Bulk Text – SMS Gateway API

Technical Specification
HTTP API - Version 1

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The API (Application Programming Interface) is another method of sending text messages from customer databases or CRM Systems.

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Contents

1. Introduction - *Which Product is Right for you?*

1.1 Vodafone SMS Gateway API

The Vodafone Bulk Text API (Application Programming Interface) product provides an interface between your existing systems and Vodafone LTD's SMS messaging gateway. It is a lower level connectivity option offering the commonly used functionality with greater flexibility for the end user.

The Vodafone SMS Gateway API allows you to:
- Integrate the API using your own company specific rules.
- Remove the manual element of sending text messages.
- Send an unlimited number of messages straight from your CRM system or Database.
- Receive real time Delivery receipts.
- Incoming messages can be relayed straight to your system as they arrive.
- Schedule messages to be sent at specific times and dates.

1.2 The Vodafone Bulk Text Messaging Application

The Vodafone Bulk Text Messaging application is an online service allowing businesses to send and receive thousands of text messages to and from customers and employees at the touch of a button. You just need internet access to Log on and register for use.

The Vodafone Bulk Text Messaging application allows you to:
- Send sent up to 100,000 texts (via Microsoft Excel) on-line in one go.
- Get Delivery Receipts showing which texts have been sent and received.
- Allow Company Names/Sender Ids to be set up so your clients know the sender.
- View live responses through the Application interface.
- Options of 'Send Now' or 'Send Later' broadcasts by time and date.

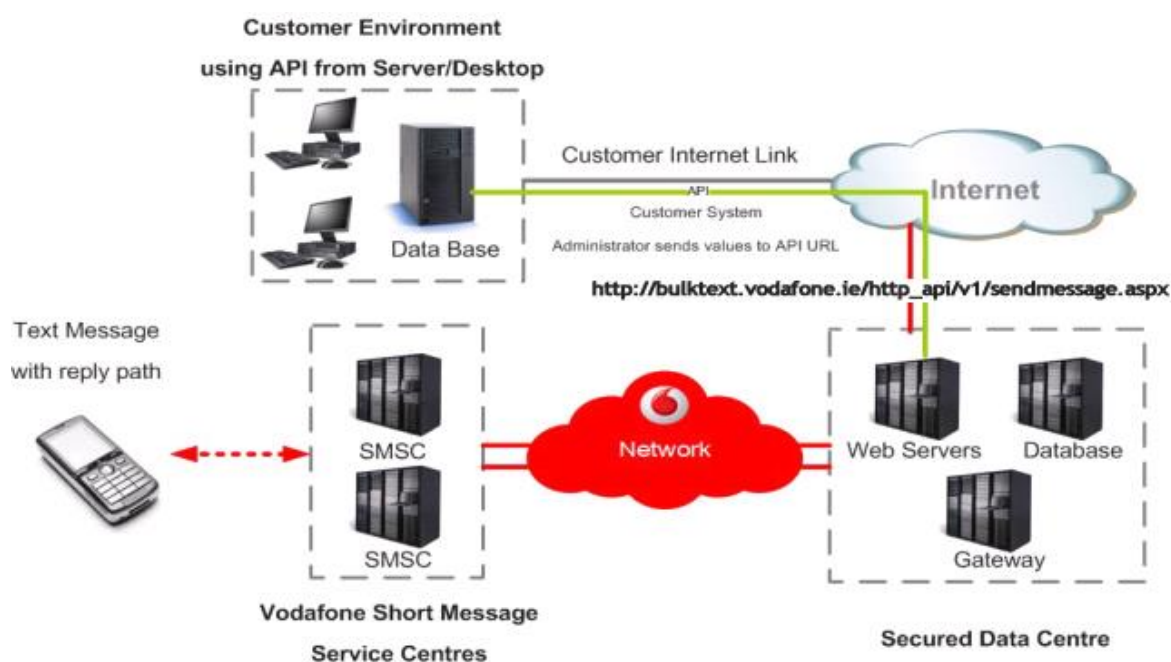# 2. Common uses of the Vodafone SMS Gateway API

Some of the common uses for the Vodafone Bulk Text API service include:

- Alert-based SMS systems, sending messages straight from client's servers.
- Notify potential customers of upcoming offers.
- Send updates and reminders to existing customers.
- Deliver information to mobile sales staff.

3. How does The Vodafone SMS Gateway API work?

The below diagram shows the stages that a message goes through when sent from the clients System.

- The Client gets their log-in credentials for the API
    - See Section on Getting Started

- The Application/Database Developer builds the API into their application. The client application can then generate the SMS message using parameters gathered from the client database.
    - See section on API Technical Specifications

- Additional security can be set up by using HTTPS and setting the firewall at the client side to allow the server to connect for outbound messages

4. How Much does it cost?

Please contact your Vodafone account manager to discuss setup and messaging costs.

5. Getting Started

Just follow the steps below to get started with the Vodafone SMS Gateway API.

Note: The manual example outlined below is not the intended purpose of the Vodafone SMS Gateway HTTP API post. Instead it assumes that developers will programmatically integrate the API into their databases and CRM systems to insert these requests into their code automatically.

Step 1.   Register for the Vodafone SMS Gateway API product. Contact your Vodafone account manager or email bulktext.ie@vodafone.com to request an API account.

Step 2.   Your 'username' and 'password' information will be issued to you on completion of registration and submission of registration fee.

Step 3.   Have the following pieces of information ready for your first transmission (This is the minimum required fields to send a broadcast):

- User (Your username): XXXX

- Password (Your Password): XXXXXXXX

- Api_id (This Id will be supplied to you and is required for all API broadcasts): XXXX

- To (Destination Mobile Number): XXXXXXXXXXXX

- Text (This is the SMS Message content you would like to send): e.g. 'Hello World'

- From (This is the sender Id that has been configured for your account and appears on the top of the SMS on the recipient's handset): e.g. 'YourCompany'

Step 4.   Open your browser (e.g. Internet Explorer), and Type in the Following Information into the address bar as follows substituting the Information in Step 3 into the HTTP Request string:

http://bulktext.vodafone.ie/HTTP_API/V1/sendmessage.aspx?user=XXXX &password=XXXXXXXX&api_id=XXXX&to=XXXXXXXXXXXX&text=XXXXXXX XXXXXXX&from=XXXXX

Press 'Enter', and your message will be sent. If the message is sent correctly you will receive a confirmation message, if it is not sent correctly you will receive an error notification message asking for correct parameters to be entered.

For more details on the Vodafone SMS Gateway API HTTP request parameters please see the API Technical Specification Sections.

6. API Technical Specification

6.1 Outbound Messages - Message Submissions

All out-bound SMS submissions to the Vodafone SMS Gateway API need to be sent to the following URL:

http://bulktext.vodafone.ie/HTTP_API/V1/sendmessage.aspx

Either a GET or POST HTTP request may be used as the gateway will automatically detect the method employed.

There are five required parameters for each of the message-submission interfaces, plus optional but recommended parameters.

Parameter Name	Value Example	Comment
Text (Required)	HelloWorld	A string specifying the content to be sent. For messages of type Text, this is the text to be sent. 0-160 characters in length. Any newlines in SMS-Content must be replaced with ¬ (ASCII 172). These will be replaced with newlines when the message is sent.
To (Required)	353871111111	The destination mobile number. Mobile numbers are recommended to be supplied in GSM format, e.g. 353861234567. Commas can be used to separate multiple mobile numbers.
From (Required)	YourCompany or 353877777777	The Senders header that appears on the top of the SMS on the recipient's handset. This is a text string of up to 11 characters with no spaces (alpha and/or numeric).Longcode/Shortcode numbers may also be used upon request.
User (Required)	User1	The assigned username of the customer.
Password (Required)	Password1	The assigned password of the customer.
Api_id	9876	This is a unique id supplied to the Customer once they are a registered.
NotifyID (Optional)	321354	This is a Notification ID defined by the user for message tracking (max 30 Characters). Allows alphanumeric characters. Note that if you leave this parameter blank, then no notification messages will be returned from the SMSC in relation to this message.

BroadcastName (Optional)	May Discount Campaign	This is a name given to the message campaign; it is only used for reference. It can be up to 200 characters long. This will not be sent as a part of the message. Campaign names are used to easily identify broadcasts that have been sent by the user. For Example, 'May Discount Campaign'. The Broadcast or Campaign details are viewable from the application user interface under the reports section. They are grouped by the name. The Default API broadcast name is 'API Broadcast'.
DeliveryTime (Optional)	120	This is the first of two options to send messages at a future date and time. This figure is number of minutes that a message will be stored for before being broadcasted, so a value of 120 minutes means a message will be sent in two hours.
SMS-SendAt (Optional)	2016-04-04 11:45	This is the second of two options to send messages at a future date and time. This is a date in the future that you would like to send the message at. It is in the following 24 hour format 'yyyy-MM-dd HH:mm'.

6.2 Delivery Receipts - Message Notifications

There are two cases in which the SMS Gateway needs to be able to contact a client after a broadcast has been made:
1. When a delivery receipt from a sent message arrives – Delivery Receipts
2. When a message for the client arrives – Incoming Messages

This section deals with the receipt of notification messages or Delivery Receipts.
The second of these cases is dealt with in section 6.3 Inbound Messages – Message Relays.

All delivery receipt notification messages are relayed to the clients via a HTTP POST. The client will be required to supply a URL for these messages to be sent to.

The parameters that are relayed are as follows:

Parameter Name	Value Example	Comment
SMS-Type	Notification	Will always equal "Text".
SMS-NotifyID	321354	This is a Notification ID defined by the user for message tracking.
SMS-Success	True	True or False, indicating if the message was successfully received by the end-user.
SMS-To	353871111111	The destination mobile number. Mobile numbers are recommended to be supplied in GSM format.
SMS-From	353877777777	The Senders header that appears on the top of the SMS on the recipient's handset.
SMS-Verify	1acbdb5d9b60a48ad 4e84ed7054b8234	Encrypted authentication. MD5 value, made up of NotifyID + SMS-Success + MD5 of Password e.g. MD5 of 321354True2ac9cb7dc02b3c0083eb70898e549b63
SMS-TotalToSend	1	No of message to send
SMS-TotalSent	1	Number of messages successfully sent
SMS-TotalFailed	0	Number of failed messages
SMS-TimeStamp	2012-01-10 14:17:44	A date-time string in the format yyyy-mm-dd hh:mm:ss (e.g. 2001-11-01 14:03:59), which represents the time that the delivery receipt arrives to the SMS Gateway.

NOTES:

SMS-Success: If the Total messages Sent = Total messages To Send and the Total number of failed deliveries = 0 then this parameter will have a value of TRUE, otherwise it will be set to FALSE.

E.g.   1. Total Sent = 2, total to send = 2, total failed = 0, result is True
2. Total Sent = 1, total to send = 2, total failed = 1, result is False

6.3 Inbound Messages – Message Relays

All Inbound messages that are to be relayed to the clients are done so via a HTTP POST. The client will be required to supply a URL for these messages to be sent to.

Examples of relays:
- Keyword sent to a shared shortcode e.g. text 'YourCompany' to 51000
- Messages to dedicated shortcode
- Messages to dedicated longcode

Note: Some of the above relay configurations may incur additional number set up and rental costs. Please contact your Vodafone account manager for pricing details.

The parameters that are relayed to the client are as follows:

Parameter Name	Value Example	Comment
SMS-Type	Text	Will always equal this value
SMS-Content	HelloWorld	Full content of text message from caller currently ranging from 1-160 characters
SMS-Keyphrase	service1	The service keyword, (The first word of the message). This can be used by the client to process specific campaigns
SMS-Network	272/1	The network code (MCC/MNC see below)
SMS-From	353871111111	The Recipients mobile number in GSM format. The mobile number that is replying to the message.
SMS-To	353877777777	Original Senders reply mobile number in GSM format.
SMS-TimeStamp	2012-01-10 14:30:00	Time received by the gateway
SMS-AuthCode	AUTH:reply/123456	For API replies this is set to the following string 'AUTH:reply/' followed by a unique message id generated by us.
SMS-Verify	ecf4328acab7b9686 5410202cc7d9984	Encrypted authentication. MD5 value, made up of SMS-Content + SMS-AuthCode + MD5 of Password e.g. MD5 of HelloWorldAUTH:reply/1234562ac9cb7dc02b3c0083 eb70898e549b63

NOTES:

1. SMS-Type:	This parameter will always be equal to 'Text' for this type of message.
2. SMS-Network:	The network code is supplied in this parameter. It consists of a value in the format MCC/MNC (i.e. Mobile Country Code/Mobile Network Code) e.g. 272/1.

For messages received from the Vodafone SMS gateway, MCC will always have a value of 272 (i.e. Ireland) and MNC will have a values for example of 1 (Vodafone), 2 (O2) or 3 (Meteor) giving values of 272/1, 272/2 or 272/3.

7. Examples

Below is an example initial request from the Client to the Mobile number 353879999999 along with both a sample Delivery receipt and Inbound Message relayed to the hypothetical 'YourCompany' on 51000 relay service.

7.1 Outbound Messages - Message Submissions

Text=HelloWorld
To=353879999999
From=353877777777
User=UserName   (Your Username)
Password=Password123   (Your Password)
Api_id=9876   (Your Unique Id)
DeliveryTime=5
NotifyID=321354   (Client generated id for message tracking)

http://bulktext.vodafone.ie/HTTP_API/V1/sendmessage.aspx?user=User1&password= Password1&api_id=9876&to=353871111111&text=HelloWorld&from=YourCompany& DeliveryTime=5&NotifyID=321354

7.2 Delivery Receipts - Message Notifications

SMS-Type= Notification
SMS-NotifyID =321354
SMS-Success=True
SMS-To=353871111111
SMS-From=353877777777
SMS-Verify=1acbdb5d9b60a48ad4e84ed7054b8234
SMS-TotalToSend=1
SMS-TotalSent=1
SMS-TotalFailed=0
SMS-TimeStamp=2012-01-10 14:17:44

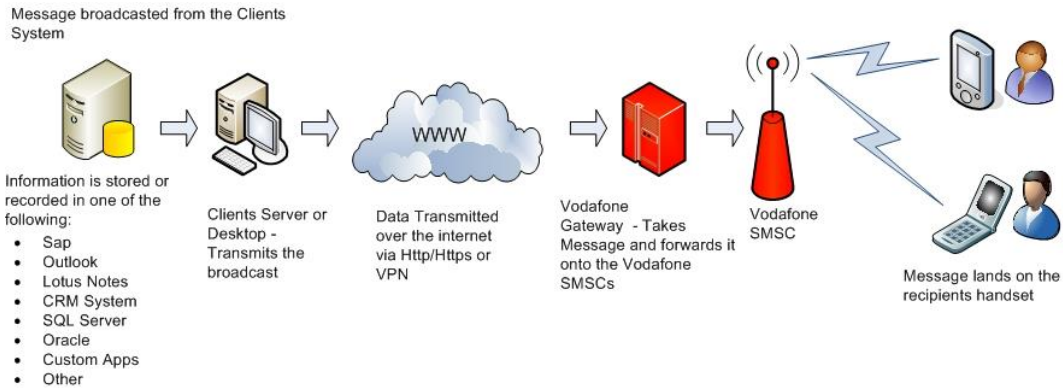### 7.3 Inbound Messages – Message Relays:

SMS-Type=Text
SMS-Content=HelloWorld
SMS-Keyphrase=TestMsg
SMS-Network=272/1
SMS-From=353871111111
SMS-To=353877777777
SMS-Timestamp=2012-01-10 14:30:00
SMS-AuthCode=AUTH:reply/123456
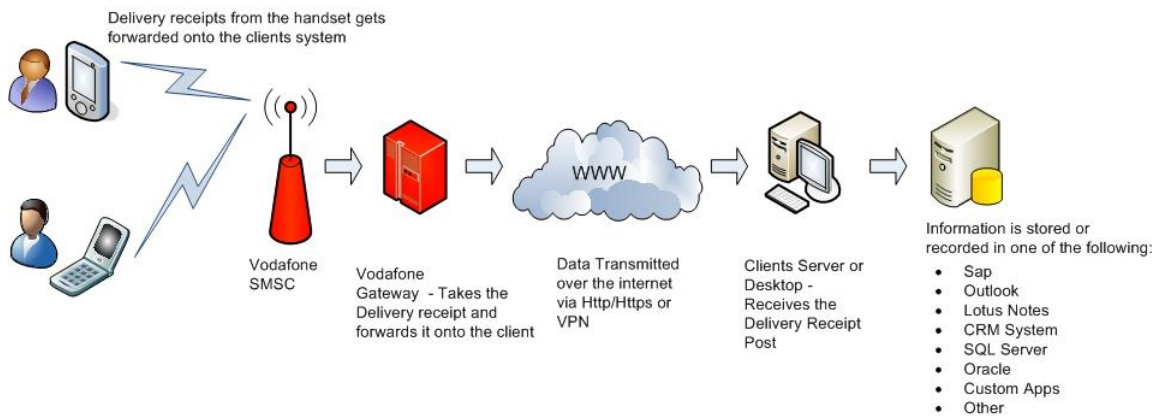SMS-Verify=ecf4328acab7b96865410202cc7d9984

NOTES:
You will be required to URL encode the HTTP Request as some characters may cause Issues.
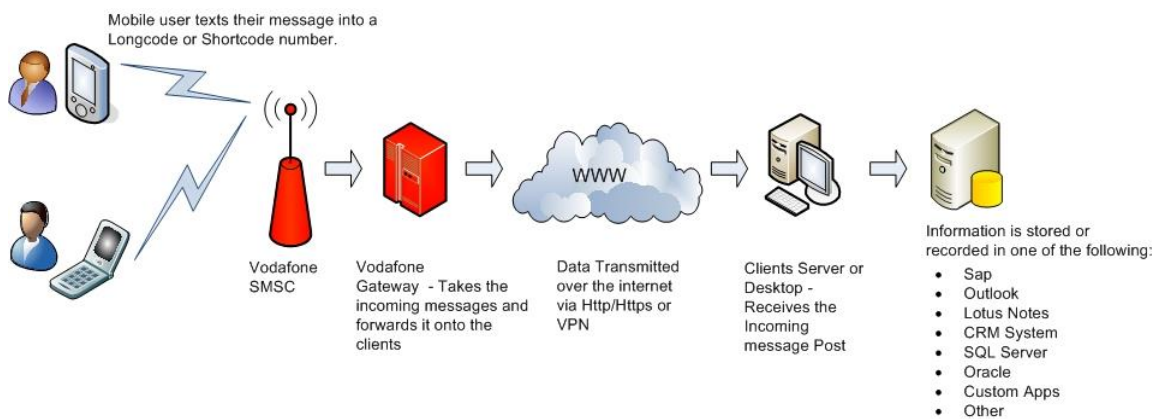
8. Message flow

8.1 Outbound Messages – Message Submissions

8.2 Delivery Receipts - Message Notifications

8.3 Inbound Messages – Message Relays

Author

This document was prepared and issued by Phonovation Response Ltd. Any comments or questions in connection with the document should be addressed to Vodafone.support@phonovation.com.

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