STOP FEATURE GUIDE

Introduction

In the United States and Canada, wireless operators and industry regulatory organizations have specific SMS (text message) compliance requirements that apply to short code programs. Providing an end-user with the ability to use their handset as a means to initiate an opt-out request on a specific short code messaging program is a wireless operator and SMS industry requirement. Processing of an opt-out request must immediately acknowledge the user by sending a one-time opt-out confirmation message to the user's mobile handset. Following the opt-out confirmation message, the dedicated short code program must not send or deliver any additional messages to that user's mobile number unless a new opt-in request is received. Managing opt-out requests that originate from the mobile handset ensures the dedicated short code program complies with opt-out requirements as set forth by industry regulators.

Enabling the STOP Feature

TeleSign dedicated short code programs in the U.S. and Canada, must respond to, at a minimum, the universal keywords STOP, END, CANCEL, UNSUBSCRIBE, QUIT and ARRET. Texting any of the supported opt-out keywords to a dedicated short code should initiate an opt-out request specific to that mobile number and short code. Due to strict SMS compliance requirements, the message content of the opt-out keyword response is managed by TeleSign. Although TeleSign manages the opt-out message content and delivery, it is mandatory that the customer maintain their own opt-in/opt-out user database on their dedicated short code.

Creating a user opt-in/opt-out database will enable the customer to appropriately manage the SMS (text message) notification preferences for each user's mobile number, thus allowing successful processing of the user opt-out requests forwarded by TeleSign to the customer.

Once a user opt-outs of a dedicated short code campaign, that same user can opt-in again at any time by initiating an opt-in request (specific to their mobile number) via the website/app or by texting a keyword (when configured) to that dedicated short code. A user initiated opt-in action represents a new opt-in request independent of previous opt-out requests sent by the user's mobile number to the dedicated short code.

Single-message campaigns: When any of the defined opt-out keywords are sent from a user's mobile handset to the dedicated short code, a specific message template response is generated by TeleSign. For single-message campaigns, because only one message is generated to the user, simply delivering a one-time opt-out confirmation message satisfies the single message campaign compliance requirements.

Recurring message campaigns: In addition to responding to the defined opt-out keywords with a specific message template, recurring message campaigns require the customer to provide TeleSign with a callback URL. TeleSign platform forwards the user's opt-out request to the customer via the specified callback URL. The callback URL that is provided by the customer is configured by TeleSign to be associated with that customer's account.

Opt-out Keywords

For a message to be recognized as an opt-out request, it must <u>begin</u> with one of the following acceptable opt-out keywords (not case sensitive):

ACCEPTABLE OPT-OUT KEYWORD EXAMPLES		
Stop	End	Unsubscribe
Quit	Cancel	Arret (Canada only)

UNACCEPTABLE OPT-OUT KEYWORD EXAMPLES		
Stops	hello cancel	Quittt
stopppp	hey unsubscribe	hello arret

Any opt-out request sent via MO keyword that differs from the acceptable opt-out keywords listed above will not be recognized by the TeleSign platform therefore the customer will not be notified of the mobile originated message. When a user sends any acceptable opt-out keyword from their mobile handset to the customer's dedicated short, the TeleSign platform will respond to the user with a specific message template. In addition to the message template response, when the 'STOP' callback URL is configured on the customer's account, TeleSign simultaneously notifies the customer of the user's opt-out request via the specified callback URL.

Callback Notification Requirements

The callback service is an efficient, push notification method that allows TeleSign to inform the customer of when the end-user sends a recognized opt-out request to the customer's dedicated short code. The 'STOP' callback URL must be provided by the customer to TeleSign, at which point it will be configured on the customer's account. Once the callback URL has been set up, TeleSign's messaging platform delivers the opt-out notification to the customer, using the customer defined callback URL. The customer is required to maintain a user opt-in/opt-out database that is specific to their dedicated short code program. TeleSign does not maintain the user opt-out requests therefore this information must be processed and managed by the customer.

If TeleSign is unable to deliver the callback notification, our server waits 10 seconds and will retry delivery. If the first retry attempt fails, our server waits an additional 30 seconds and then makes one last final attempt.

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Callback Service Configuration

To use the callback service:

1) Create a private URI on your web server for the purpose of receiving opt-out keyword callback notifications from the TeleSign platform.

2) Provide your Technical Account Manager with your private URI.

Note: If a customer has a URI configured for receiving 'START' opt-in requests, this same URI should be used to receive the 'STOP' opt-out requests.

TeleSign Callback Service Example*:
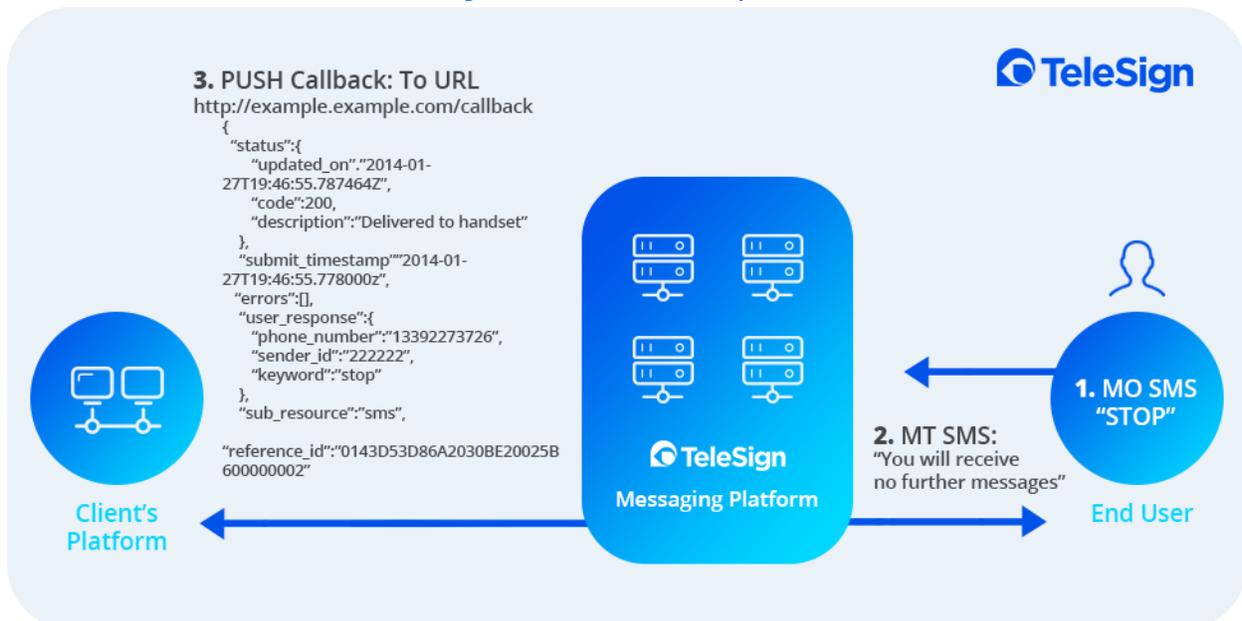
*The above example illustrates the JSON objects delivered by the TeleSign Callback Service.

Callback Service Parameters

The following example illustrates the JSON objects delivered by TeleSign in response to the 'STOP' opt-out request:

HTTP Message Header Fields
HTTP/1.1 200 OK
Date: Mon, 27 Jan 2014 19:46:55 GMT
Server: CERN/3.0 libwww/2.17
Content-Length: 742
Allow: GET
Content-Type: application/json

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Message Entity-Body

The following objects and parameters are included in the message entity-body:
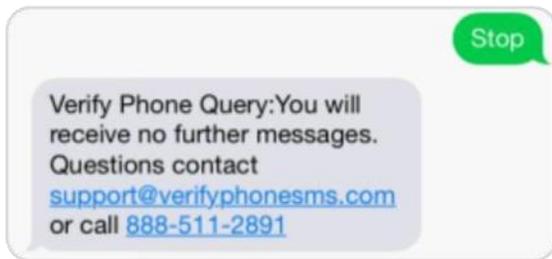
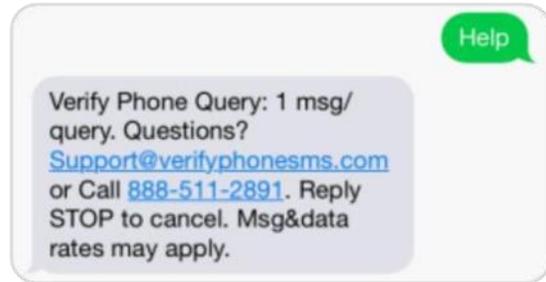| VALUE	DESCRIPTION
code	A 1 to 5-digit error code (possibly negative) that indicates the type of error that occurred. When no error occurs, the default value '0' is returned.
description	A string that describes the type of error that occurred. If no error occurs, this parameter is empty.
reference_id	A 32-digit hex value used to identify the MO (Mobile Originating) message. The value is randomly-generated by TeleSign, and is returned in the callback. The reference_id of this callback is NOT related to any previous SMS transaction reference_id.
sub_resource	The subresource to access; it is set to 'sms'.
errors	This object contains information on error conditions that might have resulted from the request, in an array of property-value pairs. If multiple errors occur, a pair of parameters is returned for each error.
	Note: If no errors occur, then this object is empty. Ex: 'errors : []'.
status	The object that describes the verification status; it contains the following parameters:
	'**code**' - One of the SMS status codes.
	'**description**' - Human readable text format describing the verification status.
	'**updated_on**' - An ISO 8601 UTC timestamp indicating when the verification status was updated.
submit_timestamp	An ISO 8601 UTC timestamp indicating when the verification status was submitted.
user_response	The object that represents the user's response and contains the following parameters:
	'**keyword**' – Description of the keyword sent by end user to access; it is set to 'stop'.
	'**phone_number**' – The MSIDSN (country code + phone number) that sent the STOP request.
	'**sender_id**' – The dedicated short code which received the end user's 'STOP' request. This is the short code to which the end user is sending the opt-out message.

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Sample Message Flow

Below are examples of compliant 'STOP' and 'HELP' keyword message flows:

STOP Response

HELP Response