



Technical Specification Premium SMS gateway

Subscription services

(TS.002)

Author:

Erwin van den Boom

Version history

v1.0	EvdB	13 September 2007
V2.0	KBM	10 March 2008
V2.1	MKh	14 March 2008
V2.2	MKh	14 April 2008
V2.3	DMI	10 June 2009
V2.4	MKh	21 August 2009

1. Terminology

Mobile Originated (MO)

A message sent from a mobile device to a premium shortcode by the end-user (your customer).

Mobile Terminated (MT)

A message sent to a mobile device.

Shortcode

The number the end-user uses to send MO messages to, for example: 3010.

Keyword

The first word, or first two words of a Mobile Originated message. The keyword will be used to identify the SMS service. When a keyword consists of multiple words, the first word will be referred to as 'main keyword', the second keyword as 'subkeyword'.

Example: Text TEST to 3010 (keyword is TEST)

Subscription service

A premium SMS service, an end-user needs to sign up for. The messages sent after subscribing are not invoked by an MO message, but are sent on a regular basis (example: Horoscope, Traffic News) or as a result of another event (example: Server monitor alert)

Service messages

Messages sent during the sign-up, sign-off or confirmation (Netherlands only) phase. These messages are the response when an end-user sends OK, OFF or ON to the shortcode. Note that there is a maximum of 25 cents on service messages, and only one service message per MO can be sent.

Member messages

Messages sent to active members, these messages are not invoked by a Premium MO message.

MO handler

Script on your server that is called when an MO message is received, and that needs to handle the message. After handling it should call the premium SMS gateway with details about the MT messages to send back to the end-user. The MO handler of a subscription service also handles the signup and signoff process.

2. Preface

This document describes how to set up a subscription based premium SMS service. Chronologically, the handling of a subscription based premium SMS service works as follows:

Sign up process

- The customer sends KEYWORD ON message to the shortcode to sign up.
- An URL on your server will be called by our system. How this is done is described in section 4.
- Your server processes the incoming message, and responds to the gateway with the reply text and the end-user rate.
- In The Netherlands a double opt-in procedure is mandatory. This means that the end-user will receive a confirmation request when he sends KEYWORD ON to the shortcode, and he needs to reply with KEYWORD OK before the subscription is active.
- In Belgium a double opt-in procedure is mandatory. This means that the end-user will receive a confirmation request when he sends KEYWORD to the shortcode and he needs to reply with OK before the subscription is active.

During membership

- You can send the same message to all your members at once, by creating a job on TargetSMS.nl. You can also create a job using our API, see section 5.1 for more details.
- You can send individual text messages to all your members, or some of the members using the API (see section 5.2)

Sign off process

- The customer sends a KEYWORD OFF or STOP message to the shortcode to unsubscribe.
- An URL on your server will be called by TargetSMS. See section 4.
- Your server processes the incoming message, and responds to the gateway with the reply text and the end-user rate.

A more detailed explanation of these steps will follow in the next sections. There is also a PHP example available, see the last section for more information.

3. Requirements

In order to set up a subscription premium SMS service:

- a) You will need to have a website and knowledge of scripting languages (ASP, PHP)
- b) You need an account on www.targetsms.nl. If you don't have an account yet, please create one on <http://www.targetsms.nl/signup>
- c) You need to register a keyword and enter some details of your service on <http://www.targetsms.nl/advanced/abo> (menu: Gateway -> Premium SMS -> Subscription).
- d) A database connection is recommended for administering your members.

4. Handling the sign up, confirmation and sign off

4.1 Receiving the MO message

When you set up the keyword, an URL for handling sign-up, sign-off and confirmation messages was also entered.

When end users want to subscribe to or cancel your subscription service, they send a KEYWORD ON, (KEYWORD) OK or KEYWORD OFF respectively to the shortcode.

When such a message is received by the premium SMS gateway for your keyword (or shortcode, when you have an unique shortcode) we will call your MO handler by using HTTP GET with all details of the MO message.

Variable	Description	Format	Example
MO_MessageId	Unique message ID	Numerical	534048699
ShortCode	Shortcode	Numerical	3010
MO_ShortKey	Keyword	Alphanumerical	WEB
Message	Complete message	Alphanumerical	Web test
SendTo	End-user phonenumber	Numerical	31612345678
operator	Operator ID	Alphanumerical	02F480
onoff	Status	'on', 'ok', 'off', 'rejoin'	On

Explanation:

- MO_MessageId: the ID of the incoming SMS message. You need to pass this value when responding in order for the SMS gateway to know to which message it replies. MO_MessageId may be empty, see the notes below!
- ShortCode: the shortcode the message was sent to.
- MO_ShortKey: the keyword of the service.
- Message: the entire message text. Do not rely on this value to determine the keyword. Use MO_ShortKey instead (see Notes).
- SendTo: end-users phone number in international format.
- operator: ID of the mobile operator. See <http://www.targetsms.nl/operators> for a list.
- onoff: is set to 'on' when the end-user sends 'KEYWORD' or 'KEYWORD ON' and is set to 'ok' when the end-user sends 'OK' or 'KEYWORD OK' and is set to off when the end-user sends 'KEYWORD OFF' or STOP and is set to rejoin when a member joins the same subscription again. In this case you should deactivate the old membership. In all other cases onoff will be empty when we receive an MO message for your keyword.

Example:

```
http://www.mysite.nl/smsandler.php?SendTo=31612345678&Message=WEB+SMS+TEST&ShortCode=3010&MO_MessageId=534048699&operator=02F480&MO_ShortKey=WEB+SMS&onoff=on
```

Expected response:

The premium SMS gateway expects your script to respond with: 45000

If you send any other data, the SMS gateway will retry until it receives a 45000 response. Please do only respond with a value other than 45000 when it makes sense to do a retry later (for example, when your database server is unavailable at that moment).

Notes:

- Next to sending KEYWORD OFF, a customer can also cancel an active subscription by:
 - o Visiting one of our Customer Care websites, e.g. www.3010sms.nl
 - o Calling our helpdesk: a Customer Care employee will manually deactivate the subscription on request.

Note that in either of these cases your MO handler will also be called. This is done so your application can process the deactivation of the member. In that case the MO_MessageId parameter will be empty.

- In some scripting languages, like PHP, variables are case-sensitive. Please take notice of the exact spelling of the variable-names. E.g. use `$_GET["MO_MessageId"]`, `$_GET["MO_ShortKey"]`, etc.
- You can secure your MO handler by checking if the requests are coming from 78.152.58.66 (In PHP, see: `$_SERVER["REMOTE_ADDR"]`)
- Make sure no other output than 45000 is given as a response, for example PHP error messages. Consider turning off 'DisplayErrors' in your configuration file (php.ini), which is recommended in general.
- In general: do not rely on the message text to determine what keyword was used, but use MO_ShortKey. Example: in some countries sending STOP will stop all subscriptions to that shortcode. We will call the MO handlers for all active subscription services, however the message text will probably be 'STOP', but we will search the right keyword and put it in MO_ShortKey.
- If you receive onoff=off from our server you can answer this user with a message stating that there are still credits left on his account and he can rejoin. E.g. "This service is now stopped, but you still have 4 ringtones left on your subscription, don't throw them away and SMS REJOIN to xxx and re-activate your account". As soon as we receive this rejoin txt we will call your server with the parameter onoff=rejoin. This person is then re-activated as a member in our system and in your system you should do the same. This rejoin request is valid for 3 days.

4.2 Reply with MT messages

Now your script has received the details and did the necessary handling (updating your database), it now needs to reply with a MT message.

The following URL has to be called with HTTP POST:

http://api.targetsms.nl/ps_handler/sendmessagev2.asp

The following variables apply:

Variable	Description	Format	Mandatory	Example
username	TargetSMS username	Alphanumeric	Yes	myaccount
handle	Access code	Alphanumeric	Yes	1234567f6697a2aad8fe7d
shortkey	Keyword	Alphanumeric	Yes	TEST
shortcode	SMS shortcode	Numeric	Yes	3010
sendto	Recipient's phonenumber	Numeric	Yes	31612345678
mo_messageid	Message ID of the incoming message	Numeric	Yes	56456345
message	Message text to be send back	Alphanumeric	Yes	You are now subscribed..
tariff	Amount to be billed	Numeric	Yes	25
ReturnID	Format of the response	Always 'yes'	Yes	yes

Explanation:

- username: The username of your TargetSMS account
- handle: Hash ID that belongs to your TargetSMS account. This is not your TargetSMS login password. You can find it on www.targetsms.nl/handle (after log in)
- tariff: The amount that will be charged to the end-user for receiving the message. The tariff is cents, local currency. The rate must be equal to or lower than the rate you set when registering the keyword.
 - o Note 1: In some countries (like Belgium) the end-user rate depends on the shortcode used. The value for 'tariff' will be ignored unless it is 0. In Belgium the reply to a subscription activation or to an OK can be no more than 0 eurocents.
 - o Note 2: In the Netherlands the end-user rate when replying an ON, OFF or OK request can be no more than 25 eurocents.
- message: the message text to reply. Your text may be no longer than 160 characters. You can use the following characters: a-z, A-Z, 0-9, +%#()*+,- /;<=>?_£¥§ÄÅÛäëéíñòöü=
- returnid: add this parameter with value 'yes' when you want to receive the MT message ID in the response. You may use this ID in receiving your billing status.

The following parameters can simply be passed on:

- shortcut: The keyword of your service (see: MO_ShortKey)
- shortcode: The shortcode your service runs on (see: ShortCode)
- sendto: The end-users phone number (see: SendTo)
- mo_messageid: The ID of the MO message (see: MO_MessageId)

Example:

```
http://api.targetsms.nl/ps_handler/sendmessagev2.asp?username=test&handle=1234567f6697a28fe7d92c586178cdba&shortcut=TEST&shortcode=3010&sendto=31612345678&mo_messageid=32479824397&message=Dit+is+een+test&tariff=025&returnid=no
```

Notes:

- In the **Netherlands** a double-opt in procedure is mandatory for subscription services. This means that you must reply to a 'KEYWORD ON' request with a text that explains how to confirm the subscription. The end-user must reply to that message with either OK or KEYWORD OK.

This message asking users to confirm needs to contain the following information:

- o Name of Service (usually your keyword)
- o End-user rate
 - total costs per content item/per week or per month
- o Shortcode (in header or in the text)
- o Frequency
 - the maximum number of messages or content items per day/per week or per month.
- o The words "subscription service" or in Dutch "abonnementsdienst"
- o the procedure for cancelling the subscription service
- o reference to customer care information like helpdesk services, a website, a telephone number, teletext or another source with relevant background information.

No white line characters (returns) can be used in these messages.

Only the approved abbreviations are allowed in these messages (see: section 9).

- When we receive the OK message, your MO handler will be called again and the onoff-parameter will be 'ok'.

- You can send only one message in response to an **ON**, **OK** or **OFF** message. These reply messages cannot cost more than 25 eurocents in The Netherlands.
- From March 15 2008 a double opt-in procedure is mandatory for subscription services in **Belgium**. This means that you must reply to a 'KEYWORD' request with a text that explains how to confirm the subscription. The end-user must reply to that message with **OK**.

This message must contain the following information:

*Om u te abonneren op dienst **SSSS** aan **XX** EURO / **PPP**, stuur **OK** naar **NNNN**. (de kost van dit bericht is **RR** euro).*

Where:

- o **SSSS** = keyword
- o **XX** = price per subscription period
- o **PPP** = subscription period, this must be one **day** or **month**
- o **NNNN** = shortcode
- o **RR** = MO End-user rate

- When we receive the **OK** message, your MO handler will be called again and the onoff-parameter will be 'ok'. Your reply to this message must contain the following information:

*U bent nu aangemeld voor **SSSS**. De kosten zijn **XX** EURO/**PPP**. Stoppen stuur stop naar **NNNN**. Voor vragen: **HHHH***

Where:

- o **SSSS** = keyword
- o **XX** = price per subscription period
- o **PPP** = subscription period, this must be one **day** or **month**
- o **NNNN** = shortcode
- o **RR** = MO End-user rate
- o **HHHH** = your Belgium end-user support number. If you do not have an end-user support number you can use our TargetMedia Belgium support number: 078-160016 (local costs apply)

- You can send only one message in response to a subscription start, confirmation or a cancellation message in Belgium. These messages must be free to the consumer.

Response:

When the message has been sent, the response will be:

45000 MT message ID

(for example. 45000 785340486)

Store the ID of the MT message when you want to be able to determine if the message was delivered and paid. See also the next section.

Errors:

If not OK, one of the following error-codes will be returned:

45001	Incorrect phonenumber
45002	Incorrect message
45003	Incorrect shortcode
45004	Incorrect mo_messageid
45005	MO record not found for this mo_messageid or maximum number of messages exceeded
45006	Invalid value for the 'tariff' field.
45007	Username doesn't match keyword owner
45013	End-user rate was higher than the registered price
45019	Unknown member
45020	Maximum number of messages exceeded
45022	Incorrect URL
45023	WAP description too long
45024	URL too long
45025	End-user rate must be zero (000) when sending a WAP Push message in this country
45030	No handle specified
45031	Incorrect handle
45091	Blocked by infofilter
45092	Blocked by infofilter

5. During membership

During membership you can:

1. Send all members the same message using the website (jobs);
2. Send all members the same message by using our API (jobs);
3. Send messages to individual members by using our API.

The first option is the easiest way to reach all your members at one time. You can create a job on <http://www.targetsms.nl/manage>. Click on the -button after the right subscription service. You can now enter the text to send, and select date and time of sending. The API for sending Premium SMS to members will be outlined below.

5.1 Sending the same text message: jobs

Scheduling jobs can also be done using our API, you need to call the following URL with HTTP POST:

http://api.targetsms.nl/ps_handler/tools/newvalidatejobs.asp

Send the following variables:

Variable	Name	Format	Mandatory	Example
username	Username	Alphanumeric	Yes	test
Handle	Access code	Alphanumeric	Yes	1234567f6697a28fe7d92c586178cdba
shortcode	Keyword	Alphanumeric	Yes	test
shortcode	SMS shortcode	Numerical	Yes	3010
country	Country code	Numerical	Yes	31
year	Year of sending	Numerical	Yes	2007
month	Month of sending	Numerical	Yes	9
day	Day of sending	Numerical	Yes	14
hour	Hour of sending	Numerical	Yes	12
min	Minute of sending	Numerical	Yes	59
message	Message text	Alphanumeric	Yes	Example message text

Explanation:

- username: The username of your TargetSMS account
- handle: Hash ID that belongs to your TargetSMS account. This is not your TargetSMS login password. You can find it on www.targetsms.nl/handle (after log in);
- shortkey: The keyword of your service (only the keyword, without ON at the end);
- shortcode: The shortcode your service runs on;
- country: Country code (31=Netherlands, 32=Belgium, etc.)
- year, month, day, hour, min: Date and time when the message will be sent. When the date and time are in the past, the job will be sent immediately.
- message: the message text to send. Your text may be no longer than 160 characters. You can use the following characters: a-z, A-Z, 0-9, +%#()*+,- /; <=>?_£¥§ÅÄÛäèéíñòöü=

Example:

```
http://api.targetsms.nl/ps_handler/tools/newvalidatejobs.asp?username=test&handle=1234567f6697a28fe7d92c586178cdba&shortkey=TEST&shortcode=3010&country=31&year=2007&month=5&day=1&hour=12&min=0&message=Dit+is+een+test
```

Response:

When the job was created successfully, the response will be:

```
000 OK
```

If not, one of these error messages will be sent:

```
002 jobid missing
003 shortcode missing
004 shortkey missing
005 message missing
006 message too long
007 jobid missing
020 invalid combination of shortcode ,shortkey, username
021 username missing
023 handle missing
024 invalid handle
030 maximum number of jobs reached for today
050 no records found
```

5.2 Sending member SMS to individual members

Sending messages to individual members can only be done using our API. You need to call the following URL for each message and for each member:

http://api.targetsms.nl/ps_handler/sendmessagev2.asp

The following variables apply:

Variable	Description	Format	Mandatory	Example
username	TargetSMS username	Alphanumeric	Yes	myaccount
handle	Access code	Alphanumeric	Yes	1234567f6697a2aad8fe7d
shortkey	Keyword	Alphanumeric	Yes	TEST
shortcode	SMS shortcode	Numeric	Yes	3010
sendto	Recipient's phonenumber	Numeric	Yes	31612345678
message	Message text to be send back	Alphanumeric	Yes	Example message text
tariff	Amount to be billed	Numeric	Yes	150
push	WAP push message	'0', '1'	No	1
purl	WAP push URL	Alphanumeric	No	http://www.test.com
mtype	Indicates member message	Always '2'	Yes	2
returnid	Format of the response	Always 'yes'	No	yes

Explanation:

- username: The username of your TargetSMS account
- handle: Hash ID that belongs to your TargetSMS account. This is not your TargetSMS login password. You can find it on www.targetsms.nl/handle (after log in)
- shortkey: The keyword of your service;
- shortcode: The shortcode your service runs on;
- sendto: The end-users phone number in international format (31612345678)
- mo_messageid: The ID of the MO message (see: MO_MessageId)
- tariff: The amount that will be charged to the end-user for receiving the message. The tariff is cents, local currency. The price must be equal to or lower than the price you set when registering the keyword.
 - o Note 1: In some countries (like Belgium) the tariff is fixed per shortcode, the value for 'tariff' will be ignored.
 - o Note 2: Service- or error messages in the Netherlands may not be charged for more than 25 eurocents.
- push: A WAP push is a bookmark for a mobile phone. Enter 1 for this parameter when a WAP push SMS message has to be sent. For a normal SMS you may either omit this variable or set it to '0'.
- purl: set the URL of the WAP push message here (only applicable when push=1)
- message: the message text to reply. Your text may be no longer than 160 characters. In case of a WAP push, the maximum length is 25 characters. You can use the following characters: a-z, A-Z, 0-9, +%#()*+,- /;<=>?_£¥\$ÅÄÛäèèïñðöüü=

Example:

http://api.targetsms.nl/ps_handler/sendmessagev2.asp?username=test&handle=1234567f6697a2aad8fe7d92c586178cdba&shortkey=TEST&shortcode=3010&mtype=2&message=Dit+is+en+test&tariff=150&returnid=yes

Response:

When the message has been sent, the response will be:

45000 <Message ID>

(for example: 45000 785340486)

Store the ID of the MT message when you want to be able to determine if the message was delivered and paid. See also the next section.

Errors:

If not OK, one of the following error-codes will be returned:

45001	Incorrect phone number
45002	Incorrect message
45003	Incorrect shortcode
45004	Incorrect mo_messageid
45005	MO record not found for this mo_messageid or maximum number of messages exceeded
45006	Invalid End-user rate (tariff)
45007	Username doesn't match keyword owner
45013	Tariff was higher than the registered price
45020	Maximum number of messages exceeded
45022	Incorrect URL
45023	WAP description too long
45024	URL too long
45030	No handle specified
45031	Incorrect handle
45091	Blocked by infofilter
45092	Blocked by infofilter

6. Getting delivery/billing status

When an OK response has been given when sending the member messages, this does not necessarily mean that the message was delivered (thus: paid).

When SMS delivery status has been set up during the process of registering your keyword, the URL you specified will be called by HTTP GET when a Premium SMS message couldn't be delivered.

Note:

Your URL will only be called in case of failure. When you did not receive a status update after **96 hours**, your application can assume that the message was delivered.

To use this service the parameter `returnid=yes` has to be sent with `sendmessagev2` to retrieve the value of the id variable.

The following variables will be sent:

Variable	Description	Format
id	MT Message ID	Alphanumeric
reason	Error code	Numeric
shortcode	Shortcode	Numeric

Explanation:

- id: MT message ID, this value was returned by the MT interface in the previous section.
- reason: Status of the message, see for a list: <http://www.targetsms.nl/statuscodes>
- shortcode: Shortcode corresponding to the service.

Example:

```
http://www.mysite.nl/statushandler.php?id=785340486&reason=0&shortcode=3010
```

Expected response:

The premium SMS gateway expects your script to respond with: 45000

If you send any other data, the SMS gateway will retry until it receives a 45000 response. Please do only respond with a value other than 45000 when it makes sense to do a retry later (for example, when your database server is unavailable at that moment).

Notes:

- In some scripting languages, like PHP, variables are case-sensitive. Please take notice of the exact spelling of the variable-names.
- You can secure your MO handler by checking if the requests are coming from **89.184.168.65** or from **78.152.58.66** (In PHP, see: `$_SERVER["REMOTE_ADDR"]`)
- Make sure no other output than 45000 is given as a response, for example PHP error messages. Consider turning off 'DisplayErrors' in your configuration file (php.ini), which is recommended in general.

7. Unsubscribing members

For your helpdesk we created an API for unsubscribing your members

http://api.targetsms.nl/ps_handler/unsubscribe.asp

The following variables apply:

Variable	Description	Format	Mandatory	Example
username	TargetSMS username	Alphanumeric	Yes	myaccount
handle	Access code	Alphanumeric	Yes	1234567f6697a2aad8fe7d
shortcode	Keyword	Alphanumeric	Yes	TEST
shortcode	SMS shortcode	Numeric	Yes	3010
phonenummer	Recipient's phonenummer	Numeric	Yes	31612345678

http://api.targetsms.nl/ps_handler/unsubscribe.asp?username=test&handle=1234567f6697a28fe7d92c586178cdba&shortcode=3010&phonenummer=31642266565

Response:

If OK the script will return

45000

If not OK, one of the following error-codes will be returned:

45001	Incorrect phone number
45003	Incorrect shortcode
45007	Username doesn't match keyword owner
45030	No handle specified
45031	Incorrect handle
45032	Member not found
45033	Member already unsubscribed

8. Example code

For your convenience, there is a PHP example available. The package can be downloaded from:

`http://www.targetsms.nl/examples/targetsms.zip`

For subscription services, the following scripts from the package are relevant:

- `class.httprequest.php`: Defines a class to call URL's without using fopen wrappers or cURL. Installing of non-standard PHP modules is therefore not needed.
- `class.targetsms.php`: This class contains several useful functions for interfacing with the TargetSMS gateway.
- `subscription.php`: An example handler for sign-up/sign-offs
- `jobs.php`: An example script for creating jobs using the API
- `single-job.php`: An example script for sending individual messages to members using the API.
- `config.php`: Describes the variables you probably want to change to your own preferences without changing the code, e.g. SMS texts.

9. Troubleshooting

This section describes some common problems and solutions as well as contact information for our tech support.

9.1 Common problems

Unexpected errors occur when the given URLs are called, for example: 400 HTTP Bad request

Check if the data that was sent was URL encoded. If you are experiencing problems with URL encoding, please try the class in `class.httprequest.php` to make the calls. In that class all parameters are encoded automatically.

There is an empty response from the URL or PHP errors are shown like 'Failed to open stream...'

Make sure that fopen-wrappers are enabled when calling the URLs with the `file()` or `fopen()` function in PHP, you check this using `phpinfo()`.

If fopen-wrappers are not enabled, you can also call the URLs using the cURL library or use the class in `class.httprequest.php` from our package with examples (the latter doesn't depend on any optional modules). If you want to use cURL, make sure that the library is enabled.

An error code of 45000 is returned

Make sure that you don't exceed the maximum number of messages per day/week/month that you set when registering the keyword. Also, make sure that no messages that cost more than 25 eurocents as a response on an ON, OK or OFF request. Additionally, this error may also occur when handling signoff's (see next).

There are problems with handling the sign-offs

Sign-offs are not necessarily invoked by an incoming MO message. In addition, our support staff can cancel pending subscriptions manually, for example as a result of a complaint from the End User. In those cases we will also call the MO handler that handles the sign-on and sign-offs as if an message was received. The value for MO message ID will - of course - be empty in those cases, if you try to send an MT back, it will generate an error. Refer to the example code to learn about the best way to handle sign-offs.

The variables like `$_GET["mo_messageid"]` are empty!

Make sure that you fetch the variables from the right array, so use `$_GET` instead of `$_POST` when your handler is called using a HTTP GET. Also, take into account that variable names are case-sensitive in PHP.

When sending an MT message in Belgium the End user rate shown in the reports isn't correct.

In Belgium the end-user rate is fixed for each shortcode. When you send an MT message, the 'tariff' parameter will therefore be ignored. In the sales reports you'll find the tariff and payout that belongs to the shortcode.

The SMS gateway keeps calling the MO handler.

When your MO handler returns any other value than 45000, our gateway will retry several times. Make sure that you have enabled error logging and disabled the output of errors to the client when using PHP, as they might output some unexpected information to the client.

9.2 Getting help

If you experience difficulties while implementing our Premium SMS interface, and the 'common problems' section was of no help, you can contact our tech support at:

techsupport@targetmedia.nl (Dutch and English support are available)

Please send us as much specifics as possible, including:

- Your TargetSMS username (do not send your password or handle!);
- Your shortcode, keyword;
- Phone number;
- (Approximate) date and time;
- Any error messages you get.

We recommend the use of the Example classes, as logging is build in there. You only need to set the default value for `$notify` in `class.targetsms.php` to your e-mail address and you will receive an e-mail with all details about the incoming MO and outgoing MT requests when an error occurs.

Our engineers will answer your mails within 24 hours (on business days, CET)

10. Abbreviations (for the Netherlands)

Words that cannot be abbreviated:

Abonnementdienst
Abonnement
Stop / Stoppen
Afmelden
Kost / Kosten
Dag
Download
Downloadkosten
Kosten
SMS
Per verzonden bericht
Per ontvangen bericht
Wallpaper
Ringtone
Realtone
Sound
Item
Product
Info
Help

Approved abbreviations:

Per bericht = /bericht.
Per content item = /item
Per chat = /chat
Maximaal = max
Minimaal = min
Per week = /wk
Per maand = /mnd
Euro = E of € (bijvoorbeeld €0,70 of 0,70 E/bericht)
Cent = c (bijvoorbeeld 150c/item)
Inclusief = Incl.
Keer = x (bijvoorbeeld 3x een funsound)
Bijvoorbeeld = bijv.

Examples of UNAPPROVED abbreviations. These CAN NOT be used:

/o.b. (per ontvangen bericht)
/b. (per bericht)
p.w. (per week)
pob en p.o.b.
pvb en p.v.b.
pb en p.b.
pw