SMS GATEWAY SOAP IMPLEMENTATION GUIDE

(DOCUMENT VERSION: 2.0, LAST UPDATE: FEBRUARY 25. 2014)

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2. DOCUMENT VERSION HISTORY

Version	Date	Comment	
2.0	February 25. 2014	New major version	3

3.   INTRODUCTION

This document contains information required for Content Providers to send and receive SMS messages to mobile-phone subscribers using the TeletopiaSMS SOAP Gateway interface. The interface is intended for developers and requires basic knowledge of WebServices and SOAP. To use this interface you will need a TeletopiaSMS SMS Gateway account (www.teletopiasms.no)

The interface is designed in order to allow a simple and robust implementation regardless of which platform the Content Provider decides to implement their solution.

In order to receive messages sent from end-users (MO or mobile originated) or delivery reports (DLR), the Content Provider must specify a URL, which is configurable through our service configuration web pages.

4.   URL AND WSDL

WSDL for sending messages (MT)	http://api1.teletopiasms.no/gateway/soap/v2/SmsSender?wsdl
WSDL for receiving messages and delivery reports (MO and DLR)	http://api1.teletopiasms.no/gateway/soap/v2/SmsReceiver?wsdl

The web service is available on the URLs listed below. We support both HTTP and HTTP and we have backup end-points available in case one of the servers should become unreachable. We encourage the Content Providers to design their systems to switch URL's whenever they lose connection.

Web service for MT (1)	http://api1.teletopiasms.no/gateway/soap/v2/SmsSender
Web service for MT (2)	http://api2.teletopiasms.no/gateway/soap/v2/SmsSender
Web service for MT (3)	http://api3.teletopiasms.no/gateway/soap/v2/SmsSender
Secure web service for MT (1)	https://api1.teletopiasms.no/gateway/soap/v2/SmsSender
Secure web service for MT (2)	https://api2.teletopiasms.no/gateway/soap/v2/SmsSender
Secure web service for MT (3)	https://api3.teletopiasms.no/gateway/soap/v2/SmsSender

5.   SECURITY

All TeletopiaSMS HTTP based API services are available as HTTPS (SSL encrypted) as well as HTTP. We recommend using HTTPS whenever possible.

To protect against simple abuse, we strongly suggests the Content Provider implement basic security features. TeletopiaSMS will always connect from our IP ranges, and we strongly recommend the Content Provider checks the IP of incoming connections.

 TeletopiaSMS currently owns the IP ranges:

- 195.159.20.0/24
- 195.159.39.0/24

- 212.62.244.16/28
- 85.252.75.156

6. SENDING MESSAGES TO END USER (MT)

This section describes the protocol used by the Content Providers to send SMS messages to mobile-phone subscribers, from here on referred to as MO or mobile terminated messages.

6.1. Method SmsSender.sendTextMessage()

Use this method to submit a single message to the Gateway.

```
SendResponse sendResponse = sender.sendTextMessage(String username, String password,
TextMessage textMessage);
```

The *username* and *password* parameters is the credential for submitting messages to the Gateway.

6.2. Method SmsSender.sendTextMessages()

Use this method to submit multiple messages to the Gateway.

```
SendResponse[] sendResponse = sender.sendTextMessage(String username, String password,
TextMessage[] textMessage);
```

6.3. Parameter TextMessage

Field name	Field type	Size		Description
Sender	String		O	Sender number.
Recipient	String		M	Recipient number (MSISDN). The format of the number is E164, without any leading + or trunk prefix. (Example: 4712345678)
Text	String		M	Content of SMS.
Gateway	String		O	Ignore unless otherwise instructed by TeletopiaSMS.
RequestDeliveryReport	Boolean		O	If set to true, the message will generate a delivery report request. Default is false.
ClientMessageId	String	60	O	This is an optional Content Provider generated message id. This id will be included in delivery reports.

DeliveryTimestamp	Long		O	The time (in milliseconds since midnight, January 1, 1970 UTC) the message will be delivered.
ExpirationTimestamp	Long		O	The time (in milliseconds since midnight, January 1, 1970 UTC) the message will expire.
Price	Integer		M	The price for the reverse-billing premium rate message in 1/100 of the currency (øre in Norway).
AgeLimit	Integer		O	Age limit for message. Commonly supported values for the various operators are 16 and 18.
ServiceCode	String	5	O	GAS messages require this value to be set. See separate file for available codes.
ServiceDescription	String		O	Additional GAS description. Support for this is operator dependent.

6.4. Return value SendResponse

Field name	Field type	Description
MessageId	String	TeletopiaSMS message id. You will receive this message id along with an optional ClientMessageId in delivery reports.
StatusCode	Int	The status code. Code 1000 means the message is accepted and queued for delivery. (See section with status codes)
StatusDescription	String	Description for the status code. This may contain additional information.

7. RECEIVING MESSAGES AND DELIVERY REPORTS FROM END USER (MO)

This section describes the protocol used by the TeletopiaSMS SOAP Gateway to forward MO SMS and delivery reports to Content Providers. The Content Provider must implement this interface in order to receive MO/DLR. All methods have a Boolean return type, where TRUE indicates success. Your web service implementation must never return false when it is unable to understand the parameter, as this will trigger a retry.

7.1. Method SmsReceiver.onIncomingMessages()

Receive a list of messages from the Gateway.

```
Boolean onIncomingMessages(IncomingMessage[] messages);
```

7.2. Method SmsReceiver.onDeliveryReports()

Receive a list of delivery reports.

```
Boolean onDeliveryReports(DeliveryReport[] reports);
```

7.3. Method SmsReceiver.onStop();

Called when the end-user sends the "stop" command to a short-code. The Content Provider must not send any messages to this user unless the user re-subscribes. The stop request is broadcast to all Content Providers connected to the gateway, it is therefore important that no messages is sent to the end-user as a result of this request. The stop-command is only applicable to subscription services.

```
Boolean onStop(String shortcode, String number);
```

IMPORTANT! The Content Provider MUST NEVER send a reply message of any kind to the end-user when handling this request type.

7.4. Parameter IncomingMessage

Field name	Field type	Description
MessageId	String	Unique message id generated by TeletopiaSMS.
Sender	String	MSISDN of end-user.
Recipient	String	The CPA number the message was sent to.
Text	String	Content of SMS. Multipart SMS messages will be combined by TeletopiaSMS
Gateway	String	Ignore unless otherwise instructed by TeletopiaSMS.

7.5. Parameter DeliveryReport

Field name	Field type	Description
MessageId	String	The message id returned when submitting a message to TeletopiaSMS.
ClientMessageId	String	The Content Provider specified client message id used when sending a message.
DeliveryTimestamp	Long	The time (in milliseconds since midnight, January 1, 1970 UTC) the message was delivered.
StatusCode	Int	The status code. (See section with status codes)

8. STATUS CODES

Code	Explanation	Description / recommended action
1000	Message accepted and queued	
2000	Message delivered successfully	
30xx	*Billing failed*	
3000	Billing failed	
3001	Subscriber is temporarily barred	
3002	Subscriber has insufficient funds	
3003	Subscriber is too young	
3004	The maximum number of messages or premium rate charge to the subscriber has been exceeded.	
40xx	*Barred*	When the Content Provider receives any of these status codes, the MSISDN MUST be removed from any subscription services.
4000	Barred	
4001	Subscriber account barred	
4002	Subscriber account closed	
4003	Subscriber is reserved against receiving overcharged content	
5000	*Access failed*	
5000	Access failed	
60xx	*Invalid message*	These status codes indicate that something is syntactically wrong in the message, and there may be something wrong with the Content Providers implementation of the protocol.
6000	Invalid message	
6001	Invalid destination address	
6002	Invalid originating address	
6003	Invalid price	
6004	Invalid content	
70xx	*Gateway error*	This indicates that there is something wrong internally at TeletopiaSMS or temporary with the operators. If problem persists, contact support.
7000	Gateway error	
7001	Route not found	
7002	Message rejected	
7003	Operator submit error	
7004	Message submitted to the wrong operator	
7005	Message not delivered because the subscriber is unknown	
7006	GAS Prepaid	Special for Norwegian premium rate GAS-operators, indicating a GAS-charge on a prepaid account. Retry with appropriate service code / business model for prepaid subscribers.
9999	Expired message	