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Titel Service Description SEND SMS REST-API			

1 INTRODUCTION

This document describes the Ballou REST-API for sending SMS. The URL for the API is <https://smsapi.ballou.se/>.

2 AUTHORIZATION

Basic authorization is used for access control, user name and password is provided by Ballou. All requests to the API shall contain a Base64-encoded authorization-header as shown below

Authorization: Basic username: password

3 SEND SMS

SMS is sent by using the /Message resource and POST with the following variables.

<https://smsapi.ballou.se/SmsGateway/api/v1/Message/>

Variable	Input	Mandatory/Optional
From	Phone number or an alphanumeric string	Mandatory
To	Array of receiver phone numbers	Mandatory
Text	The actual message	Mandatory
DeliveryReportUrl	Url for receiving delivery reports	Optional
ValidityPeriodMinutes	The validity period of the message	Optional
TextParameters	Array of arrays with strings to insert into Text	Optional
BatchJobName	A name tag for sent message	Optional
SendAt	Date and time when the message is to be sent	Optional
Flash	True or False	Optional

Phone number is given in international format starting with a + and followed by country code.

When an alphanumeric string is used in the From-variable it must be 3-11 characters and contain only a-z, A-Z and 0-9.

The variable To array must not contain more than 1000 phone numbers except when SendAtvariable is used, then 100 000 numbers are allowed.

The variable DeliveryReportUrl is used to specify an http(s) address where the delivery reports for sent SMS is to be received. When the variable isn't present no delivery reports are delivered.

The variable ValidityPeriodMinutes is set in minutes and specifies the period the SMS is valid counting from the time the POST request was sent. If the variable for example is set to 10 minutes and the POST request is sent at 11.00 AM the SMS will not be delivered to the receiver phone number after 11.10 AM. When the variable isn't present a default validity period of 72 hours is used.

BatchJobName is a generic name messages are tagged with. The name tag can later be used to filter the SMS Webb message log. BatchJobName can be up to 50 characters long.

To request that messages are scheduled for later delivery theSendAt variable is used. SendAt consists of a date and time in the format "yyyy-mm-dd hh:mm" and not more than 3 months from present. If SendAt is used the response contains a BatchId that can be used to cancel the delivery.

3.1 Send SMS examples

Example 1: Send a single message;

```
POST /SmsGateway/api/v1/Message HTTP/1.1
Host: smsapi.ballou.se
Authorization: Basic dXNlcjpwYXNzd29yZA==
Accept: application/json
Content-Type: application/json

{
  "From": "Ballou",
  "To": ["+467XXXXXXXX"],
  "Text": "Hi! This is a test message",
}
```

The response is an http status code 201 combined with an array of unique Message ID. The guid in the Location parameter is the same as for the first message in the array of MessageId.

```
HTTP/1.1 201 Created
Content-Type: application/json; charset=utf-8
Location: https://smsapi.ballou.se/SmsGateway/api/v1/Message/60e5243f-9254-4fd6aee8-3277912b98eb
Content-Length: 54

{
  "MessageId": ["60e5243f-9254-4fd6-aee8-3277912b98eb"]
}
```

Example 2: Send a message to two receivers, with validity period and delivery report URL set;

```
POST /SmsGateway/api/v1/Message HTTP/1.1
Host: smsapi.ballou.se
Authorization: Basic dXNlcjpwYXNzd29yZA==
Accept: application/json
Content-Type: application/json

{
  "From": "Ballou",
  "To": ["+467XXXXXXXX", "+467ZZZZZZZ"],
```

```

    "Text": "Hi! This is a test message",
    "DeliveryReportUrl": "http://customer.se/drcallback/dr.php",
    "ValidityPeriodMinutes": "10"
  }

```

The response is an http status code 201 combined with an array of unique Message ID. The guid in the Location parameter is the same as for the first message in the array of MessageId.

```

HTTP/1.1 201 Created
Content-Type: application/json; charset=utf-8
Location: https://smsapi.ballou.se/SmsGateway/api/v1/Message/60e5243f-9254-4fd6aee8-3277912b98eb
Content-Length: 93
{
  "MessageId": ["60e5243f-9254-4fd6-aee8-3277912b98eb", "cf1e52fd-64d9-4dfb-aebb579b70cb813d"]
}

```

Example 3: Send multiple scheduled messages (batch) with the SendAt parameter set;

```

POST /SmsGateway/api/v1/Message HTTP/1.1
Host: smsapi.ballou.se
Authorization: Basic dXNlcjpwYXNzd29yZA==
Accept: application/json
Content-Type: application/json

{
  "From": "Ballou",
  "To": ["+467XXXXXXXX", "+467YYYYYYYY"],
  "Text": "Hi {1}! This is a test message",
  "TextParameters": [{"Alice"}, {"Bob"}],
  "DeliveryReportUrl": "http://customer.se/drcallback/dr.php",
  "ValidityPeriodMinutes": "10",
  "BatchJobName": "Test one",
  "SendAt": "2015-12-01 14:05"
}

```

The response is an http status code 201 combined with a BatchId and an array of unique Message ID. The guid in the Location parameter is the same as the BatchId.

```

HTTP/1.1 201 Created
Content-Type: application/json; charset=utf-8
Location: https://smsapi.ballou.se/SmsGateway/api/v1/Message/eed9e625-a1a6-4536b649-24260a34d826
Content-Length: 142

{
  "BatchId": "eed9e625-a1a6-4536-b649-24260a34d826",
  "MessageId": ["60e5243f-9254-4fd6-aee8-3277912b98eb", "cf1e52fd-64d9-4dfb-aebb579b70cb813d"]
}

```

}

3.2 Message text

Text given in the Text-variable is encoded using UTF-8.

When characters according to GSM 03.38 are used the maximum size of a single SMS is 160 characters. If a longer text than 160 characters is given in the /Message POST request, the service creates several SMS where every SMS is a maximum of 153 characters. When characters not represented in the GSM 03.38 are used the text will be encoded using UTF-16 and the maximum size of one SMS is 70 characters. If a longer text than 70 characters is given in the /Message POST request, the service creates several SMS where every SMS is maximum of 67 characters.

When a text is automatically divided into several SMS by the service they are received, and shown, as one long SMS in the receiver mobile phone.

The text can be adjusted for each receiver phone number. This is done using {1} and {2} etc. in the text and supplying replacement strings in the variable TextParameters. TextParameters is an array of the same length as "To" and each element in the array is an array of replacement strings.

4 DELIVERY REPORTS

Delivery reports are used to find out whether an SMS is delivered to the receiver phone number or not. New delivery reports are either pushed with a POST request from the service or downloaded with a GET request (poll). When POST request is used the Url for the service to use must be specified in the variable DeliveryReportUrl when sending messages. The Message ID is used to match delivery reports with sent SMS.

4.1 Delivery report with push

The service makes a POST request to a specified URL when there are new delivery reports to deliver. When the specified URL isn't available at the time for the first request, repetitive delivery attempts are made by the service.

The POST request contains the following parameters.

Variable	Meaning
MessageID	The Id of the requested message
StatusTime	Time and date for the status
Status	Sending -> Sent -> Delivered / Failed

Example:

```
POST /SmsGateway/api/v1/Message HTTP/1.1
Host: smsapi.ballou.se
Accept: application/json
Content-Type: application/json

{
  "MessageId": "fb0c913a-c9e9-42f9-92ef-c00b09290099",
  "StatusTime": "2016-08-26T09:22:07+02:00",
  "Status": "Delivered"
```

}

After you have received delivery reports from the service, your webserver should send http response 200 OK. This tells us that you have received the delivery reports and we can flag the transaction complete.

4.2 Delivery report with poll

With poll delivery reports are downloaded regularly. Poll is done by using the /Message resource and GET with the Message ID given in the URL.

<https://smsapi.ballou.se/SmsGateway/api/v1/Message/MessageId>

The response to the GET request contains the following parameters.

Variable	Meaning
MessageID	The Id of the requested message
StatusTime	Time and date for the status
Status	Sending -> Sent -> Delivered / Failed

Example: Get delivery report for the Message ID fb0c913a-c9e9-42f9-92ef-c00b09290099

```
GET /SmsGateway/api/v1/Message/fb0c913a-c9e9-42f9-92ef-c00b09290099 HTTP/1.1 Host:
smsapi.ballou.se
Authorization: Basic dXNlcjpwYXNzd29yZA==
Accept: application/json
```

The response is an http 200 combined with the delivery report status for the given Message ID.

```
HTTP/1.1 200 Created
Content-Type: application/json; charset=utf-8
```

```
{
  "MessageId": "fb0c913a-c9e9-42f9-92ef-c00b09290099",
  "StatusTime": "2016-08-26T09:22:07+02:00",
  "Status": "Delivered"
}
```

5 CANCEL SCHEDULED DELIVERY

Messages scheduled for later delivery with the SendAt parameter can be canceled by using DELETE and the /Message resource followed by BatchId.

Example: Delete BatchId eed9e625-a1a6-4536-b649-24260a34d826

```
{
  DELETE /SmsGateway/api/v1/Message/eed9e625-a1a6-4536-b649-24260a34d826 HTTP/1.1
  Host: smsapi.ballou.se
  Authorization: Basic dXNlcjpwYXNzd29yZA==
  Accept: application/json
  Content-Type: application/json
}
```

The response to a successful delete is an http status code 204.

6 ERRORS

When a POST request isn't successful an http status code, combined with a response code and a clear text description from the service, is returned in the response.

Example;

HTTP/1.1 429

Content-Type: application/json; charset=utf-8

Content-Length: 46

Retry-After: 5

{"Code":100,"Description":"Too Many Requests"}

Http status code	Status	Meaning
201	OK	Successful request. A unique message ID is given in the http body.
400	Bad request	Something in the request is missing or wrong
429	To many request	Too many requests within the specified timeslot

Response code	Meaning
100	Too many requests within the specified timeslot. The http header RetryAfter specifies the number of seconds to wait before the next POST request can be done.
200	Invalid input
300	Internal error