1 PushBox Mobile App

CommzGate PushBox is a free mobile app that receives SMS messages delivered as a push notification message. It is perfectly suited for organizations with teams or a member base, and can improve communications drastically while keeping the costs low.



Using the MT API, recipient numbers with Pushbox installed will automatically receive the message as a Push Notification message. PushBox has been successfully integrated with systems such as PRTG, SolarWinds, and Aruba ClearPass for sending system alerts as well as One-Time Passwords.

PushBox is available for iPhone and Android, and can be downloaded from:  
<http://www.commzgate.com/page/downloads/>

## 2.2 Custom Mobile App

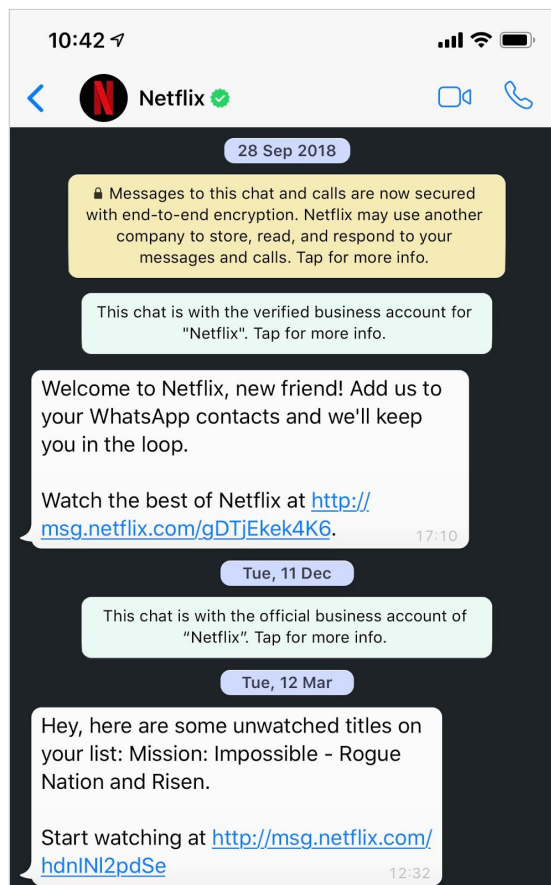
MACH is our push-messaging service that lets you send mobile messages using our CloudSMS Portal & CloudSMS API.

Using the MT API, recipient numbers with MACH-enabled mobile apps installed will automatically receive the message as a MACH Push Notification message. Otherwise the message will be delivered via SMS.

If you wish to integrate your own mobile app to MACH, please register for a free account at <http://app.themach.com>

## 2.3 Official WhatsApp Business API

Create business profile on the official WhatsApp Business API (<https://www.whatsapp.com/business/api>) and reach billions of WhatsApp numbers using the same Web Portal and API that you use for sending SMS.



We will help you register a WhatsApp Business API verified number and business profile (denoted by a green checkmark) which will be used to send and receive WhatsApp messages via our Web Portal and API. Contact us for more information!

## **2.4 Voice Messaging**

Using advanced real-time text to speech technology, your SMS message can be delivered as a voice call to the mobile recipient. This alternate channel is perfect for scenarios where SMS is not practical or where the destination country has restrictions in place for SMS delivery.

## **2.5 Email Messaging**

CommzGate also supports the delivery of enterprise-grade email messages with features such as SPF setup, reverse DNS setup, reputation checking and IP whitelisting. Get connected to a truly unified messaging platform without dealing with multiple vendors and protocols.

## 3 MT API

### 3.1 Send Message

URL

<https://www.commzgate.net/gateway/SendMessage>

Description Sends a message to the specified mobile number.

HTTP Method POST

Field	Description
ID	<p><i>Type=String, Max Length=50 (Case-Sensitive)</i></p> <p>API ID, pre-assigned by the CommzGate CloudSMS Service. You can view this value by logging in to your CloudSMS Portal account.</p>
Password	<p><i>Type=String, Max Length=50 (Case-Sensitive)</i></p> <p>API password. You can configure or change this by logging in to your CloudSMS Portal account.</p> <p>If your password contains special symbols, please make sure to URL-encode this value in your request.</p>
Mobile	<p><i>Type=Numeric, Max Length=20</i></p> <p>Message recipient mobile phone number (single number, include country code and exclude "+" sign) e.g. 6591502554</p> <p>See the 'Batch' parameter option if you wish to send the same message to more than 1 mobile number using a single MT API request.</p>
Type	<p><i>Type=Char, Max Length=4 (Case-Sensitive)</i></p> <p>Message Content Type:                      "AUTO" – Automatically detect                      "A" – ASCII content of less than 160 characters                      "LA" – ASCII content of less than 1530 characters</p>



	<p>“H” – Hexadecimal                  “U” – Unicode</p> <p>When using the ‘Type=AUTO’, the Type parameter value will be automatically selected based on message content. Long messages (up to 1530 characters) are also supported.</p> <p>If you send a message containing characters within the GSM character set, the Type parameter value can be set to A. If this message content is more than 160 characters, with Type set to LA.</p> <p>When using the ‘Type=LA’, the message ID returned will be sufficed by a ‘C’.                  eg. 01010,c1_14931761715062610C                  Depending on the exact number of message parts the long message content is split into, the actual message ID of each message part will be in the form c1_14931761715062610_XXC where XX indicates the part number of the long message.                  eg.                  Part 1: c1_14931761715062610_01C                  Part 2: c1_14931761715062610_02C</p> <p>If you send a message containing UTF-8 characters outside of the GSM character set, and the entire message content will be automatically converted into 16-bit hexadecimal with the Type parameter value set to U.                  e.g. 使用 <i>english</i></p> <p>When using ‘Type=U’, send the message content as double-byte UTF-16 represented using hexadecimal characters.                  See example in next section.</p>
Message	<p><i>Type=String, Max Length=Variable (see below)</i></p> <p>Message Content (must be URL-encoded)                  If Type = “AUTO”, not more than 1530 characters</p> <p>If Type = “A”, not more than 160 characters                  If Type = “LA”, not more than 1530 characters                  If Type = “H”, not more than 280 (less the length of UserHeader value) in hexadecimal characters                  If Type = “U”, not more than 70 characters</p>

Sender  <b>Optional</b>	<p><i>Type=String, Max Length=11 (Case-Sensitive)</i></p> <p><b>Alphanumeric</b> Originating Address Also know as Number Masking or TPOA</p> <p><i>* IMPORTANT: To prevent spoofing of Number Mask values, we require you register Number Mask values you wish to use with us, else using this option will result in your message not being delivered. Number Mask registration charges may apply.</i></p>
UserHeader  <b>Optional</b>	<p><i>Type=String, Max Length=not more than 280 (less the length of Message value) in hexadecimal characters.</i></p> <p>This is the value of the User Data Header that is used for certain messages types, such as long concatenated messages.</p>
OTP  <b>Optional</b>	<p><i>Type=String, Max Length=8 (Case-Sensitive)</i></p> <p>This option works only when the Type parameter is set to 'A' and the Message parameter is restricted to 160 characters.</p> <p>Set this to 'true' to enable basic OTP mode and send SMS containing One-Time Passwords (OTP).</p> <p>In this mode, the CommzGate CloudSMS API will look for the placeholder <i>*OTP*</i> in your message content, and replace this with a randomly generated 5-digit number (the OTP).</p> <p>This same OTP 5-digit number will be appended to the Return String that is returned to your requesting application, after the Message ID, separated by a comma. Use this OTP value returned to you to compare against the input value submitted by the mobile recipient, they should match.</p> <p>Set this to 'advanced' to enable advanced OTP mode.</p> <p>In advanced mode, the message workflow mimics that of a traditional RADIUS authentication system.</p> <p>Additional parameter options for sending OTP SMS are available to configure OTP length, expiry time, etc, and OTP validation is provided by the CloudSMS API.</p>

	<p>The CommzGate CloudSMS API will look for the placeholder <b>##OTP##</b> in your message content, and replace this with the generated OTP code.</p> <p>The following describes how an advanced mode OTP is triggered and subsequently validated.</p> <ol style="list-style-type: none"> <li>i. Customer System (eg. Web Portal) validates initial user login credentials (eg. via local LDAP or Active Directory node)</li> <li>ii. If credentials are validated, Customer System sends OTP request via HTTPS to “CloudSMS”, which in turn generates and delivers OTP SMS to user.</li> <li>iii. User enters OTP value into Customer System, the Customer System in turn validates the OTP value entered against “CloudSMS” via a HTTPS request. See Section 3 for the ‘OTP Validation’ API.</li> <li>iv. “CloudSMS” replies with the OTP validation result. (e.g. ACCEPT or REJECT)</li> <li>v. Customer System responses to User Login request, based on OTP validation result returned by “CloudSMS”.</li> </ol> <p>The OTP validation API can be found in section 3.2 Please contact your Account Manager to activate this feature.</p>
<p>OtpExpiry</p> <p><b>Conditional</b></p>	<p><i>Type=Numeric, Default=180, MaxLength=4</i></p> <p>This option is available only when ‘OTP=advanced’ is used.</p> <p>Use this to set the OTP expiry time in seconds, beyond which all validation attempts will encounter a REJECT.</p> <p>Possible values are 30 to 600.</p>

<p>OtpLength</p> <p><b>Conditional</b></p>	<p><i>Type=Numeric, Default=4,, MaxLength=1</i></p> <p>This option is available only when 'OTP=advanced' is used.</p> <p>Use this to set the length of OTP value to be generated.</p> <p>Possible values are 4 to 7</p>
<p>OtpMaxValidate</p> <p><b>Conditional</b></p>	<p><i>Type=Numeric, Default=3, MaxLength= 2</i></p> <p>This option is available only when 'OTP=advanced' is used.</p> <p>Use this to set the maximum number of validation attempts allowed for an OTP, beyond which all validation attempts will encounter a REJECT.</p> <p>Possible values are 1 to 10</p>
<p>Batch</p> <p><b>Optional</b></p>	<p><i>Type=String, Default=false, Max Length=8 (Case-Sensitive)</i></p> <p>Set this to 'true' to enable batch MT mode.</p> <p>You are able to include up to 1000 mobile numbers in the 'Mobile' parameter, with each mobile number separated by a comma. (,)</p> <p>i.e. You will be able to send the same message content to up to 1000 mobile numbers, via a single POST request.</p> <p>For successful requests, a single batch message ID will be returned. To check on the status of each individual message in the batch request, use this batch message ID on the CloudSMS portal to retrieve the details of each message in the batch.</p> <p>When this parameter is set to 'true', the max length of the Message parameter is extended to 1530 and the Type parameter will be ignored.</p> <p>Set this to 'advanced' to enable advanced batch MT mode.</p> <p>Using advanced batch mode, you are able to include up to 50,000 mobile numbers with personalised message content for each mobile number.</p>

	<p>All other parameters will be ignored when this option is enabled. Please send your API credentials and data as a POST body in the JSON format below:</p> <pre> {   "ID": "xxxx",   "Password": "xxxx",   "Schedule": "202012250700",   "Sender": "xxxx",   "MessageContent": [     {"6598561596": "Hello1"},     {"6598561597": "Hello2"},     {"6598561598": "Hello3"}   ] } </pre> <p>The max length of the message field is 1530 inclusive of unicode characters.</p> <p>For successful requests, a single batch message ID will be returned. To check on the status of each individual message in the batch request, use this batch message ID on the CloudSMS portal to retrieve the details of each message in the batch.</p> <p>Optional parameters like <i>Sender</i> and <i>Schedule</i> can be omitted from the JSON body if not needed.</p> <p><b><u>Scheduling Batch Requests</u></b>      To schedule a batch request for processing at a future time, you can use the optional parameter <i>Schedule</i> and indicate the intended data and time in YYYYMMDDHHMM format. e.g  <i>202012250700</i></p>
	<p>Set this to 'cancel' to cancel a previously submitted scheduled batch request.</p> <p>All other parameters will be ignored when this option is selected. Please send your API credentials and data as a POST body in the JSON format below, where "<i>BatchID</i>" should content the batch ID of the request you wish to cancel.</p>

	<pre>{   "ID": "xxxx",   "Password": "xxxx",   "BatchID": "b1_a_1588659442134" }</pre>
Shorten  <b>Optional</b>	<p><i>Type=String, Default=false, Max Length=5 (Case-Sensitive)</i></p> <p>Set this to 'true' to enable URLs found in the message content will be replaced with a shortened URL in the format <b>http://comm.sg/uJh4S</b> where <b>http://comm.sg</b> is CommzGate's built-in URL shortening service. Recipient URL clicks are tracked and displayed in a report on the CommzGate portal.</p> <p>As a custom option, the shortened URL can be also pointed to your own domain in the format <b>https://&lt;subdomain&gt;.yourdomain.com/uJh4S</b></p> <p>Please contact your account Manager to have this feature enabled.</p>
TemplateMode  <b>Optional</b>	<p><i>Type=String, Default=false, Max Length=5 (Case-Sensitive)</i></p> <p>Set this to 'true' to enable sending of message content that you have already pre-configured on the CommzGate portal.</p>
TemplateID  <b>Conditional</b>	<p><i>Type=String, Max Length= 10 (Case-Sensitive)</i></p> <p>This option works only when the TemplateMode parameter is set to 'true'.</p> <p>Set this to the ID of the message template which you have already pre-configured on the CommzGate portal.</p>
Voice  <b>Optional</b>	<p><i>Type=String, Default=false, Max Length=5 (Case-Sensitive)</i></p> <p>This options works only when the Type parameter is set to 'A'</p> <p>Set this to 'true' to enable message content to be delivered as a telephone voice call to the recipient number, with the text content translated into a spoken voice message using real-time text-to-speech.</p>

	<p>You can use this mode to deliver OTP messages to destinations where SMS delivery is problematic due to carried rules etc.</p> <p>If this parameter is set to true, all other optional parameters will be ignored except for the “OTP” parameter.</p> <p>Please contact your account Manager to have this feature enabled.</p>
<p>Title</p> <p><b>Optional</b></p>	<p><i>Type=String, Max Length=10 (Case-Sensitive)</i></p> <p>This option is effective only for MACH and WhatsApp Business API messages.</p> <p>Set this to display the title of the Push Notification or the WhatsApp header text if applicable.</p>
<p>MACH</p> <p><b>Optional</b></p>	<p><i>Type=String, Default=true, Max Length=6 (Case-Sensitive)</i></p> <p>Set this to ‘false’ to route the message via SMS only.</p> <p>If a recipient mobile number is registered on the CommzGate PushBox mobile app or a custom MACH-enabled mobile app, the message will arrive on the user device as a Push Notification by default. Use the parameter ‘MACH=false’ to force-route the message to be delivered via SMS.</p> <p>Set this to ‘silent’ if you wish to have notifications silently arrive on a custom MACH-enabled mobile app with the payload delivered in the background.</p> <p>Payload for the push notification shall be sent in the Message parameter in the following format:</p> <p><i>Payload1:&lt;Payload Value&gt;,Payload2:&lt;Payload Value&gt;,Payload3:&lt;Payload Value&gt;</i></p> <p><i>where &lt;Payload Value&gt; contains your custom payload value (without the angled brackets)</i></p> <p>If this parameter is set to true, all other optional parameters will be ignored.</p>

WhatsApp  <b>Optional</b>	<p><i>Type=String, Default=false, Max Length=5 (Case-Sensitive)</i></p> <p>Set this to 'true' to enable WhatsApp Business API MT options. If this parameter is set to true, all other optional parameters will be ignored. Please refer to Section 6 for details.</p> <p>Please contact your account Manager to have this feature enabled.</p>
Email  <b>Optional</b>	<p><i>Type=String, Default=false, Max Length=5 (Case-Sensitive)</i></p> <p>Set this to 'true' to enable the message content to be delivered as an email. If this parameter is set to true, all other optional parameters will be ignored. Please refer to Section 7 for details.</p> <p>Please contact your account Manager to have this feature enabled.</p>

<b>Return String</b>	<b>Description</b>
Return Code	The success/error acknowledgement (from the CommzGate CloudSMS Service) of the API request. Defined in Return Codes List.
Message ID	This is a unique message identifier that is generated by CloudSMS.
OTP	Optional. If you had enabled the OTP parameter in your MT request, the 5-digit number generated will be returned here.



**A- Example for English Message**

**ID**=1000002  
**Password**= qrxxy53tohh88  
**Mobile**=6591122334  
**Type**=A  
**Message**=Happy+Birthday+to+you

The following return string is returned:  
01010, c1\_118334327757067122

The return string values are mapped as follows:

Result Code	01010 (Success)
Message ID	c1_118334327757067122

**B- Example for Chinese Message**

(To send the Character 人)

**ID**=1000002  
**Password**= qrxxy53tohh88  
**Mobile**=6591122334  
**Type**=U  
**Message**=4EBA

The following return string is returned:  
01010, c1\_118334327757067122

The return string values are mapped as follows:

Result Code	01010 (Success)
Message ID	c1_118334327757067122

**C- Example for Binary Message**

(To send a Nokia Ringtone)

**ID**=1000002  
**Password**= qrxxy53tohh88  
**Mobile**=6591122334  
**Type**=H  
**UserHeader**=06050415810000  
**Message**=024A3A51D195CDD004001B20550590610560558550548540820849900  
000

The following return string is returned:

*01010,c1\_118334327757067122*

The return string values are mapped as follows:

Result Code            *01010 (Success)*  
Message ID            *c1\_118334327757067122*

#### ***D- Example for English Message with OTP***

***ID=1000002***  
***Password= qrxy53tohh88***  
***Mobile=6591122334***  
***Type=A***  
***Message=Your+One-Time+Password+is+\*OTP\****  
***OTP=true***

The following return string is returned:

*01010,c1\_118334327757067122,34215*

The return string values are mapped as follows:

Result Code            *01010 (Success)*  
Message ID            *c1\_118334327757067122*  
OTP generated        *34215*

#### ***E- Example for English Message with Batch=true***

***ID=1000002***  
***Password= qrxy53tohh88***  
***Mobile=6598561596,6598561597,6598561598***  
***Type=A***  
***Message=Happy+Birthday+to+you***  
***Batch=true***

The following return string is returned:

*01010, b\_118334327757067122*

The return string values are mapped as follows:

Result Code            *01010 (Success)*  
Batch ID                *b\_118334327757067122*

**F- Example for English Message with Batch=advanced****Batch=advanced**

```
{
  "ID": "xxxx",
  "Password": "xxxx",
  "Schedule": "202012250700",
  "Sender": "xxxx",
  "MessageContent": [
    {"6598561596": "Hello1"},
    {"6598561597": "Hello2"},
    {"6598561598": "Hello3"}
  ]
}
```

The following return string is returned:

01010, b\_118334327757067122

The return string values are mapped as follows:

Result Code	01010 (Success)
Batch ID	b_118334327757067122

### 3.2 OTP validation API

#### URL

<https://www.commzgate.net/OTP/Validate>  
<https://vip.commzgate.net/OTP/Validate>

*NOTE: https://vip.commzgate.net is reserved for Pro Plan users only and source IP whitelist is required*

Description	Validates the OTP value for a Mobile Number.
HTTP Method	GET

Field	Description
ID	<i>Type=String, MaxLength=50</i> API ID, pre-assigned by the CommzGate Cloud SMS Service.
Password	<i>Type=String, MaxLength=50</i> API password.
Mobile	<i>Type=Numeric, MaxLength=20</i> The Mobile Number to validate.
OtpValidate	<i>Type=String, MaxLength=8</i> This is the OTP value to be validated for the Mobile Number.

Return String	Description
Validation Status	Possible values are described in the next table.

---

<b>Result Code</b>	<b>Description</b>
ACCEPT	OTP value is validated and accepted.
REJECT	OTP value is rejected.  Possible reasons for rejection are: -Invalid OTP value -Expired OTP -Maximum retries exceeded -Mobile number does not have any existing OTP session.
01011	Invalid request format; check request format definition (e.g. parameter names, the length of the values you are passing into the parameters, the type of values such as numeric/alphabet).
01012	Unauthorized access; either the external application does not exist (based on ID), Password is invalid, or the request is being originated from a non-authorized IP address.
01013	Temporary system error; contact CommzGate support if condition persists.

### 3.3 Send Long Concatenated Messages manually

If you are looking to send long concatenated messages easily, consider using the 'Type=AUTO' or 'Type=LA' parameter as described in the MT API, instead of using the 'UserHeader' parameter.

The parameter "UserHeader" is used when sending special binary formatted message (melodies, pictures etc) or when concatenating multipart messages into 1 long message.

The data sent in the UserHeader corresponds to the User-Data-Header segment within Transport Protocol Data Unit (PDU) as defined in the GSM specifications (3GPP TS 23.040).

An example UserHeader for sending a long concatenated message is

```
0500030F0201
```

In this example UserHeader the first 3 Octets *050003* represent the standard identifier for a concatenated message:

```
05--User Data Header Length (5 octets)
```

```
00--Concatenated message (8-bit reference)
```

```
03--Information Element Data Length
```

The next 3 Octets are described as follows:

```
0F--Concatenated Message Reference. This is a modulo 256 number which remains the same for all segments composing a concatenated message.
```

```
02--Total Message Parts (value 0-255) . This number represents the number of segments composing the concatenated message.
```

```
01--Part Number of this Segment (value 0-255). The first segment of a concatenated message has a sequence number of 1. Value 0 is reserved.
```

Further examples of User Header settings can be obtained from each respective handset manufacturers' SMS specification documents. (eg. Nokia Smart Message FAQ)

As long as the required binary User Data Header info is submitted in the *UserHeader* parameter and the rest of the binary message body in the *Message* parameter, the SMS will be delivered as specified.

## 4 MO API

### 4.1 Receive Message

Whenever the CommzGate Cloud Service receives an SMS, it will look up its own Application Routing table to determine which application the SMS is to be forwarded to. Once this has been resolved, the CommzGate Cloud Service will post a HTTP request to the application and pass in argument values.

The application must have a web-component that is able to receive a **HTTP POST method call**. The URL path of the application's receiving component must be pre-registered with the CommzGate Cloud Service.

Field	Description
Mobile	The originating mobile number of the received message
Type	Message Content Type: "A" – ASCII "H" – Hexadecimal "U" – Unicode  This indicates the type of Message Content being received. For Type=U, the Message Content is in Unicode UTF-16 represented by Hex characters, 2 Hex characters per character. For a mixture of English and non-English content, the Type is set to U.
SMTType	This parameter applies only if Type="H".  The value of this field is taken as <destination port><originating port> in the User Data Header, according to the Nokia Smart Messaging specifications; some are shown below-  VCARD 23F40000 LOGO 15820000 PICTURE 158A0000 RINGTONE 15810000
Message	Message Content (URL-Encoded content) If Type = "A", not more than 160 characters If Type = "H", not more than 280 HEX characters If Type = "U", not more than 280 HEX characters in UTF-16

	<p>If the message is a Smart Message (e.g. ring-tone, logo etc), Type will be set to H and the Message field will contain only the content (no header information) of the Smart Message. This will contain the ENTIRE Smart Message, since the CommzGate Cloud Service will perform the concatenation of the message parts.</p>
Timestamp	<p>The date-time that the message was received by the CommzGate Cloud Service. The format is YYYY-MM-DD hh:mm:ss</p>
ServiceNum	<p>This value specifies the Service Number / short-code / mobile number <b>to which</b> the SMS MO was sent.</p>
ConnID	<p>This value specifies the unique ID of the Connector through which the CommzGate Cloud Service received the incoming message. The possible values of the ConnID must be obtained from the deployment architect of the system.</p>
OperatorID	<p>This value specifies the mobile operator / service provider that the Connector receives the incoming message from. Note that this is different from the ConnID in that there may be multiple Connectors for a single mobile operator / service provider. If you only need to know which mobile operator / service provider the message is from (and not the <i>specific connector</i>), then use this field.</p>
MessageID	<p>This is the unique message ID assigned to the message by CommzGate. Use this for cross-checking with CommzGate when troubleshooting issues.</p>



**Example**

Assuming the receive path of the application is:

**202.22.123.5:8081/messagegateway/receive.jsp**

The CommzGate Cloud Service receives an incoming SMS and determines that it is to be routed to this application. The CommzGate Cloud Service then calls a HTTP POST with the following details:

**202.22.123. 5:8081/messagegateway/receive.jsp**

**Mobile=6598765432**

**Type=A**

**Message=Testing**

**Timestamp=2003-02-03 20:15:05**

**ServiceNum=1944367**

**Note:** The CommzGate Cloud Service will expect an acknowledgement code 'OK' to be returned by the application, otherwise it will treat the message as undelivered and will either retry, or log the message as 'Not Forwarded'.

## 5 Delivery Status

**NOTE:** This is an optional add-on feature available only with a Pro Plan account

Whenever you successfully submit a message to the CommzGate Cloud Service, and the success code returned by the CommzGate Cloud Service only indicates the successful acceptance of your message attempt for subsequent delivery to the appropriate Mobile Operator the message is intended for. The Mobile Operator might subsequently accept this message or it might be rejected for one reason or another.

To find out the eventual status of the message submitted, you can either manually review the message status reports via the Customer Access Portal, or use our Message Status API, or configure a Webhook to receive message statuses.

### 5.1 Get Message Status API

URL

<https://www.commzgate.net/gateway/GetStatus>

Description Returns a list of messages status delimited by the comma character.

HTTP Method GET

Field	Description
ID	<i>Type=String, Length=50</i>  API ID, pre-assigned by the CommzGate CloudSMS Service. You can view this value by logging in to your CloudSMS Portal account.
Password	<i>Type=String, Length=50</i>  API password. You can configure or change this by logging in to your CloudSMS Portal account.
MessageID	<i>Type=String, Length=50</i>  Specify the Message ID value for message status to retrieve

BatchID  <b>Optional</b>	<i>Type=String, Length=50</i>  The unique ID for the batch message request that was successfully submitted to the CommzGate Cloud Service.  If this parameter is specified, the MessageID parameter will be ignored.
--------------------------------	--

Return String	Description
Status List	The list of message statuses with each status separated by a new line. Up to 50,000 records will be returned with each call. Format is described in the next table.

Field	Description
MsgID	The unique message ID for the message that was successfully submitted to the CommzGate Cloud Service. This message ID was returned by the CommzGate Cloud Service to your application as part of the success code.
Mobile	This is the mobile number that that message was sent to.
Status	This is the Status of the messages that were submitted by your application earlier. Possible values are:  SUCCESS DELIVERED QUEUED ERROR- PREPAID BLOCK ERROR- NUMBER NOT ROUTABLE ERROR- TELCO ERROR ERROR- NUMBER INVALID ERROR- UNAUTHORISED ERROR- CONTENT ERROR ERROR- SYSTEM ERROR

The message status QUEUED is a transient condition and not final, upon the subsequent requests to this API, the final status will be returned. All other status values are final conditions.

The message status DELIVERED will only appear for accounts enabled for handset delivery reports. Please contact your account Manager to have this feature enabled.

#### **A- Example with MessageID**

**ID=1000002**

**Password= qrxxy53tohh88**

**MessageID= c1\_10999338883883**

The following string is returned:

c1\_118334327757067122,6591112222,SUCCESS

#### **B- Example with BatchID**

**ID=1000002**

**Password= qrxxy53tohh88**

**BatchID= 60088**

The following string is returned:

c1\_118334327757067122,6591112222, SUCCESS  
c1\_118334327757067123,650,ERROR-NUMBER\_INVALID  
c1\_118334327757067124,6597652233, DELIVERED  
c1\_118334327757067125,6591124232,DELIVERED  
c1\_118334327757067126,6591002288,QUEUED

## **5.2 SMS Delivery Notification Webhook (Callback)**

The application must have a web-component that is able to receive a **HTTP POST method call**. The URL path of the application's receiving component must be pre-registered with the CommzGate Cloud Service. If you have already setup a web-component to receive MO messages from CommzGate Cloud Service, this same web-component must be setup to receive Delivery Notifications as well.

\*Delivery Notification feature is optional and must be enabled for your account.

If you have already set up a Web Component to receive MO messages from CommzGate Cloud Service, the following are additional parameters fields that CommzGate Cloud Service will send as HTTP POST to you.

Field	Description
MsgID	The unique message ID for the message that was successfully submitted to the CommzGate Cloud Service. This message ID was returned by the CommzGate Cloud Service to your application as part of the success code. (See Section 3) The MsgID is used to identify the message for which the Status value is for.
Status	This is the Status of the messages that were submitted by you application earlier. Possible values are:  SUCCESS DELIVERED QUEUED ERROR- PREPAID BLOCK ERROR- NUMBER NOT ROUTABLE ERROR- TELCO ERROR ERROR- NUMBER INVALID ERROR- UNAUTHORISED ERROR- CONTENT ERROR ERROR- SYSTEM ERROR

The message status QUEUED is a transient condition and not final, the final status will be sent to you subsequently.

The message status DELIVERED will only appear for accounts enabled for handset delivery reports. Please contact your account Manager to have this feature enabled.

### **Example**

Assuming the receive path of the application is:

**202.22.123.5:8081/messagegateway/receive.jsp**

The CommzGate Cloud Service then calls a HTTP POST with the following details:

**202.22.123.5:8081/messagegateway/receive.jsp**

**MsgID=** c1\_118334327757067122

**Status=**SUCCESS

**Note:** On receiving the Delivery Notification, your application has to return a HTTP header 200. No other return acknowledgement from your application is necessary.

### 5.3 URL Click Tracking Notification Webhook (Callback)

When a mobile recipient clicks on a shortened URL generated by CommzGate using the 'shorten' MT API parameter, the click-thru data shall be sent via HTTP POST in near real-time to your MO URL using the following format.

On successfully receiving each request, your application should return an acknowledgement by responding with a plain "OK" string in the HTTP body.

Field	Description
Type	This value will contain the string "Report" to indicate that the following reporting data are being transmitted. Otherwise, MO SMS message data is being transmitted.
ClickedTimestamp	Timestamp in YYYY-MM-DD hh:mm:ss format
Mobile	Mobile Number that made the URL click.
MessageID	CloudSMS Message ID of the original MT SMS request sent.
DeviceOS	OS info of the device that made the URL click.
Browser	Browser info of the device that made the URL click.
IPAddress	IP address of the device that made the URL click.
OriginalURL	The original long URL string before it was shortened
RepeatedClick	Defaults to 'false'  Will be set to 'true' if the URL click is a repeated one from the same mobile number.

## 6 WhatsApp Parameters

The following parameters are processed only if the WhatsApp parameter value is set to “true” in the MT API.

Field	Description
<b>TemplateID</b> <b>Optional</b>	<p><i>Type=String, Max Length=10 (Case-Sensitive)</i></p> <p>Set this to the ID of the template which you have already pre-registered for sending WhatsApp Business API Template messages.</p> <p>If left unset, the message is assumed to be a WhatsApp session message.</p>
<b>Placeholder1</b> <b>Conditional</b>	<p><i>Type=String, Max Length=50 (Case-Sensitive)</i></p> <p>This option works only when the TemplateID parameter is set to a value.</p> <p>If the TemplateID parameter is set, please set at least 1 Placeholder value for use with the template message.</p>
<b>Placeholder2</b> <b>Conditional</b>	<p><i>Type=String,Max Length=50 (Case-Sensitive)</i></p> <p>This option works only when the TemplateID parameter is set to a value.</p> <p>If the TemplateID parameter is set, you can set more than 1 Placeholder value for use with the template message.</p>
<b>Placeholder3</b> <b>Conditional</b>	<p><i>Type=String, Max Length=50 (Case-Sensitive)</i></p> <p>This option works only when the TemplateID parameter is set to a value.</p> <p>If the TemplateID parameter is set, you can set more than 1 Placeholder value for use with the template message.</p>

<b>MediaType</b>  <b>Optional</b>	<i>Type=String, Default=text, Length= variable (Case-Sensitive)</i>  Accepted values are “text” ,”document” or “image” Default value is ‘text’ if left empty
<b>MediaUrl</b>  <b>Conditional</b>	<i>Type=String, Max Length=50 (Case-Sensitive)</i>  This option works only when the MediaType parameter is set to a value other than ‘text’.  If the MediaType parameter value is “document” or “image”, set this to the URL where your media file can be located.
<b>Caption</b>  <b>Conditional</b>	<i>Type=String, Max Length=20 (Case-Sensitive)</i>  This option works only when the MediaType parameter is set to a value other than ‘text’.  If the MediaType parameter value is ”document” or “image”, set this to the caption text that will accompany your media file.
<b>SMSFailOver</b>  <b>Optional</b>	<i>Type=String, Default=false, Max Length=5 (Case-Sensitive)</i>  Set this to ‘true’ if you wish for the WhatsApp message to be delivered via SMS should WhatsApp delivery be unsuccessful.



## 7 Email API

The following parameters are processed only if the Email parameter value is set to “true” in the MT API.

Field	Description
TemplateID  <b>Optional</b>	<i>Type=String, Max Length= 10 (Case-Sensitive)</i>  The ID of the template which you have already pre-registered for sending Email messages.  If left unset, the Email message content is taken from the Message parameter and sent as a plain text Email.
SubjectPlaceholder  <b>Conditional</b>	<i>Type=String, Max Length= 10 (Case-Sensitive)</i>  If a TemplateID is specified, this value will be used to replace the placeholder text found in the email subject.  Email Subject must contain a placeholder in the following example format. “Balance Statement #PLACEHOLDER1# is ready for viewing”  No HTML code is allowed.
From	<i>Type=String, Max Length= 30 (Case-Sensitive)</i>
To	<i>Type=String, Max Length= 30 (Case-Sensitive)</i>
Subject	<i>Type=String, Max Length= 50 (Case-Sensitive)</i>
PlaceholderArray	<i>Type=String Array, Max Length= 100 (Case-Sensitive)</i>  Example  ["John Lee","Feb","7036","2","\$0.00","\$100.00"]  No HTML code is allowed.

## Appendix A: List of Return Codes

Result Code	Description
01010	SMS MT request successfully submitted.
01011	Invalid request format, please check parameters and parameter values.
01012	Unauthorized access. Either the API ID does not exist or the API password is invalid, the account has been suspended, or the request is being originated from a non-authorized IP address.
01013	Transient System error, please retry after 60 seconds
01014	Unable to route to mobile operator for the attempted mobile number.
01015	The credit balance for the API account is not sufficient. (for prepaid accounts only)
01018	The mobile number attempted is blacklisted.

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