ASPSMS.COM

XML INTERFACE

TECHNICAL SPECIFICATIONS

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II. Abbreviations and technical terms

Element	XML structural construct. An XML element consists of a start tag, an end tag, and the information between the tags, which is often referred to as the contents. Each element has a type, identified by name, sometimes called its “generic identifier” (GI), and may have a set of attribute specifications. Each attribute specification has a name and a value. An instance of an element is declared using <element> tags.
HTML	Hypertext Markup Language
Processing Instruction	Information contained in an XML structure that is intended to be interpreted by a specific application.
XML	Extended Markup Language. A subset of SGML that is optimized for delivery over the Web, XML provides a uniform method for describing and exchanging structured data that is independent of applications or vendors. At the time of this writing, XML 1.0 is a Worldwide Web Consortium Recommendation, which means that it is in the final stage of the approval process.
XML Document	A document object that is well formed, according to the XML recommendation, and that might (or might not) be valid. The XML document has a logical structure (composed of declarations, elements, comments, character references, and processing instructions) and a physical structure (composed of entities, starting with the root, or document entity).
XML Parser	A software module used to read XML documents and provide access to their content and structure. The XML parser generates a hierarchically structured tree, then hands off data to viewers and other applications for processing, and finally returns the results to the browser. A validating XML parser also checks the XML syntax and reports errors.
xmlSMS	XML interface of ASPSMS.COM

1. Introduction

xmlSMS allows you to send sms (short message service) by using a XML interface. The following features are included:

- **simple sms**
- **wap push sms**
- **multiple sms**
- **flashing sms**
- **blinking sms**
- **delivery notification**
- **alphanumeric originator**
- **ringtones**
- **operator logos**
- **vcards**
- **binary sms**
- **Arabic & other oriental characters**
- **multiple concurrent users**
- **balance check**
- **ASPTOKEN for authentication**

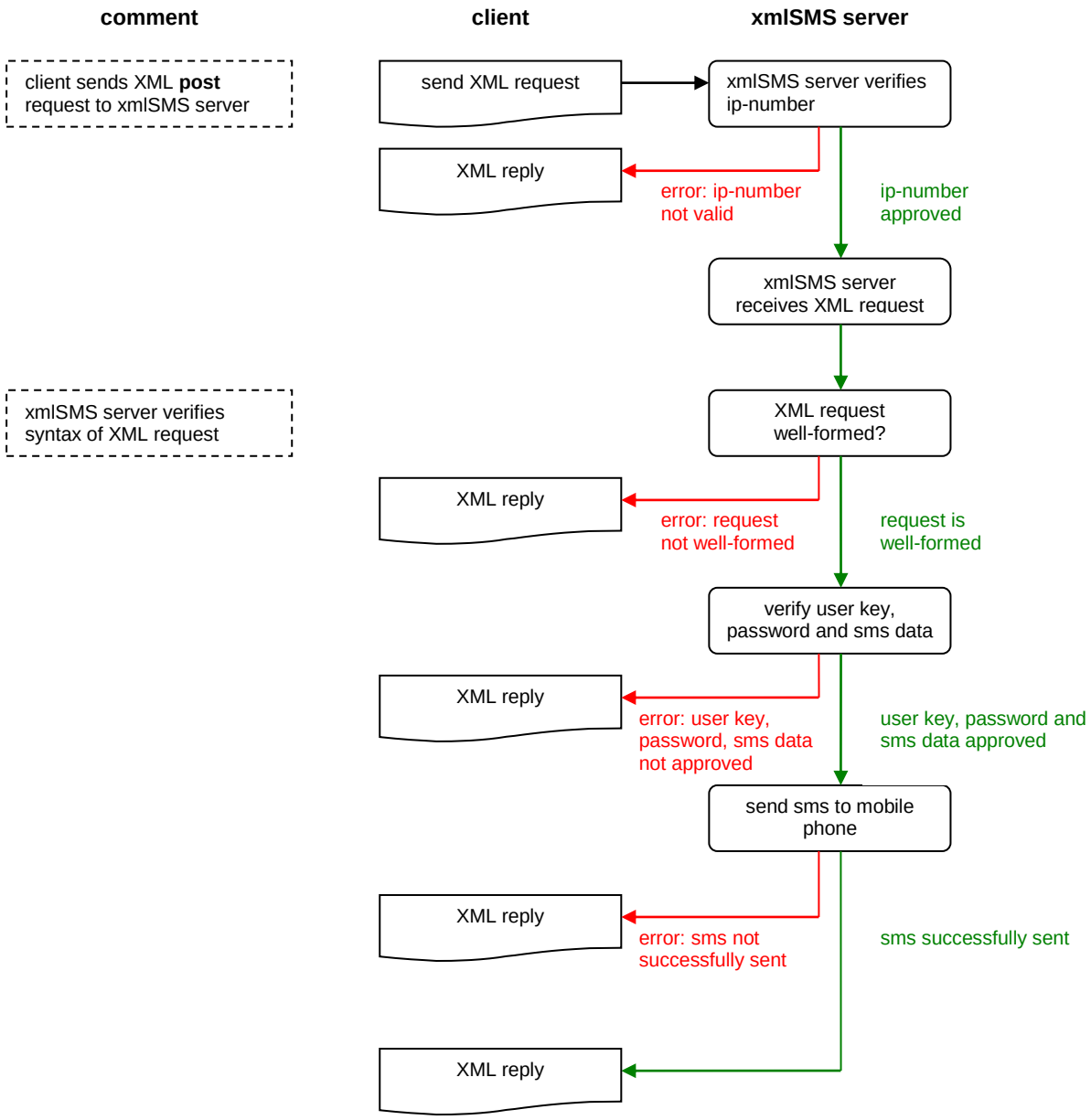
2. Overview

2.1 Getting started

1.	**Access to the xmlSMS server**	You need a user key and a password. Information are available at https://www.aspsms.com/
2.	**Register your ip address (optional)**	This step is ***optional***. In order to protect your credits you can set an ip address or a subnet in coherence with your user key. By using this feature, you are only able to use the interface from the determined ip address(es). If no ip address is set you can access the interface from any address. You can set your ip address(es) by login on https://www.aspsms.com/ with your login and password.
3.	**Preparation of XML request**	Prepare your XML request according to the rules.
4.	**Send your XML request**	Send your XML request to the following address: https://xml3.aspsms.com/xmlsvr.asp http://xml3.aspsms.com/xmlsvr.asp or https://xml3.aspsms.com/xmlsvr.asp or http://xml3.aspsms.com:5098/xmlsvr.asp or https://xml4.aspsms.com/xmlsvr.asp or http://xml3.aspsms.com/xmlsvr.asp or https://xml4.aspsms.com/xmlsvr.asp or http://xml4.aspsms.com:5098/xmlsvr.asp
5	**Check for reply messages**	xmlSMS server will reply messages to the address where the request was sent from. Reply messages are also sent as XML documents.
6.	**Error messages**	If you receive reply messages indicating error, correct your XML request and send it again.

2.2 General procedure of XML request

The following scheme describes the general procedure of an XML request you send to the xmlSMS server:



3. Communications

3.1 General

The xmlSMS server consists of two physical servers which are redundant and have different addresses:

- **xmlSMS Server 3: xml3.aspsms.com, port 443 (TLS)**
- **xmlSMS Server 3: xml3.aspsms.com, port 80**
- **xmlSMS Server 3: xml3.aspsms.com, port 5061**
- **xmlSMS Server 3: xml3.aspsms.com, port 5098**
- **xmlSMS Server 4: xml4.aspsms.com, port 443 (TLS)**
- **xmlSMS Server 4: xml4.aspsms.com, port 80**
- **xmlSMS Server 4: xml4.aspsms.com, port 5061**
- **xmlSMS Server 4: xml4.aspsms.com, port 5098**

In order to successfully make a XML request, the client has to open a socket, transport an XML string, read the reply and then close the socket. The XML string is part of an external message protocol defined by HTTP/1.0.

HTTP/1.0 is described in RFC 1945, „Hypertext Transfer Protocol – HTTP/1.0“ . It is not really necessary to read the full specifications since the functionality needed for the xmlSMS service requires only a small subset of the protocol. To be precise, the xmlSMS server processes only **POST requests**.

We do strongly recommend that you program your applications redundant. That means that in case xml3.aspsms.com does not respond your application tries xml4.aspsms.com.

3.1 Examples

Due to many inquiries in the past, we decided to supply some examples how to connect to xmlSvr. We provide examples for PHP, Python and ASP (Active Server Pages) based on VB Script.

3.1.1 PHP example

Please notice that this is not a complete script. It only shows the method of how the connect can be made.

```
<?php
$content = "<?xml version…";
```

```
$len = strlen($content);
$fp = fsockopen( "xml3.aspsms.com", 5061 , &$errno, &$errdesc );
         if ( ! $fp ) die ( "Couldn't connect: $errno → $errdesc\n" );
fputs( $fp, "POST /xmlsvr.asp HTTP/1.0\r\n");
fputs( $fp, "Content-Type: text/xml\r\n");
fputs( $fp, "Content-Length: $len\r\n\r\n");
fputs( $fp, $content);
while ( ! feof( $fp ) )
     $reply[] = fgets( $fp, 1024 );
fclose( $fp );
?>
```

3.1.2 Python example

```
#!/usr/bin/python2
print 'Content-Type: text/html'
print # Blank line marking end of HTTP headers

import socket

HOST = 'xml3.aspsms.com'    # The remote host
PORT = 5061 # The same port as used by the server
userkey = #please fill in your USERKEY
password = #please enter your PASSWORD
originator = #please fill in the ORIGINATOR
recipient = #please insert the RECIPIENT here
text = #Your SMS Text

CONTENT="""<?xml version="1.0" encoding="ISO-8859-1"?>
  <aspsms>
   <Userkey>"""+str(userkey)+"""</Userkey>
    <Password>"""+str(password)+"""</Password>
    <Originator>"""+ str(originator) +"""</Originator>
    <Recipient>
    <PhoneNumber>"""+ str(recipient) +"""</PhoneNumber>
    </Recipient>
    <MessageData>"""+ str(text) +"""</MessageData>
    <Action>SendTextSMS</Action>
    </aspsms>"""

length=len(CONTENT)
s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.connect((HOST, PORT))
s.send("POST /xmlsvr.asp HTTP/1.0\r\n")
s.send("Content-Type: text/xml\r\n")
s.send("Content-Length: "+str(length)+"\r\n\r\n")
s.send(CONTENT)
datarecv=s.recv(1024)
print "Reply Received: "+ str(datarecv)
s.close()
```

3.1.3 ASP example (VBScript)

```
<%
Option Explicit

'--------------------------------------------------------------------------
' Define Variables
'--------------------------------------------------------------------------
Dim xmlExample, XMLhttp, xmlDoc2, Response_Doc

'--------------------------------------------------------------------------
' HTML
'--------------------------------------------------------------------------
%>
<html>
<head>
<title>XML Post</title>
</head>
<body>
<pre>
<%
'--------------------------------------------------------------------------
' Open XML document
'--------------------------------------------------------------------------
Set xmlExample = CreateObject("MSXML2.DOMDocument")
xmlExample.SetProperty "ServerHTTPRequest", False
xmlExample.Async = False
xmlExample.Load "E:\aspsms\xml\request1.xml"

'--------------------------------------------------------------------------
' Check XML document
'--------------------------------------------------------------------------
If Not xmlExample.ParseError = 0 Then
        Response.Write "<b>Error Code:</b> " & xmlExample.ParseError & "<br>"
        Response.Write "<b>Error Description:</b> " & xmlExample.ParseError.reason & "<br>"
        Response.Write "<b>Error File Position:</b> " & xmlExample.ParseError.filepos & "<br>"
        Response.Write "<b>Error Line:</b> " & xmlExample.ParseError.line & "<br>"
        Response.Write "<b>Error Line Position:</b> " & xmlExample.ParseError.linepos & "<br>"
        Response.Write "<b>Error Source Text:</b> " & xmlExample.ParseError.srcText & "<br>"
Else
        '--------------------------------------------------------------------------
        ' Send XML request
        '--------------------------------------------------------------------------
        Set XMLhttp = CreateObject("MSXML2.ServerXMLHTTP")
        XMLhttp.Open "POST", "https://xml3.aspsms.com/xmlsvr.asp", False
        XMLhttp.Send xmlExample.xml

        '--------------------------------------------------------------------------
        ' Get server status
        '--------------------------------------------------------------------------
        Response.Write "<br>"
        Response.Write "<b>xmlSvr Server Status:</b><br>"
        Response.Write "----------------------------------------<br>"
        Response.Write "<b>Status (Value must be 200): </b>" & XMLhttp.status & "<br>"
        Response.Write "<b>ReadyState (Value must be 4): </b>" & XMLhttp.ReadyState & "<br>"
        Response.Write "<b>StatusText (Value must be OK): </b>" & XMLhttp.StatusText & "<br>"
        Response.Write "<b>AllResponseHeaders:</b><br>" & XMLhttp.GetAllResponseHeaders & "<br>"

        '--------------------------------------------------------------------------
        ' Get XML response from xmlSvr
        '--------------------------------------------------------------------------
        Set xmlDoc2 = CreateObject("MSXML2.DOMDocument")
        xmlDoc2.setProperty "ServerHTTPRequest", True
        xmlDoc2.async = False
        xmlDoc2.LoadXML XMLhttp.ResponseXML.xml
        Response.Write "<br>"
        Response.Write "<b>xmlSvr XML Response:</b><br>"
        Response.Write "----------------------------------------<br>"
        Response_Doc = xmlhttp.responseXML.xml
        Response_Doc = Replace (Response_Doc,"<","&lt;")
        Response_Doc = Replace (Response_Doc,">","&gt;")
        Response.Write Response_Doc & "<br>"
End If
%>
```

```
</pre>
</body>
</html>
```

This script is based on Microsoft Windows 2000 Server, Microsoft Internet Information Server 5.0 (IIS), Microsoft XML 3.0/Service Pack 1 (MSXML) and ASPSMS Active X Component Version 3.0. Make sure that you modify the path for your XML document.

For Microsoft Windows users we have developed a VBScript Class that makes it very easy to use the XML Interface. Further information is available at https://www.aspsms.com/vbscript_class/

3.1.4 Java

```
import java.net.*;
import java.io.*;

public class ASPSMS {

String xmlURL = "https://xml4.aspsms.com/xmlsvr.asp";
// insert required userkey,password and originator
String userkey = "";
String password = "";
String originator = "";

ASPSMS() {
}

public String send( int idsms,
                    String number,
                    String message,
                    int flashing,
                    String URLDeliveryNotification,
                    String URLNonDeliveryNotification) {

String content =
  "<?xml version=\"1.0\" encoding=\"ISO-8859-1\"?>\r\n"
+ "<aspsms>\r\n"
+ "<Userkey>" + userkey + "</Userkey>\r\n"
+ "<Password>" + password + "</Password>\r\n"
+ "<Originator>" + originator + "</Originator>\r\n"
+ "<Recipient>\r\n"
+ "<PhoneNumber>"
+ number
+ "</PhoneNumber>\r\n"
+ "<TransRefNumber>"
+ idsms
+ "</TransRefNumber>\r\n"
+ "</Recipient>\r\n"
+ "<MessageData>"
+ message
+ "</MessageData>\r\n"
+ "<FlashingSMS>"
+ flashing
+ "</FlashingSMS>\r\n"
+ "<URLDeliveryNotification>"
+ URLDeliveryNotification
+ "id=</URLDeliveryNotification>\r\n"
+ "<URLNonDeliveryNotification>"
+ URLNonDeliveryNotification
+ "id=</URLNonDeliveryNotification>\r\n"
+ "<Action>SendTextSMS</Action>\r\n"
+ "</aspsms>\r\n";

InetAddress inetAddr = null;
String xmlResult = "";

try {
  URL aspsmsURL = new URL(xmlURL);
  URLConnection aspsmsCon = aspsmsURL.openConnection();

  aspsmsCon.setRequestProperty("Content-Type","text/xml");
  aspsmsCon.setDoOutput(true);
  aspsmsCon.setDoInput(true);

  PrintWriter out = new PrintWriter(aspsmsCon.getOutputStream());

  char[] buffer = new char[1024*10];
  buffer = content.toCharArray();

  out.write(buffer,0,content.length());
  out.close();

  BufferedReader in = new BufferedReader(
                                      new InputStreamReader(
                                      aspsmsCon.getInputStream()));
```

```
  String inputLine = null;
  while ((inputLine = in.readLine()) != null)
  {
    xmlResult = xmlResult + inputLine;
    System.out.println(inputLine); }

  in.close();
} catch (Exception ex) {
  System.out.println(ex.getMessage());
}
return xmlResult;
}

public static void main(String[] args) {
            ASPSMS testSMS = new ASPSMS();
            String xmlResult =
testSMS.send(refnumber,handynumber,message,flashing,urldelivery_yes,urldelivery_no);
}
}
```

4. Encoding

The XML declaration is a processing instruction (PI) that identifies the document as being XML. All XML documents have to begin with the following XML declaration:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
```

If a request does not contain exactly this declaration, it may be refused.

The following encoding rules must be obeyed:

- The one and only encoding declaration that can be used is ISO-8859-1. The xmlSMS server only accepts ISO-8859-1. Others will be refused.
- The value of special characters (38, 60, 62, 128 - 255) must be ISO-encoded, i.e. 'ä' becomes &#228. Use of HTML-encoding (e.g. ü for ä) is not allowed.

5. Character Set

Basically we use the ISO-8859-1 char set but you do not have to encode all characters with ISO-8859-1 numbers. The following range within ISO-8859-1 characters (decimal value) have to be encoded by ISO-Numbers:

- 38
- 60
- 62
- 128 till 255

Examples:
& becomes &
< becomes <
> becomes >
Ä becomes Ä
ü becomes ü

Notice that you only have to replace values. Do ***not*** use &#60 to open a tag (e.g. &#60aspsms&#62).

6. XML Request

6.1 Definition

An XML request must contain the following two parts:

- Processing Instruction (PI)
- Content of Document

6.1.1 Processing Instruction (PI)

XML structural construct. A mechanism for embedding information in a file intended for proprietary applications rather than the XML parser or browser. The XML parser passes the instructions to the application.

A processing instruction is a string of text included almost anywhere in an XML document's character data between <? and ?> marks. It begins with the name of the application for which the PI is intended, followed by the data for the instruction.

The processing instruction always has to contain the following information:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
```

6.1.2 Content of the XML Document

The XML document has to start by <aspsms> tag and must end by </aspsms> tag. Between the so-called root tags you have to insert element tags and child element tags. Let us start with an example:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>I3QHMYKEY6E</Userkey>
   <Password>mypassword</Password>
   <Recipient>
      <PhoneNumber>0041795555555</PhoneNumber>
   </Recipient>
   <MessageData>Test</MessageData>
   <Action>SendTextSMS</Action>
</aspsms>
```

6.1.3 Special Notice

Notice that you send a CRLF after every line. Important: The web server on which xmlSMS server is running classifies a CRLF as 2 characters. To be precise as CR and LF character. Make sure that you modify the content length. Thanks to Simon Vogl for this reference.

6.2 Overview

The following table shows you all tags which can be used:

Root	Element	Child Element	Allowed Chars
<aspsms>			
	<Userkey>		[a-zA-Z0-9]
	<AffiliateId>		[0-9]
	<Password>		[a-zA-Z0-9]
	<Originator>		[a-zA-Z0-9\!\@]
	<UsedCredits>		0|1
	<Recipient>		
		<PhoneNumber>	[0-9\+]
		<TransRefNumber>	[a-zA-Z0-9]
	<DeferredDeliveryTime>		[0-9]
	<LifeTime>		[0-9]
	<MessageData>		ISO-8859-1
	<URLBinaryFile>		ISO-8859-1
	<FlashingSMS>		0|1
	<BlinkingSMS>		0|1
	<MCC>		[0-9]
	<MNC>		[0-9]
	<URLBufferedMessageNotification>		ISO-8859-1
	<URLDeliveryNotification>		ISO-8859-1
	<URLNonDeliveryNotification>		ISO-8859-1
	<TimeZone>		[0-9\-]
	<XSer>		[0-9]
	<BinaryFileDataHex>		ISO-8859-1
	<TransRefNumber>		[a-zA-Z0-9]
	<ReplaceMessage>		1|2|3|4|5|6|7
	<VCard>		
		<VName>	ISO-8859-1
		<VPhoneNumber>	[0-9\+]
	<WAPPushDescription>		ISO-8859-1
	<WAPPushURL>		ISO-8859-1
	<OriginatorUnlockCode>		[0-9]
	<Token>		
		<Reference>	ISO-8859-1
		<Validity>	[0-9]
		<Mask>	ISO-8859-1
		<VerificationCode>	ISO-8859-1
		<CaseSensitive>	0|1
		<PhoneNumber>	[0-9\+]
	<Action>		SendRandomLogo| SendTextSMS|

SendPictureMessage|
SendLogo|
SendGroupLogo|
SendRingtone|
InquireDeliveryNotifications|
ShowCredits|
SendVCard|
SendBinaryData|
SendWAPPushSMS|
SendOriginatorUnlockCode|
UnlockOriginator|
CheckOriginatorAuthorization
SendTokenSMS
VerifyToken

6.3 Further information on individual tags

6.3.1 <Userkey>

The user key is needed every time your make a request. The xmlSMS server always verifies authentification.

Example:

```
<Userkey>IWHGETG3I</Userkey>
```

6.3.2 <AffiliateId>

If you are registered as an affiliate member you can send the corresponding affiliate id. More information about the affiliate program is available at https://www.aspsms.com/affiliates/.

Example:

```
<AffiliateId>2</AffiliateId>
```

6.3.3 <Password>

The password is needed every time your make a request. The xmlSMS server always verifies authentification.

Example:

```
<Password>3424iew3</Password>
```

6.3.4 <Originator>

6.3.4.1 Notice

Please be aware, that using this feature is delicate. ***Any abuse of this nice feature will be tracked and prosecuted according to serious civil- and / or criminal law regulations.*** We will close such accounts immediately without prior notification. Thank you for your understanding.

6.3.4.2 Unlock procedure

Due to potential abuse of the originator feature there are some restrictions. These restrictions only refer to numeric and not to alphanumeric originators. To enable a numeric originator the following steps have to be taken:

1. Request an unlock code for a specific numeric originator by using action SendOriginatorUnlockCode (see 6.3.28.12). An unlock code will be sent to the mobile phone.

   Example:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>LLLLLLLLLLL</Userkey>
   <Password>password</Password>
   <Originator>0041790000000</Originator>
   <Action>SendOriginatorUnlockCode</Action>
</aspsms>
```

2. Unlock the numeric originator by using action UnlockOriginator (see 6.3.28.13).

   Example:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>LLLLLLLLLLL</Userkey>
   <Password>password</Password>
   <Originator>0041790000000</Originator>
   <OriginatorUnlockCode>65164424</OriginatorUnlockCode>
   <Action>UnlockOriginator</Action>
</aspsms>
```

3. Check if the numeric originator has been unlocked by using action CheckOriginatorAuthorization (see 6.3.28.14

   Example:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>LLLLLLLLLLL</Userkey>
   <Password>password</Password>
```

```
      <Originator>0041790000000</Originator>
      <Action>CheckOriginatorAuthorization</Action>
   </aspsms>
```

6.3.4.3 Description

Specifies an alphanumeric or numeric originator. It can be a mobile phone number or a short text with a maximum of 11 characters.

Example:

```
<Originator>aspsms.com</Originator>
```

6.3.5 <UsedCredits>

This feature provides you information about used credits during a transaction. If you set the value equal 0 the credits used will not be returned. By setting the value equal 1 the tag <CreditsUsed> (see 7.2.3) will be returned.

Example:

```
<UsedCredits>1</UsedCredits>
```

6.3.6 <Recipient>

Set a recipient and a transaction reference number (optional). With this feature, it is possible to send messages to a maximum of 1000 recipients at the same time. The transaction reference number is used to inquire delivery notifications. If used, the transaction reference number should be unique to ensure predictable results.

Examples:

```
<!--
Example 1: 1 recipient without transaction number
-------------------------------------------------
-->

<Recipient>
   <PhoneNumber>0041795555555</PhoneNumber>
   <TransRefNumber/>
</Recipient>



<!--
Example 2: 2 recipients with transaction numbers
------------------------------------------------
-->

<Recipient>
   <PhoneNumber>0041795555555</PhoneNumber>
   <TransRefNumber>1234</TransRefNumber>
</Recipient>

<Recipient>
   <PhoneNumber>0041796666666</PhoneNumber>
   <TransRefNumber>1235</TransRefNumber>
</Recipient>
```

6.3.7 <DeferredDeliveryTime>

If set, specifies when a submitted message should be sent. The format is **ddmmyyyyhhmmss**. If this feature is used outside the time zone GMT+1, the time zone should also be set.

Example:

```
<TimeZone>-5</TimeZone >
```

6.3.8 <LifeTime>

If an SMS can not be delivered instantly, it remains within the GSM network for a given time. During this timeframe, the network tries to deliver the SMS periodically. The LifeTime property represents this validity period of an SMS in Minutes. Please note that the LifeTime can not be shorter than 3 minutes and can not exceed 1440 minutes (24h). If not specified, the LifeTime is 24h by default.

Example:

```
<LifeTime>15</LifeTime>
```

6.3.9 <MessageData>

The message can be text or binary hex-coded.

Examples:

```
<!--
Example 1: Text message
-----------------------
-->

<MessageData>This is a Textmessage</MessageData>



<!--
Example 2: binary hex-coded message
-----------------------------------
-->

<MessageData>22F81001480E01000000000FF0000000000420001000C0000000041198061938000000020824082 5A7C00000
000642302DB03FC000008143C42FC8004000004040381848 0F8000003041C1884BF0000000082E00879C0000000000F00040
20000000003F003830C000000000200FC60F00000000003FF001F0000000000000000000000000000</MessageData>
```

6.3.9.1 Arabic & other oriental characters

We support Arabic and other special characters too. You need just to encode a SMS in UCS2/HexEncoded and set the proper XSer value for the character set

This are the HexEncoded values for “Hello”:
0048 = H
0065 = e
006C = l
006C = l
006F = o

```
<!--
Example:
-->

<XSer>020108</XSer>
<MessageData>00480065006C006C006F </MessageData>
<Action>SendBinaryData</Action>
```

All the values for UCS2 range from 0000 to FFFF, which means that there are 65536 possible characters which can be used (not only 256 like in ANSI).

On the following URLs you will find information about the code values of special characters:

Arabic

http://www.unicode.org/charts/PDF/U0600.pdf

Syriac

http://www.unicode.org/charts/PDF/U0700.pdf

Thaana

http://www.unicode.org/charts/PDF/U0780.pdf

Arabic Presentation Forms-A

http://www.unicode.org/charts/PDF/UFB50.pdf

Arabic Presentation Forms-B

http://www.unicode.org/charts/PDF/UFE70.pdf

Greek and Coptic

http://www.unicode.org/charts/PDF/U0370.pdf

Hebrew

http://www.unicode.org/charts/PDF/U0590.pdf

Thai

http://www.unicode.org/charts/PDF/U0E00.pdf

You can find a full list for all special characters (Arabic, Greek, Cyrillic, Chinese, Japanese, Thai etc.) at the following address:

All characters

http://www.unicode.org/charts

6.3.10 <URLBinaryFile>

Specifies a file, that stores binary-data. For logos and picture messages, the format must be *.bmp, for ring tones, a *.ott or *.txt file has to be specified (*.ott = OTA Tone, *.txt = RTTTL format).

Supported formats:

- Operator Logos:
  Bitmap 72 * 14 Pixel (*.bmp, black/white)
- Picture Messages:
  Bitmap 72 * 28 Pixel (*.bmp, black/white)
- Ring tones:
  The Ring tone files have to be compliant to Nokring or Nokia PC Composer

Notice that the binary file URL has to begin with “http://”

Example:

```
<URLBinaryFile>http://www.mysite.com/images/tone1.ott</URLBinaryFile>
```

6.3.11 <FlashingSMS>

If set to “1”, a text-message will be displayed directly on the display of the recipient.

Example:

```
<FlashingSMS>1</FlashingSMS>
```

6.3.12 <BlinkingSMS>

If set to "1", the text message or parts of it will blink, when the message is displayed on the mobile phone. If used, the total number of characters used is limited to 69. Note: At the moment, this feature only works on the following Nokia phones: 3210, 3310, 5110, 6110, 6150, 8210, 8810, 8850. With the command <BLINK>, used in the message text, it is possible to control the appearance of the blinking text.

Examples:

```
<!--
Example 1: complete message is blinking
---------------------------------------
-->

<BlinkingSMS>1</BlinkingSMS>
<MessageData>Every character in this message blinks</MessageDate>



<!--
Example 2: Message "I love you!", but only the word "love" is blinking
----------------------------------------------------------------------
-->

<BlinkingSMS>1</BlinkingSMS>
<MessageData>I &#60;BLINK&#62; love &#60;/BLINK&#62; you!</MessageData>
<!--
Notice that <BLINK> and </BLINK> have to be ISO-8859-1-encoded.
<BLINK> becomes &#60;BLINK&#62
</BLINK> becomes &#60;/BLINK&#62
-->
```

6.3.13 <ReplaceMessage>

If set in a range from 1 to 7, this feature allows you to overwrite existing messages on a handset with the same replace messsage value. Notice: The message you want to overwrite has already to be indicated by a replace message.

Example:

```
<ReplaceMessage>5</ReplaceMessage>
```

6.3.14 <MCC>

MCC means mobile country code. This feature should be specified sending operator logos. The complete list of operator codes is available at http://www.gsmworld.com/gsminfo/

Example:

```
<MCC>228</MCC>
```

6.3.15 <MNC>

MNC means mobile network code. This feature should be specified sending operator logos. The complete list of operator codes is available at http://www.gsmworld.com/gsminfo/

Example:

```
<MNC>1</MNC>
```

6.3.16 <URLBufferedMessageNotification>

URL the xmlSMS server is going to request if a message was not delivered instantly and was buffered. The value of the submitted transaction reference number will be the argument of the URL.

Example:

```
<URLBufferedMessageNotification>http://www.yoursite.com/buffered.php4?ID=
</URLBufferedMessageNotification>


<!--
The transaction reference number was, for example, set 1234. In this case, the xmlSMS server makes
the following request: http://www.yoursite.com/buffered.php4?ID=1234
-->
```

6.3.17 <URLDeliveryNotification>

URL the xmlSMS server is going to request if a message was delivered instantly. The value of the submitted transaction reference number will be the argument of the URL.

Example:

```
<URLDeliveryNotification>http://www.yoursite.com/delivered.php4?ID=</URLDeliveryNotificatio>

<!--
The transaction reference number was, for example, set 1234. In this case, the xmlSMS server makes
the following request: http://www.yoursite.com/delivered.php4?ID=1234
-->
```

6.3.18 <URLNonDeliveryNotification>

URL the xmlSMS server is going to request if a message was not delivered. The value of the submitted transaction reference number will be the argument of the URL.

Example:

```
<URLNonDeliveryNotification>http://www.yoursite.com/fail.php4?ID=</URLNonDeliveryNotification>
<!--
The transaction reference number was, for example, set 1234. In this case, the xmlSMS server makes
the following request: http://www.yoursite.com/fail.php4?ID=1234
-->
```

6.3.19 <TimeZone>

Specifies the time zone where the xmlSMS service is used. It is only necessary to set this feature if the feature deferred delivery time is used and the service is used outside the time zone GMT +1.

Example:

```
<!--
Example 1: User is in the time zone GMT+3
----------------------------------------
-->

<TimeZone>2</TimeZone>
<!--
Example 2: User is in the time zone GMT-4
----------------------------------------
-->

<TimeZone>-5</TimeZone>
```

6.3.20 <XSer>

Additional information for binary messages.

Example:

```
<XSer>010706050415821582</XSer>
```

6.3.21 <BinaryFileDataHex>

Specifies the content of a file which is already in memory in hexadecimal representation.

Example:

```
<BinaryFileDataHex>424DE6000000000000003E0000002800000048000000E0000000100010000000000A8000000C40E0
000C40E00000000000000000000000000000FFFFFF00FFFFFC24FF30FC8000000000FFFFF9B6FCFEFEC020000000FFFFF8D0F
9FF0E6431000000FF07F84BFBE3FF6419000000FC03C063F3DFFF761C000000F1F3050FF7DC1F7B0D000000C7F01FFFF7046
F1F8E000000CFC0FFFFE7106F47CE000000FE01FFFF833A6EF7E7000000F83CFFFFBB3AEEF3E7000000E0FCFFFF399B5C0BF
7000000E7F0FFFF00C739E3FB000000FFC1FFFF3F3FE7F3FB000000FE1FFFFF7FC01FFBFF000000</BinaryFileDataHex>
```

6.3.22 <TransRefNumber>

If you want to get the delivery status of a sent sms you have to set the transaction reference number you want information about. You can set more than one within one request. To be precise you can set up to 1000 transaction reference numbers. This feature has to be used in combination with the action InquireDeliveryNotifications (see 6.3.28.7).

Example:

```
<!--
Example 1: one transaction reference number will be set to get the delivery status
--------------------------------------------------------------------------------
-->

<TransRefNumber>1234</TransRefNumber>


<!--
Example 2: 5 transaction reference numbers will be set to get the delivery status
--------------------------------------------------------------------------------
```

```
-->

<TransRefNumber>1234</TransRefNumber>
<TransRefNumber>1235</TransRefNumber>
<TransRefNumber>1236</TransRefNumber>
<TransRefNumber>1237</TransRefNumber>
<TransRefNumber>1238</TransRefNumber>
```

6.3.23 <VCard>

A vcard is a kind of a phone book record for mobile phones. It always contains name and number of the phone book record.

Example:

```
<!--
Example: A phone book record with name "Tarzan" and phone number "0041796666666" will
         be sent to a mobile phone.
-------------------------------------------------------------------------------------
-->

<VCard>
   <VName>Tarzan</VName>
   <VPhoneNumber>0041796666666</VPhoneNumber>
</VCard>
```

6.3.24 <WAPPushDescription>

The wap push description describes the content of a wap sms.

Example:

```
<WAPPushDescription>Nice Gils at the beach</WAPPushDescription>
```

6.3.25 <WAPPushURL>

Specifies the url of the file to be transferred by wap protocol. This tag has to be set if using the SendWAPPushSMS action.

Example:

```
<WAPPushURL>http://www.yourserver.com/img/beachgirl.gif</WAPPushURL>
```

6.3.26 <OriginatorUnlockCode>

Specifies the unlock code sent to a specific handy to unlock a numeric originator. For more information about the unlock procedure see 6.3.4.

Example:

```
<OriginatorUnlockCode>65164424</OriginatorUnlockCode>
```

6.3.27 <Token>

The Token Element is used for the ASPSMS Authentication Feature ASPTOKEN

6.3.27.1 ASPTOKEN authentication procedure

6.3.27.2 <Reference>

The Reference element is used to distinguish between several tokens for the same phone number.

Example:

```
<Token>
       <Reference>Protected Service</Reference>
```

6.3.27.3 <Validity>

Specifies the validity period of a Token in minutes. If not specified, the Validity of a Token is 5 minutes by default.

6.3.27.4 <Mask>

Used to have the ASPSMS generate a verification code by mask. The mask can contain the following special characters:

- # : a digit
- A : an alphabetic character
- N : an alphanumeric character

All other chars are taken literally. If not specified, the Mask is "NNNN" by default.

6.3.27.5 <VerificationCode>

When Action VerifyToken is called:

- The verification code specifies the user input to be verified.

When Action SendTokenSMS is called:

- Explicitly specifies the verification code to be sent to the user.

6.3.27.6 <CaseSensitive>

Specifies, if the verification code comparison is case sensitive:

- 1 : case sensitive
- 0 : not case sensitive

If not specified, CaseSensitive is 0 by default.

6.3.27.7 <PhoneNumber>

Specifies the phone number to be verified in combination with a token reference.

6.3.28 <Action>

The action element instructs the xmlSMS server what to do. Notice that only one action can be called within one request. Action values are case sensitive.

Further information about individual values:

6.3.28.1 SendRandomLogo

Sends a random operator logo out of a collection of several hundred logos. This action costs one credit per recipient.

6.3.28.2 SendTextSMS

Sends a text sms. This action costs one credit per recipient.

6.3.28.3 SendPictureMessage

Sends a picture message. This action costs three credits per recipient.

6.3.28.4 SendLogo

Sends an operator logo. This action costs one credit per recipient.

6.3.28.5 SendGroupLogo

Sends a group logo. This action costs one credit per recipient.

6.3.28.6 SendRingtone

Sends a ring tone. This action costs one credit per recipient.

6.3.28.7 InquireDeliveryNotifications

Inquires the status of sent messages and returns a string, which contains the query result. This action costs 0.25 credits per transaction reference number.

6.3.28.8 ShowCredits

Number of messages, that can be sent with the current account balance.

6.3.28.9 SendVCard

Sends a vcard.

6.3.28.10 SendBinaryData

Sends binary-data. XSer has to be specified.

6.3.28.11 SendWAPPushSMS

Sends a wap push sms. Notice, that the following two tags have to be specified: WAPPushDescription (see 6.3.24) and WAPPushURL (see 6.3.25).

6.3.28.12 SendOriginatorUnlockCode

Initiates the sending of the unlock code to a mobile phone. This action has to be used in combination with <Userkey>, <Password> and <Originator>. For more information about the unlock procedure see 6.3.4.2.

6.3.28.13 UnlockOriginator

Sends the unlock code received by mobile phone back to our servers to verify the numeric originator. This action has to be combined with <Userkey>, <Password>, <Originator> and <OriginatorUnlockCode>. For more information about the unlock procedure see 6.3.4.2.

6.3.28.14 CheckOriginatorAuthorization

Verifies if a specific numeric originator is enabled on your account. This action has to be combined with <Userkey>, <Password> and <Originator>. For more information about the unlock procedure see 6.3.4.2.

6.3.28.15 SendTokenSMS

Sends Text-Message containing the verification code to a specific recipient.

If MessageData is set, the placeholder <VerificationCode> will be substituted with the verification code. If MessageData is not defined, or if MessageData does not contain the placeholder <VerificationCode>, only the verification code is sent.

6.3.28.16 VerifyToken

When called for the first time:

- Verifies an entered verification code previously sent to a specific phone number combined with a specific token reference.

When called again within validity period:

- Verifies if a phone number combined with a specific token reference is still valid.

7. XML replies

7.1 Overview

Every request you send will be answered by xmlSMS server returning a XML document. The following table shows you all tags which can occur:

Root	Element	Child Element	Allowed Chars
<aspsms>			
	<ErrorCode>		[0-9]
	<ErrorDescription>		[a-zA-Z0-9]
	<CreditsUsed>		[0-9\.]
	<DeliveryNotification>		
		<TransRefNumber>	ISO-8859-1
		<DeliveryStatus>	[0-9]
		<SubmissionDate>	[0-9]
		<NotificationDate>	[0-9]
		<ReasonCode>	[0-9]
	<Credits>		[0-9\.]
	<ParserErrorCode>		[0-9\-]
	<ParserErrorDescription>		[a-zA-Z0-9\.\,]
	<ParserErrorFilePos>		[0-9]

<ParserErrorLine>	[0-9]
<ParserErrorLinePos>	[0-9]
<ParserErrorSrcText>	ISO-8859-1

7.2 Further information on individual tags

7.2.1 <ErrorCode>

After invoking an action an error code is going to be returned. If the operation was successful, the error code is 1. If there was an error, the value is different from 1.

Example:

```
<ErrorCode>1</ErrorCode>
```

7.2.2 <ErrorDescription>

The error description gives specific information, why an error has occurred.

Example:

```
<ErrorDescription>Ok</ErrorDescription>
```

7.2.3 <CreditsUsed>

This tag will be returned if your request contains the tag <UsedCredits/>.

Example:

```
<CreditsUsed>2</CreditsUsed>
```

7.2.4 <DeliveryNotification>

Inquires the status of sent messages and returns an XML document, which contains the query result.

Example:

```
<DeliveryNotification>
   <TransRefNumber>1234</TransRefNumber>
   <DeliveryStatus>0</DeliveryStatus>
   <SubmissionDate>13062001182055</SubmissionDate>
   <NotificationDate>13062001182058</NotificationDate>
   <ReasonCode>0</ReasonCode>
</DeliveryNotification>
```

7.2.4.1 <TransRefNumber>

The represented value is the transaction reference number you requested.

7.2.4.2 <DeliveryStatus>

The delivery status represents the current status of the sent sms. If the delivery status is equals to 0 the sms was successfully delivered to the mobile phone. There are other possibilities for delivery status. See appendix for further information.

7.2.4.3 <SubmissionDate>

The value of the submission date is in the format ddmmyyyyhhmmss.

7.2.4.4 <Notification>

The value of the notification date is in the format ddmmyyyyhhmmss.

7.2.4.5 <ReasonCode>

The reason code tells you more about a specific sms. See appendix for further information.

7.2.5 <Credits>

This feature gives you information about your accounts balance.

Example:

```
<Credits>526</Credits>
```

7.2.6 <ParserErrorCode>

The parser error code does only occur if there is a problem with the parsing process caused for example by a bad structured XML document. In this case a numeric value will be returned.

Example:

```
<aspsms>
   <ParserErrorCode>-1072896680</ParserErrorCode>
</aspsms>
```

7.2.7 <ParserErrorDescription>

The parser error description does only occur if there is a problem with the parsing process caused for example by a bad structured XML document. In this case an alphanumeric value will be returned. This tells you the reason why the process failed.

Example:

```
<aspsms>
   <ParserErrorDescription>XML document must have a top level element.</ParserErrorDescription>
</aspsms>
```

7.2.8 <ParserErrorFilePos>

Contains the absolute file position where the error occurred.

Example:

```
<aspsms>
   <ParserErrorFilePos>261</ParserErrorFilePos>
</aspsms>
```

7.2.9 <ParserErrorLine>

Specifies the line number that contains the error.

Example:

```
<aspsms>
   <ParserErrorLine>9<ParserErrorLine>
</aspsms>
```

7.2.10 <ParserErrorLinePos>

Contains the character position within the line where the error occurred.

Example:

```
<aspsms>
   <ParserErrorLinePos>18</ParserErrorLinePos>
</aspsms>
```

7.2.11 <ParserErrorSrcText>

Returns the text of the line containing the error.

Example:

```
<aspsms>
   <ParserErrorScrText>&</ParserErrorScrText>
</aspsms>
```

8. Network Information

List of supported networks

https://xml3.aspsms.com/opinfo/networks.xml
https://xml4.aspsms.com/opinfo/networks.xml

List of Networks with termination fees

https://xml3.aspsms.com/opinfo/fees.xml
https://xml4.aspsms.com/opinfo/fees.xml

III. Examples

a) Simple text sms

In this first example a simple text sms without any special features will be sent.

```
<!--
XML Request
-----------
-->

<?xml version="1.0" encoding="ISO-8859-1"?>
```

```
<aspsms>
   <Userkey>I3QHMYKEY6E</Userkey>
   <Password>mypassword</Password>
   <Recipient>
      <PhoneNumber>0041795555555</PhoneNumber>
   </Recipient>
   <MessageData>Hello Jane, i got the tickets. See you. Tarzan</MessageData>
   <Action>SendTextSMS</Action>
</aspsms>
```

b) Text sms with special features

In this example it is getting much more complicated. An originator is set. The user who receives this sms sees “aspsms.com” as originator. A transaction reference number is set to enable to verify the delivery status of the sent sms at a later time. This sms will not be sent immediately because a deferred delivery time is set. In this example the sms will be sent on June, 15th 2001 at 8 pm. In the existing example the sms will be sent as flashing sms with a blinking component. Only the word “love” is set to be blinking. The delivery status is going to be posted to the pre defined URL. The last feature of this request is the time zone setting. If the time zone is not set the xmlSMS server assumes GMT+1. This feature is useful for users they are not in the GMT+1 time zone.

```
<!--
XML Request
-----------
-->

<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>I3QHMYKEY6E</Userkey>
   <Password>mypassword</Password>
   <Originator>aspsms.com</Originator>
   <Recipient>
      <PhoneNumber>0041795555555</PhoneNumber>
      <TransRefNumber>1234</TransRefNumber>
   </Recipient>
   <DeferredDeliveryTime>15062001200000</DeferredDeliveryTime>
   <MessageData>I &#60;BLINK&#62; love &#60;/BLINK&#62; you!"</MessageData>
   <FlashingSMS>1</FlashingSMS>
   <BlinkingSMS>1</BlinkingSMS>
   <URLBufferedMessageNotification>http://www.mysite.com/sms/buffered.asp?id=
</URLBufferedMessageNotification>
   <URLDeliveryNotification>http://www.mysite.com/sms/delivered.asp?id=
</URLDeliveryNotification>
   <URLNonDeliveryNotification>http://www.mysite.com/sms/nondelivered.asp?id=
</URLNonDeliveryNotification>
   <TimeZone>-5</TimeZone>
   <Action>SendTextSMS</Action>
</aspsms>
```

c) Customized operator logo

This example shows you how to send an customized operator logo to a mobile phone. You have to tell the xmlSMS server where to get the picture data from by setting an URL.

```
<!--
XML Request
-----------
-->

<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>I3QHMYKEY6E</Userkey>
   <Password>mypassword</Password>
   <Originator>aspsms.com</Originator>
   <Recipient>
      <PhoneNumber>0041795555555</PhoneNumber>
      <TransRefNumber>1234</TransRefNumber>
   </Recipient>
   <MCC>228</MCC>
```

```
   <MNC>1</MNC>
   <URLBinaryFile>http://www.mysite.com/sms/handylogos/logo1.bmp</URLBinaryFile>
   <Action>SendLogo</Action>
</aspsms>
```

There is a second possibility to send operator logos using the BinaryFileDataHex feature:

```
<!--
XML Request
-----------
-->

<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>I3QHMYKEY6E</Userkey>
   <Password>mypassword</Password>
   <Originator>aspsms.com</Originator>
   <Recipient>
      <PhoneNumber>0041795555555</PhoneNumber>
   </Recipient>
   <MCC>228</MCC>
   <MNC>2</MNC>
<BinaryFileDataHex>424DE6000000000000003E0000002800000048000000E00000001000100000000000A8000000C40E0
000C40E0000000000000000000000000000000FFFFFF00FFFFFC24FF30FC8000000000FFFFF9B6FCFEFEC020000000FFFFF8D0F
9FF0E6431000000FF07F84BFBE3FF6419000000FC03C063F3DFFF761C000000F1F3050FF7DC1F7B0D000000C7F01FFFF7046
F1F8E000000CFC0FFFFE7106F47CE000000FE01FFFF833A6EF7E7000000F83CFFFFBB3AEEF3E7000000E0FCFFFF399B5C0BF
7000000E7F0FFFF00C739E3FB000000FFC1FFFF3F3FE7F3FB000000FE1FFFFF7FC01FFBFF000000</BinaryFileDataHex>
   <Action>SendLogo</Action>
</aspsms>
```

d) Random operator logo

We control a large number of operator logos. By using SendRandomLogo a random logo will be sent to the mobile phone.

```
<!--
XML Request
-----------
-->
<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>I3QHMYKEY6E</Userkey>
   <Password>mypassword</Password>
   <Originator>aspsms.com</Originator>
   <Recipient>
      <PhoneNumber>0041795555555</PhoneNumber>
   </Recipient>
   <MCC>228</MCC>
   <MNC>1</MNC>
   <Action>SendRandomLogo</Action>
</aspsms>
```

e) Group Logo

This example shows you how to send a group logo. The method how to get the picture data is equal to the method under III c).

```
<!--
XML Request
-----------
-->


<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>I3QHMYKEY6E</Userkey>
   <Password>mypassword</Password>
   <Originator>aspsms.com</Originator>
   <Recipient>
      <PhoneNumber>0041795555555</PhoneNumber>
   </Recipient>
   <URLBinaryFile>http://www.mysite.com/sms/handylogos/logo1.bmp</URLBinaryFile>
```

```
   <Action>SendGroupLogo</Action>
</aspsms>
```

f) Ring tone

A very interesting feature is the following one. It allows you to send ring tones to a mobile phone. The xmlSMS server will get the *.ott or *.txt file directly from the pre defined URL.

```
<!--
XML Request
-----------
-->

<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>I3QHMYKEY6E</Userkey>
   <Password>mypassword</Password>
   <Originator>aspsms.com</Originator>
   <Recipient>
      <PhoneNumber>0041795555555</PhoneNumber>
   </Recipient>
   <URLBinaryFile>http://www.mysite.com/sms/handylogos/tone1.ott</URLBinaryFile>
   <Action>SendRingtone</Action>
</aspsms>
```

g) Inquire delivery notification

Under III b) we have set a transaction reference number. After having sent this sms we want to verify the delivery status.

```
<!--
XML Request
-----------
-->

<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>I3QHMYKEY6E</Userkey>
   <Password>mypassword</Password>
   <TransRefNumber>1234</TransRefNumber>
   <TransRefNumber>1235</TransRefNumber>
   <Action>InquireDeliveryNotifications</Action>
</aspsms>
```

h) Show Credits

This example allows you to verify your current balance.

```
<!--
XML Request
-----------
-->

<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>I3QHMYKEY6E</Userkey>
   <Password>mypassword</Password>
   <Action>ShowCredits</Action>
</aspsms>
```

i) VCard

A vcard is a kind of a phone book record for mobile phones. The following example shows you how to send a vcard to mobile phone.

```
<!--
XML Request
-----------
-->

<?xml version="1.0" encoding="ISO-8859-1"?>
<aspsms>
   <Userkey>I3QHMYKEY6E</Userkey>
```

```
   <Password>mypassword</Password>
   <Originator>aspsms.com</Originator>
   <Recipient>
      <PhoneNumber>0041795555555</PhoneNumber>
   </Recipient>
   <VCard>
      <VName>Tarzan</VName>
      <VPhoneNumber>0041796666666</VPhoneNumber>
   </VCard>
   <Action>SendVCard</Action>
</aspsms>
```

IV. Appendix

a) Values of delivery status

Value	Reason
-1	Not yet submitted or rejected
0	Delivered

1	Buffered
2	Not Delivered

b) Possible values of reason code

0	Unknown subscriber
1	Service temporary not available
2	Service temporary not available

112	Unknown SC
113	SC congestion
114	Illegal MS

3	Service temporary not available	115	MS not a subscriber
4	Service temporary not available	116	Error in MS
5	Service temporary not available	117	SMS lower layer not provisioned
6	Service temporary not available	118	System fail
7	Service temporary not available	119	PLMN system failure
8	Service temporary not available	120	HLR system failure
9	Illegal error code	121	VLR system failure
10	Network time-out	122	Previous VLR system failure
30	Originator not Authorized	123	Controlling MSC system failure
31	Originator already Authorized	124	VMSC system failure
100	Facility not supported	125	EIR system failure
101	Unknown subscriber	126	System failure
102	Facility not provided	127	Unexpected data value
103	Call barred	200	Error in address service centre
104	Operation barred	201	Invalid absolute Validity Period
105	SC congestion	202	Short message exceeds maximum
106	Facility not supported	203	Unable to Unpack GSM message
107	Absent subscriber	204	Unable to convert to IA5 ALPHABET
108	Delivery fail	205	Invalid validity period format
109	SC congestion	206	Invalid destination address
110	Protocol error	207	Duplicate message submit
111	MS not equipped	208	Invalid message type indicator

c) Most occurring reason code

Reason Code	**Reason**	**Possible explanation**
0	Unknown Subscriber	Not existing recipient number used

103	Call Barred	Blocked mobilephone, occurs in cases of stolen phones or unpaid bills
107	Absent Subscriber	Mobilephone switched off or out of memory
108	Delivery Fail	External partner has definitely given up to deliver message after a maximum period of 72 hours
110	Protocol Error	Mobilephone damaged or not capable to receive message, e.g. if a logo has been sent
111	MS not equipped	Mobilephone damaged or not capable to receive message, e.g. if a logo has been sent
118	System fail	Indicates serious problems within mobilephone and/or network of the recipient
119	PLMN Failure	Public Land Mobile Network Failure - Indicates serious problems within network of the recipient
120	HLR system Failure	Home Location Register Failure - Indicates serious problems within network of the recipient, also possible that terminating network has blocked our external partners
121	VLR system Failure	Visiting Location Register Failure - Indicates problems within network of the recipient, occurs often if recipient is moving very fast, e.g. in a driving car