



**User Guide to
Inbound and Outbound
SMS & PSMS API Gateways**

8th Edition. Spetember 2014



Contents

Page 3	Introduction to our API
Page 3	API Integration
Page 3	Incoming and Outgoing SMS & PSMS Authentication
Page 4	Sending Non Premium Rate SMS Messages
Page 6	Sending Premium Rate Outbound SMS Messages
Page 8	Getting reports on PSMS Submissions
Page 9	Configuring an Inbound SMS to post to your server
Page 10	PSMS API Traffic Flowchart
Page 11	Checking Your Account Balance via our API
Page 12	Submission Error Codes
Page 13	FAQ & Troubleshooting

Introduction.

Textvertising offer 3 gateways to integrate your product with our SMS and PSMS services.

- 1) Inbound SMS from shortcode and/or virtual mobile number posted to your application.
- 2) Outbound SMS to send either single or multiple messages (SMS).
- 3) Outbound SMS to send Premium Rate single messages (PSMS).

Integration may require some knowledge of basic programming but example working Perl scripts can be obtained if required.

API Integration.

An account with Textvertising is a requirement. Once created, you can take advantage of both inbound and outbound SMS via our easy to implement API.

Inbound SMS is only available on our virtual mobile number 07716 711 744 unless you upgrade your account to use the shortcode. The system works the same way in either case, except you will not be notified of the network. Outbound premium rate SMS (PSMS) alongside Standard SMS is optional and depends on your account settings.

Virtual Mobile Number Hosting.

If we are hosting a virtual mobile number on your behalf, the system will work in exactly the same way.

The following pages show how to integrate your platform with our SMS system via API.

Incoming and Outgoing SMS & PSMS Authentication.

Users are advised to lock their incoming scripts to traffic from these specific Textvertising Server IP addresses for additional security.

Depending on our traffic at any given time or the services used, any one of these servers can post inbound requests or PSMS delivery notifications to you:

5.79.25.227
162.13.149.214
217.137.239.3 ... 217.137.239.13

Clients are reminded that when posting to our servers, repeated login failure will result in our gateway blocking your IP. Please ensure that your scripts are posting the correct details before starting testing with our API.

1) Standard (Non Premium Rate) OUTBOUND SMS.

Users should call a HTTP GET or use HTTP POST request to call the following script:

<http://www.textvertising.co.uk/cgi-bin/smssend.pl>

This API can accept both single and bulk messages. We recommend sending large numbers across as a bulk message rather than many single posts. HTTP GET has a limit on characters that can be submitted in the URL, and the URL is visible across the network. **We advise HTTP POST as a preferred method of submission for added security.**

The parameters required are shown below. The parameters must be sent in LOWERCASE only:

numbers	The number(s) that you wish to send an SMS to. Must start in UK "44" format, for example: 447777111177. If submitting multiple numbers to send the same message to, the numbers should be separated with an underscore "_" for example: 447777111177_447777111188
smsid	The sender ID (the ORIGINATOR of the message) that should show on the handset. This can be Alphanumerical or Numerical. If using Numerical and showing a valid mobile number, replies can be made to that mobile number, otherwise the end user will be unable to reply.
user	Your account Username/Keyword
pass	Your account Username/Password
reportx	OPTIONAL. Set this parameter to either XML or STD reports. If omitted STD will be used.
message	The body of the message up to 160 characters in length.
expiry	OPTIONAL. The expiry date of the message. If not used the last day of the current year is set as the default. This is for future use when the networks open up larger message holding. Message expiry is preset by the network to the same day. If undelivered by this time, the message will be discarded in the network. Use MMDD format – eg 1231 is the 31 st December. The expiry can only specify the current year.
data	OPTIONAL. Can be used to create individually branded messages. By inserting the term [data] into your message, it can be replaced by the information passed in the elements of the data parameter. Each element should be separated by an underscore "_" – for example: John_Paul_Dave. The elements should be passed in the same order as the applicable numbers
notify	OPTIONAL. This parameter if set to "no" will disable any report emails being sent for every submission made. For example use report=no

Example GET request to send the same message to two phones:

http://web.textvertising.co.uk/cgi-bin/smssend.pl?numbers=4477777771_4477777772&user=yourusername&pass=yourpassword&message=testmessage&report=xml&smsid=TestMe&expiry=1130&report=no

This will simply send "test message" to both phones.

Example GET request to send the same message to two phones but addressed to each differently:

[http://web.textvertising.co.uk/cgi-bin/smssend.pl?numbers=4477777771_4477777772_4477777772&user=yourusername&pass=yourpassword&message=Dear_\[data\].Test SMS&report=xml&smsid=TestMe&expiry=1130&data=Steve_Jason_Paul](http://web.textvertising.co.uk/cgi-bin/smssend.pl?numbers=4477777771_4477777772_4477777772&user=yourusername&pass=yourpassword&message=Dear_[data].Test SMS&report=xml&smsid=TestMe&expiry=1130&data=Steve_Jason_Paul)

This will send:

"Dear Steve, Test SMS" to 447777777771
"Dear Jason, Test SMS" to 447777777772
"Dear Paul, Test SMS" to 447777777773

Reports:

If accepted, and ID will be given in the format:

ACCEPTED xx-yyyy

xx is your batch ID to trace the history inside your account,
yy is our internal reference number for the message

If an error exists on submission, a alternative response will be given. For specific errors, please see ERROR CODES on page 17.

We recommend filtering the response for the word ACCEPTED as this means the submission was successful.

2) Premium Rate OUTBOUND SMS.

Outbound PSMS messages that you send are not stored within your account. When using our PSMS API, users are responsible for archiving the history of messages submitted and the IDs supplied in return of a successful submission.

Premium rate submissions require a matched number and network. **Users should not submit requests without a matched number and network.**

When utilising our INBOUND SMS API, any submissions made to 82055 will also include the network to enable you to reply with a PSMS reply.

TO SEND A REVERSE BILLED PREMIUM RATE MESSAGE A PERSON MUST SUBSCRIBE BY TEXTING YOUR KEYWORD TO 82055 FIRST OR THE SYSTEM WILL FORBID SENDING.

If you are using our virtual mobile number our API will submit an empty network parameter to your application. Virtual mobile numbers cannot be used with Premium rate services.

Users should call a HTTP GET or use HTTP POST request to call the following script. HTTP GET has a limit on characters that can be submitted in the URL, and the URL is visible across the network. **We advise HTTP POST as a preferred method of submission for added security.**

<http://www.textvertising.co.uk/cgi-bin/psmssend.pl>

This API only accepts single posts. We recommend running a maximum of 5 simultaneous threads for sending to this API for efficiency.

The parameters required are shown below. The parameters must be sent in LOWERCASE only:

number	The UK number to send the premium rate message to. Must be UK 44 format. Eg 447771111112. (Please omit the leading + symbol if applicable).
pamt	The charge that should be applied. 10p : set this parameter to 10 25p : set this parameter to 25 50p : set this parameter to 50 £1.00 : set this parameter to 100 £1.50 : set this parameter to 150 £2.50 : set this parameter to 250 £5.00 : set this parameter to 500
network	Set to match the network of the number submitted. Can be VODAFONEUK, TMOBILEUK, ORANGEUK, VIRGINUK, BTCELLNETUK, THREEUK, MANXUK, GUERNSEYUK or JERSEYUK. DO NOT SUBMIT a request if the network is not known or your account may be barred!
user	Your account username/keyword
pass	Your account password
message	The message to send – max 160 characters. Do not use New Line characters (ASCII 13) or it will be replaced with a space (ASCII 32)
notify	This is an optional parameter. The “notify” parameter should be the address that our server can post a delivery report to when it arrives from the network for that submission. If you use the notify parameter our server will send the following parameters to your server script address to help you validate the ID against your PSMS SEND logs: Cont...

id – the message id that was provided to you on submission.
number – the mobile number that was submitted.
result – the status of delivery to that number.

If omitted, or left blank, no report will be posted back. You can however request a report at any time by simply by doing a PSMS REPORT post using the ID which is displayed after a successful submission. See section (3).

Example GET request to send a PSMS message to a phone at 50p:

<http://web.textvertising.co.uk/cgi-bin/psmssend.pl?number=44777777771&user=yourusername&pass=yourpassword&message=test&pamt=50&network=VODAFONEUK>

Example GET request to send a PSMS message to a phone and have the delivery report posted back to "www.myserver.com/reply.pl" using the "notify" parameter:

<http://web.textvertising.co.uk/cgi-bin/psmssend.pl?number=44777777771&user=yourusername&pass=yourpassword&message=test&pamt=50&network=VODAFONEUK¬ify=http://www.myserver.com/reply.pl>

Error reporting:

For filtering purposes, a fully numeric response indicate a valid submission.

If an error exists on submission, a response will be shown. If accepted, and ID will be given in the format 1234567890. (Please see ERROR CODES on page 17).

The submission number is your ID to trace for all delivery/billing reports and also for notifications of deliveries automatically posted back to you if requested using the notify parameter.

3) REQUESTING A PSMS DELIVERY REPORT ON AN PSMS SUBMISSION ID

You can enquire on the status of delivery and whether the end user was billed or not provided you have the billing amount that was used and the ID that was given after submission.

Users should call a HTTP GET or use HTTP POST request to call the following script:

<http://www.textvertising.co.uk/cgi-bin/psmsreport.pl>

id	The long numeric ID that was provided to you on submission of a PSMS SEND request.
pamt	The charge that was applied to the end user. 10p : set this parameter to 10 25p : set this parameter to 25 50p : set this parameter to 50 £1.00 : set this parameter to 100 £1.50 : set this parameter to 150 £2.50 : set this parameter to 250 £5.00 : set this parameter to 500
report	Optional - Set to match the type of report you would like. Left blank – standard text/html report set to "xml" – XML style report
user	Your account username/keyword
pass	Your account password

Example GET request to request a PSMS delivery report:

[http://web.textvertising.co.uk/cgi-bin/psmsreport.pl?
id=1234567890&user=yourusername&pass=yourpassword&report=xml&pamt=150](http://web.textvertising.co.uk/cgi-bin/psmsreport.pl?id=1234567890&user=yourusername&pass=yourpassword&report=xml&pamt=150)

On Success, a report will be provided. Unless this result shows BUFFERED, the report is final and will either show either DELIVERED, REJECTED, FAILED or FORBIDDEN REVERSE BILLING.

FAILED indicates that the message was undeliverable and the end user has not been charged and you can retry sending the message again if you wish.

REJECTED indicates that the handset could not be charged. This is usually when either the handset blocks shortcodes or is out of credit.

FORBIDDEN REVERSE BILLING is a separate error that occurs. This normally occurs:

- 1) if you attempt to send to a handset that has not first subscribed by sending a subscription text to 82055
- 2) The number/handset is blocked by the network.
- 3) Too many requests have been made within a small period of time that is considered excessive by the Network.

NO REPORT or a blank response indicates that no report is yet available. The message/status is still within the SMSC and will appear sometime later.

Some reports can take up to 72 hours to appear.

This is because an undelivered message is queued for retry a short time later by the network. Deliveries are retried for up to 72 hours after which time FAILED will normally be the response if delivery did not happen. This will normally occur if you send a request to a handset which is switched off for an extended period of time. Normally this occurs with subscription services as you are sending the message to a phone which may be switched off.

Error reporting:

If an error exists on submission, a response will be shown. (Please see ERROR CODES on page 17). If accepted, a result will be given in the format ID STATUS DATE. The delimiter for your own records is a "space" – ID<space>STATUS etc.

4) INBOUND SMS

Users should develop their own application to accept a HTTP POST request from our servers.

To set up HTTP POST inside your account, select INBOUND SMS and then choose option 5 (HTTP POST).

At the next step, provide the full URL to your processing script including any port if required. Your script must exist before it will allow you to set it up and respond with a HTTP 200 status.

Finally test the connection and make changes if required. Once set up, your server should accept requests from our API successfully.

The parameters that will be submitted to you will be as follows:

number	The number that made a request.
message	<p>The message that was submitted.</p> <p>If using the virtual mobile number, inbound requests can be a maximum of 160 characters.</p> <p>If using a shortcode multiple message parts can be submitted and our system will re-assemble and submit the entire message to your system. This is provided that all parts are received or the message is locally discarded.</p>
network	<p>Will be VODAFONEUK, TMOBILEUK, ORANGEUK, VIRGINUK, BTCELLNETUK, THREEUK, MANXUK, GUERNSEYUK or JERSEYUK</p> <p><i>A network will only be included if using a shortcode number, not a virtual mobile number</i></p>
keyword	<p>The keyword that was used to trigger the request. If you have multiple keywords it will identify the request to you.</p> <p>If we have set up keyword pointing then your message body will be shifted right and the keyword used will be inserted.</p> <p>For example, assume you have the main keyword ABC and also a pointed keyword XYZ that we have added for you. If the end user submits ABC HELLO you will receive the keyword ABC and the message HELLO. If the end user submits XYZ HELLO you will receive the keyword ABC and the message XYZ HELLO. The first word of the message body helps you distinguish where it originated from by comparing it to your pointed keyword list.</p>
time	The time of the received request in GMT (SQL/MySQL format YYYY-MM-DD HH:MM:SS)

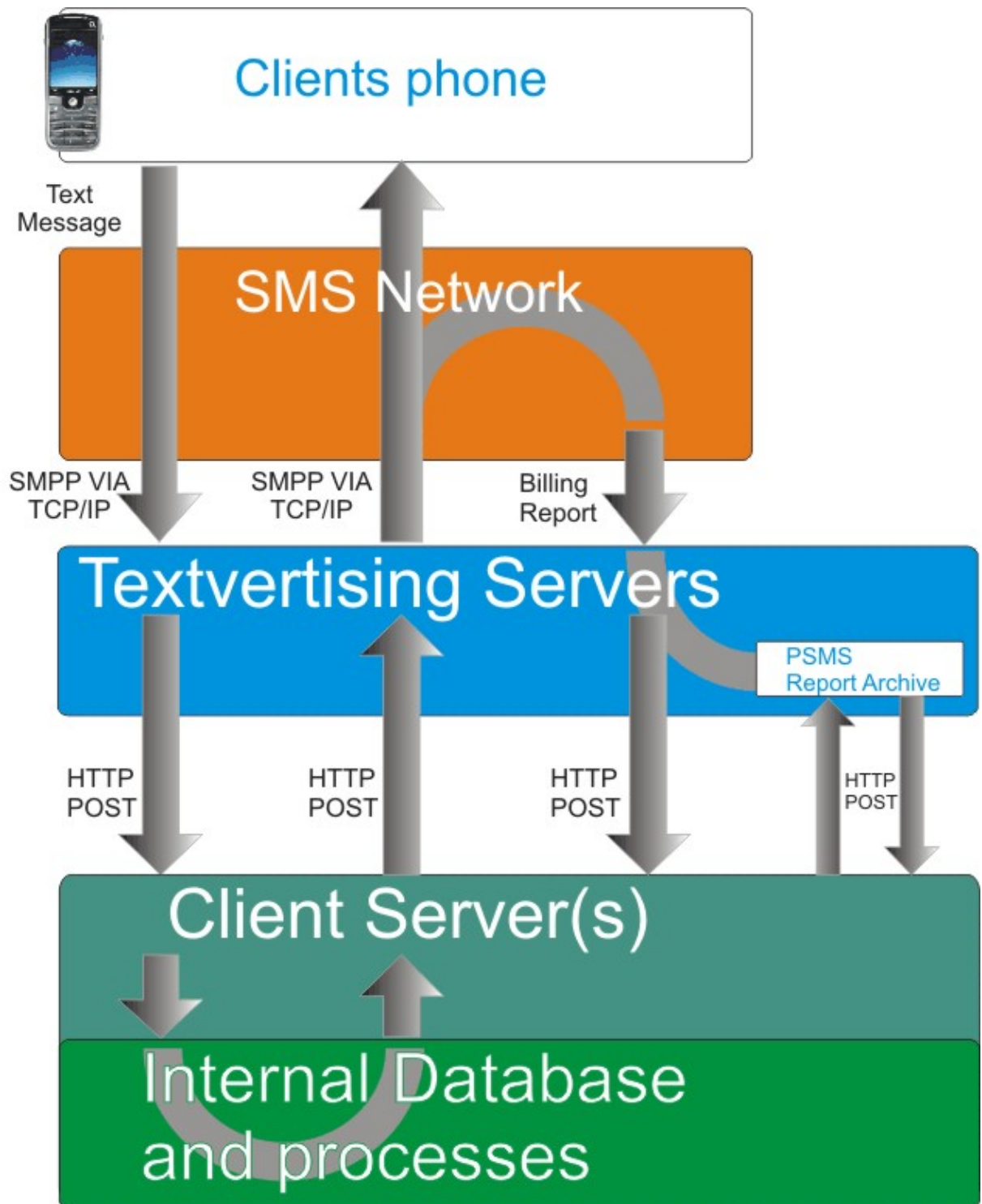
Points to take note of:

When using the HTTP POST facility, our server sends the request directly to you and does not store any information inside your account.

Your server/script should respond in a timely fashion (sub 500ms). If it does not, or is unavailable, the request is lost.

Your server/script should also respond with a basic response like "OK" or "ACCEPTED" or you may experience problems setting up HTTP POST.

API Flowchart



Checking Your Account Balance via our API.

You can check how many available message credits are inside your account using our API. This is especially useful to enable your software to automatically check free messages before sending a message.

You can call the following page to request your balance:

http://www.textvertising.co.uk/cgi-bin/show_credits.pl

You should also pass two parameters USER and PASS.

Example HTTP GET

http://www.textvertising.co.uk/cgi-bin/show_credits.pl?user=YOURUSERNAME&pass=YOURPASS

Your account balance will simply be displayed as a number.

If you are on PREPAY where you purchase messages up front, the value will be the number of message credits you have left. (13432 is 13,432 messages available).

If you are on ACCOUNT the value shown will be the amount you owe to us in pence. (16789.1 is £167.891 pence which would be rounded to the nearest penny)

MMS Enabled Accounts.

If your account is MMS enabled and PREPAY, the result will show two figures separated by a comma. The first is your free SMS messages, the second the free MMS messages. (123,456 is 123 free SMS, 456 free MMS).

If you have an ACCOUNT with us, the balance will be the **total** amount owed, and this includes any MMS messages sent.

Error reporting:

If an error exists on submission, a response will be shown. (Please see ERROR CODES on page 17).

Submission Error Codes.

Receiving errors can be annoying and we can help you trace errors that may occur. Below is a list of the errors that you may receive and the reasons they usually occur. Some errors may be more specific.

FAILED LOGIN, NO ID or NO USERNAME	The username or password supplied is incorrect or blank
ACCOUNT PROBLEM: xxxxx	Your account is barred or another problem exists. xxxxx will be replaced by a specific error.
MESSAGE TOO LONG	The submitted message is longer than 160 characters
ONE OR MORE MOBILE NUMBERS IS INVALID	One or more of the numbers submitted is either too long, too short, is not a valid mobile number or does not start with 447...
MESSAGE CONTAINS INVALID CHARACTERS AT POSITION xx	The message contains an invalid character that cannot be accepted by the network. Where applicable xx will be replaced by the position of character(s).
SMSID TOO LONG	The sender ID is longer than 11 characters if Alphanumeric or 13 numbers if Numeric.
EXPIRY WRONG FORMAT	The expiry date specified is in the wrong format or is malformed. This should be 4 numbers, MMDD (month, date). Maximum expiry time is 3 days from submission.
NO NUMBERS	Your submission contains no numbers.
ACCOUNT NOT PSMS ENABLED	You are attempting to send a premium rate message but the settings on your account do not permit this.
NETWORK INVALID	The network submitted is not valid, (see section 2 under NETWORK).
BILLING AMOUNT OUT OF RANGE	You are submitting an amount for the "pamt" parameter that is not correct (See the values - section 2 under PAMT).
NUMBER BARRED	The number you are submitting to has text stop or has been barred by the network from receiving premium messages.
MMS CREDIT IS ZERO	You have run out of free MMS messages and should top up your account.
MMS FAILED: xxxxx	Your MMS failed submission. xxxxx will be replaced by the reason.
NOT ENOUGH FREE MESSAGES	You have run out of free SMS messages and should top up your account.

Troubleshooting.

Commonly asked questions:

Q: "Inbound API does not work on the shortcode, only the virtual mobile number"

A: This is account specific. If your account is not setup to use the shortcode, it will not work. All accounts can be upgraded to use the shortcode. Please call us to talk about this.

Q: "I keep receiving errors when submitting data via HTTP POST"

A: Usually this is caused by a spelling mistake in the parameter name(s) or using uppercase instead of all lowercase letters. Passwords and usernames are case sensitive.

Q: "I cannot send PSMS request (Premium Rate SMS)"

A: Your account must be activated to use reverse billing, it is not automatically available to all accounts.

Q: "I do not know how to write the necessary software to connect via your API what can I do?"

A: We can provide a range of basic software written in PERL, PHP and ASP. However, if you are unfamiliar with either setting up a server, or writing or running software on it, we advise you seek the help of a professional or use our web interface instead.

Q: "I am texting my keyword to test but not seeing a response at my server"

A: Double check the posting address and ensure you can call it from an EXTERNAL site. Sometimes you may be able to see it internally but from another location, this may not work. This is normally when your firewall blocks our requests. We can add a trace to test your connection and what is returned. If you are experiencing problems you cannot resolve, please call or chat with one of the Technical Support Team online.

Should you experience any problems, please call our technical team who will be pleased to assist in the set up of our API.

Telephone us on 0845 27 82055